

ESTONIAN HUMAN DEVELOPMENT REPORT 2014 / 2015



ESCAPING THE TRAPS?

ESTONIAN COOPERATION ASSEMBLY

[Tallinn 2015]

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Dear Reader:

The long term development strategy “Sustainable Estonia 21” can be analyzed in different ways. Some have judged it to be idealistic and somewhat inappropriate for everyday life, lacking an action plan. More like a wishlist or a dream than a plan to execute. For others (hopefully for most), this strategy has given them a way forward in a situation where Estonia was taking its first steps as a member of the European Union and where everyone was trying to find a solution to the complicated task of how Estonia could best remain itself in an ever faster globalizing world and an integrating Europe. In other words, how to maintain the uniqueness of Estonia, while being part of Europe and the world.

Ten years is a sufficiently long time to take a moment and look back at the aims and strategies of “Sustainable Estonia 21” while taking into account the

interim events and wisdom that has been gained. There is no better format for this deep analysis than the Estonian Human Development Report which celebrates its 20th anniversary this year and is able to consider and construe the sustainability of the notions of that time. Moreover, I hope that this report will become the center for a substantive discussion which will encourage us to make decisions directed to the future.

Maybe for the first time since the independence of Estonia was restored we are changing slower than the world around us. There are changes which do not make us optimistic. For coping with both the long term and recent risks Estonia will need mostly, besides good allies, decisions which are well thought through and take global trends into account. We can find a lot of analysis between these covers. Enjoy reading and thinking along! ■



President of the Republic
TOOMAS HENDRIK ILVES

*May 4, 2015
in Kadriorg*

Estonia's position in the Human Development Index

► RAIVO VETIK

The Human Development Index (HDI), which was introduced in 1990 by the UN Development Programme is based on indicators in three categories: life expectancy, number of years of schooling, and income. The index formed by these three indicators is a generalisation that, while omitting many other possible human development indicators, is based on the intuitively plausible assumption that health, knowledge and economic wellbeing are the main resources that people use for organising their life.

The benefits of the HDI are its simplicity and its level of generalisability: on the one hand, it is universally comprehensible, while on the other it enables a comparison of countries. However, it should be taken into account that the three components of the index measure the outcomes of relatively long-term social processes. Therefore, it is not possible to come to any firm conclusions based on them concerning the success of policies implemented in the recent past of any specific country.

The Global Human Development Report (HDR) 2014 ranks 187 nations on the basis of the Human Development Index. In this scale, Estonia ranked 33rd in 2014, i.e. it belongs to the group of countries that have achieved very high human development overall. Estonia's score in human development is 0.890, and is calculated by combining three sub-indices: average life expectancy (74 years), average number of years of schooling (12 years) and GDP per capita at purchasing power parity (23,387 USD).

We highlight only some facts from the global Human Development Report in order to put Estonian indicators into a broader context. For instance, according to the global report more than 15% of the world's population, i.e. 2.2 billion people, live either in poverty or near the poverty line (this report placed the poverty line at 1.25 USD per day). If this limit were increased to 2.5 USD, almost half of the world population would be included among the poor. The global report also emphasises that 12% of the planet's population suffers from chronic hunger and 80% lack adequate social protection.

The string of such facts could easily be lengthened, but the above shows that in a global comparison Estonia indeed belongs with the countries with very high human development. However the position of countries in the HDI not only reveals, but also conceals things. Since this is an aggregated index it hides the differences between countries in the three component categories. A look at countries that are next to each other in the Human Development Index may produce

certain surprises. For instance, Estonia is ranked just behind Brunei Darussalam, Qatar and Cyprus, and just ahead of Saudi Arabia, Lithuania and Poland. While it is easy to compare the data of the last two countries with Estonia, the comparison with the remaining four countries could actually create confusion because they are very different in character from Estonia.

The umbrella topic of the HDR 2014 is the vulnerability of people, communities and societies in the increasingly globalising world, and the practices of countries in coming to terms with it. To describe the capacity of societies to successfully adapt to changing conditions, the Report uses the concept of resilience. In the global Report, resilience is generally defined as the capacity of people, communities and societies to overcome obstacles that do not allow them to manifest their preferences and choices, through the development of new skills or institutions

The logic underlying the linkage of the concepts of social vulnerability and resilience is also the basis for the terms of reference in the Estonian Human Development Index 2014/2015, which generalises these concepts through the metaphors of the social trap and the empowerment of development. Both the global and Estonian HDIs presume that the problems that weaken the sustainability of societies are caused by lack of knowledge and skills on the one hand, and by inadequate political and social institutions on the other. Both reports mention the need to turn significantly more attention to the dimension of policies and power when analysing the sustainability of societies because the interests of one group are often promoted at the expense of another.

The global HDR emphasises the fact that most countries have improved their human development score in the last twenty years. This is also true for Estonia. Our ranking in the Index has been constantly at around the 30th position (as measured by the calculation method adopted in 2010), moving a place or two up or down. This begs the question of whether this is the best that we can do, or whether we have possibilities of improving our score. What is holding us back and what should we do to promote human development in Estonia and climb up in the rankings? These and analogous questions form the essence of this report, and by answering them from the perspective of Estonian developmental trends in the last decade, our aim is to help promote Estonian human development and further the debate on sustainability. ■

TABLE. HUMAN DEVELOPMENT INDEX AND HIS BASIC INDICATORS IN SELECTED COUNTRIES, 2013

Rank	Country	Life expectancy at birth (years) 2013	Mean years od schooling (years) 2012*	Expected years of schooling (years) 2012*	Gross national income (GNI) per capita (2011 PPP US dollars) 2012	Human Development index 2013
VERY HIGH HUMAN DEVELOPMENT	1 Norway	81.5	12.6	17.6	63.909	0.944
	2 Australia	82.5	12.8	19.9	41.524	0.933
	3 Switzerland	82.6	12.2	15.7	53.762	0.917
	4 Netherlands	81.0	11.9	17.9	42.379	0.915
	5 United States	78.9	12.9	16.5	52.308	0.914
	6 Germany	80.7	12.9	16.3	43.049	0.911
	7 New Zealand	81.1	12.5	19.4	32.569	0.910
	8 Canada	81.5	12.3	15.9	41.887	0.902
	9 Singapore	82.3	10.2	15.4	72.371	0.901
	10 Denmark	79.4	12.1	16.9	42.880	0.900
	11 Ireland	80.7	11.6	18.6	33.414	0.899
	12 Sweden	81.8	11.7	15.8	43.201	0.898
	13 Iceland	82.1	10.4	18.7	35.116	0.895
	14 United Kingdom	80.5	12.3	16.2	35.002	0.892
	15 Hong Kong, China (SAR)	83.4	10.0	15.6	52.383	0.981
	16 Korea (Republic of)	81.5	11.8	17.0	30.345	0.891
	17 Japan	83.6	11.5	15.3	36.747	0.890
	18 Liechtenstein	79.9	10.3	15.1	87.085	0.889
	19 Israel	81.8	12.5	15.7	29.966	0.888
	20 France	81.8	11.1	16.0	36.629	0.884
	21 Austria	81.1	10.8	15.6	42.930	0.881
	22 Belgium	80.5	10.9	16.2	39.471	0.881
	23 Luxembourg	80.5	11.3	13.9	58.695	0.881
	24 Finland	80.5	10.3	17.0	37.366	0.879
	25 Slovenia	79.6	11.9	16.8	26.809	0.874
	26 Italy	82.4	10.1	16.3	32.669	0.872
	27 Spain	82.1	9.6	17.1	30.561	0.869
	28 Czech Republic	77.7	12.3	16.4	24.535	0.861
	29 Greece	80.8	10.2	16.5	24.658	0.853
	30 Brunei Darussalam	78.5	8.7	14.5	70.883	0.852
	31 Qatar	78.4	9.1	13.8	119.029	0.851
	32 Cyprus	79.8	11.6	14.0	26.771	0.845
	33 ESTONIA	74.4	12.0	16.5	23.387	0.840
	34 Saudi Arabia	75.5	8.7	15.6	52.109	0.836
	35 Lithuania	72.1	12.4	16.7	23.740	0.834
	36 Poland	76.4	11.8	15.5	21.487	0.834
	37 Andorra	81.2	10.4	11.7	40.597	0.830
	38 Slovakia	75.4	11.6	15.0	25.336	0.830
	39 Malta	79.8	9.9	14.5	27.002	0.829
	40 United Arab Emirates	76.8	9.1	13.3	58.068	0.827
	41 Chile	80.0	9.8	15.1	20.804	0.822
	42 Portugal	79.9	8.2	16.3	24.130	0.822
	43 Hungary	74.6	11.3	15.4	21.239	0.818
	44 Bahrain	76.6	9.4	14.4	32.072	0.815
	45 Cuba	79.3	10.2	14.5	19.844	0.815
	46 Kuwait	74.3	7.2	14.6	85.820	0.814
	47 Croatia	77.0	11	14.5	19.025	0.812
	48 Latvia	72.2	11.5	15.5	22.186	0.810
	49 Argentina	76.3	9.8	16.4	17.297	0.808

* Data refer to 2012 or the most recent year available.



THE GROWTH OF WELFARE: ITS IMPACTS AND PROSPECTS

1

ESTONIAN HUMAN DEVELOPMENT REPORT 2014/2015

INTRODUCTION

► ERIK TERK

In the document Sustainable Estonia 21 (SE21), welfare was treated as one of the principal objectives of the society along with others such as ecological balance, the viability of the cultural space and social cohesion. The authors of the document stated that, despite progress made so far, a deficit in welfare, primarily economic welfare, exists in Estonia and this will likely continue to exist for quite some time, thereby representing both a stimulus for and hindrance to development (**Estonian Ministry of the Environment 2005**). The authors of the document stressed that the growth of welfare is necessary in order for Estonia to be a place where people want to live in the future. Against the background of open borders, this focus is especially important.

Welfare (well-being) is a complex phenomenon, and it is studied by representatives of various fields of research. It can be defined generally as the satisfaction of people's material, social and cultural needs. It encompasses people's opportunities for self-realisation, as well as their sense of security, i.e. the feeling that one is sufficiently protected against possible risks. Often, in general economics, welfare is simply equated with the society's economic wealth. Although economists admit that the per capita volume of GDP as the generally used measure of welfare need not reflect several important aspects

people tend to relate to welfare (e.g. health, education, confidence within the society, the amount of leisure time etc.), they usually confine themselves to stating that high GDP provides a better prerequisite for moving toward all these positive goals. (**Mankiw 2001**) The representatives of welfare economics, as a branch of economics, turn their attention more to ensuring an elementary level of welfare for economically deprived population groups. Therefore, their attention is focused on the distribution of wealth and income, public benefits and public services. Ensuring support for people who are economically deprived is important from the viewpoint of a society's ethical standards and also helps to ensure the social stability necessary for economic growth. However, unsuccessful welfare policies can become a burden for society and hinder economic development. Sociologists and political scientists deal with the latter, especially within the framework of the welfare society and welfare state paradigms. Subjective well-being (a sense of happiness and satisfaction) is of interest to specialists in psychology and social psychology, but increasingly in recent times also to economists (**Easterlin 2009**).

In the SE-21 document, the concept of welfare was divided into three components: economic wealth, level of security and the diversity of opportunities. However the greatest attention

was focused on the economic aspects of welfare, i.e. on how to achieve a structure of economy that would ensure Estonia's continued development; how to make better use of education and research in the interests of continued economic growth; and how to improve cooperation between the state and the private sector in order to support development.

Sociologists, political scientists as well as economists have contributed to this chapter of the Estonian Human Development Report. Two focal points can be differentiated in the chapter. The first is how people can cope with a changing economic situation and the welfare policies designed to help them do so. The dynamics of the economic conditions of Estonian families and their specifics by family type are analysed. An attempt is made to find areas of focus in the welfare policies that would provide results not only in the near future but would also promote coping in the long term. The second focus area deals with the prospects for a qualitative change in the

Estonian economy as whole. The development of the Estonian economy is viewed as a movement on two "axes". The first axis is the movement toward a knowledge economy (this direction also occupies a key position in the SE-21 document); and the second is the movement toward a creative economy. The ideological bases of the Estonian economic development model, and its EU-related background are also dealt with. In order to find development ideas that are suitable for application in Estonia, the development models used outside of Europe are also analysed.

The two aforementioned focus areas – welfare policies and economic policies – cannot exist in isolation from each other. In the chapter summary, an attempt is made to formulate positions on how these focuses could be integrated and on what obstructs this. ●

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1.1

Welfare Dynamics and Welfare Problems in the Period During and After the Economic Crisis

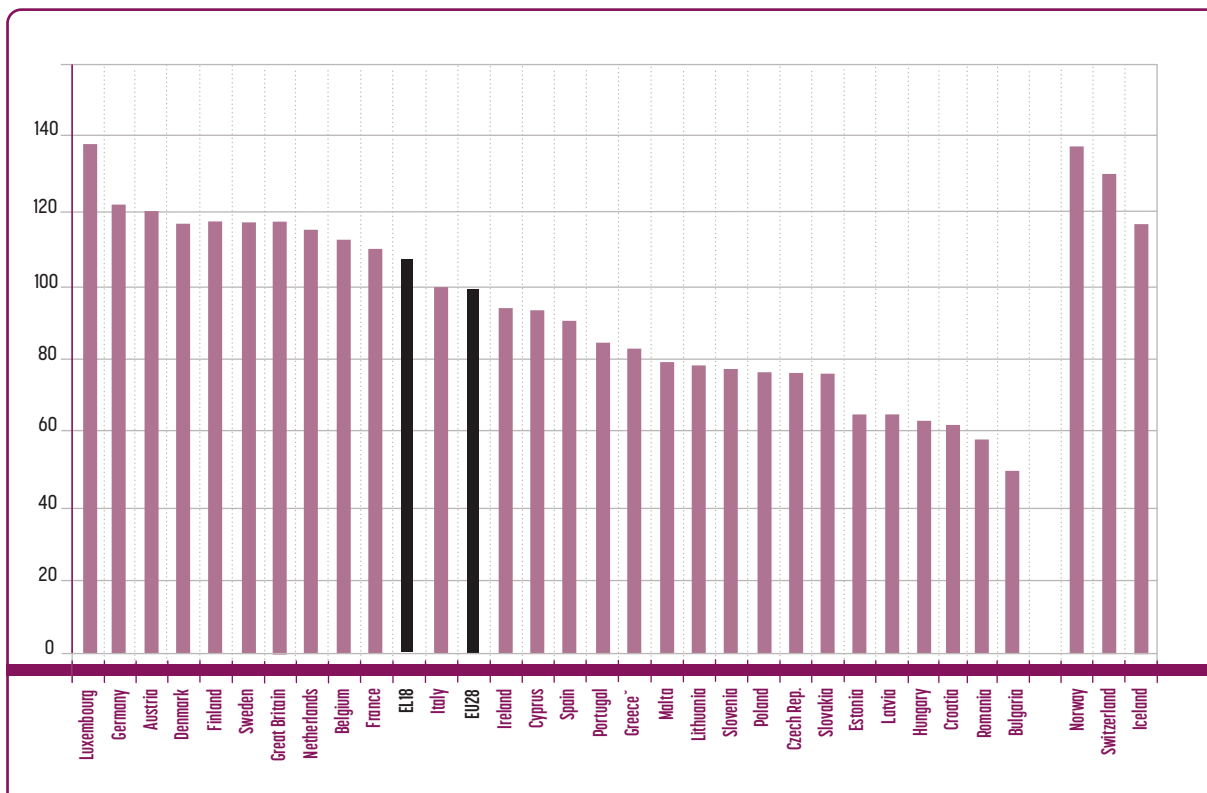
► ANU TOOTS, ERIK TERK, KAIRI KASEARU & AVO TRUMM

1.1.1 The many aspects of welfare dynamics

Welfare problems and Estonia's path to becoming a welfare state have been analysed in several Estonian Human Development Reports (EHDR). The EHDR 2010/11 emphasised that the Baltic countries are moving toward welfare growth, but must deal with a double task: alleviate the social problems inherited from the transition period (such as poverty and high unemployment) and also deal

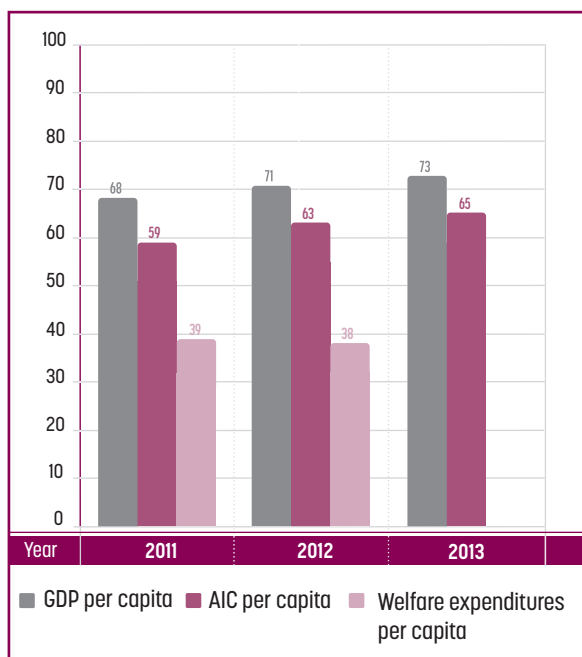
with 21st century challenges like emigration, the weakness of family institution, an aging population and increasing global trade competition (Aidukaite 2011). The EHDR 2012/13 approached the welfare topic in a considerably broader context by moving on from the traditional topics of economic wealth - its distribution (viz. risk groups and poverty) and social protection expenditures – and examining people's own assess-

FIGURE 1.1.1 Actual individual consumption (AIC) per capita in purchasing power standards. (2013. EU28=100)



Source: Eurostat (2014) Consumption per capita in purchasing power standards in 2013.

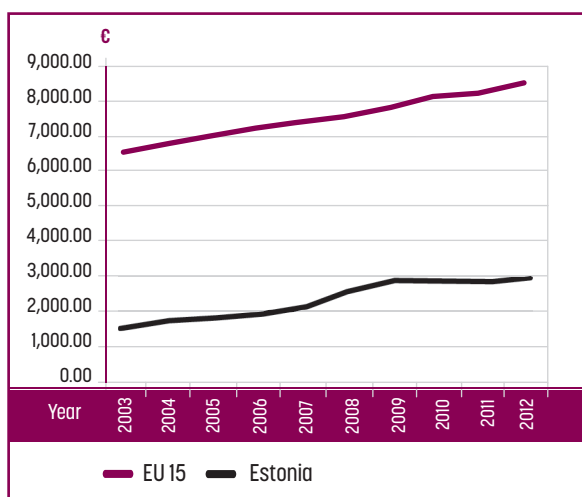
FIGURE 1.1.2 The Estonian wealth and welfare indicators as compared to the EU28 average based on purchasing power parity, EU28=100



Source: Eurostat (2014).

ments of their life quality and satisfaction. The strategic document Sustainable Estonia (SE-21) defined welfare as having three components: in addition to material welfare (which can be measured at the level of the national economy by per capita gross domestic product or GDP, at the individual level by income per family member, or by individual consumption), security and the attractiveness (variety and interest levels) of life were also considered to be elements of welfare. When the SE-21 document was drawn up it was assumed that an aspira-

FIGURE 1.1.3 Social protection expenditures per capita in purchasing power standards



Source: Eurostat (2014).

tion to increase material welfare would initially continue to be people's dominant motivation, and as material welfare increased, the other two motives would strengthen. The valuation of the third element is closely connected to "post-materialist values", i.e. the emergence of professions requiring creativity, the blurring of lines between work and recreational activities, etc. This is also the basis for the increased importance of the creative economy element, looking into the future.

In regard to economic development, the SE-21 document set a target of reaching 80% of the per capita GDP of the current EU member states by 2030. It was assumed that this would be the level at which the material welfare deficit would recede into the background. The mechanisms for achieving this goal included the creation of an economic and entrepreneurial structure with a diverse sector-based export orientation and a transition to an innovation-based knowledge economy.

The reality is that Estonia's development, especially its economic development in the ten years following the ratification of the SE-21 document, has been very unstable. These years have included a period of rapid economic growth (2004–2007) as well as an extensive economic crisis (2008–2010), which was caused primarily by global factors, but also by the unsustainability of the Estonian economic model, which was too focused on the domestic market. And this has been followed by a stabilisation period after the crisis.

If, at one time, we could speak of the rapid growth of the Estonian economy as well as the swift convergence with the economies of the "old" EU member states, which resulted in the gap in per capita GDP being quickly reduced, the steep recession changed this situation. As a whole, we can speak about the period between 2008 and 2012 as one where economic convergence did not occur. Currently the economy has stabilised, although the level of economic growth is rather low. Although the goal of 80% of the per capita GDP of the EU states by 2030 cannot be considered unrealistic, it presumes that great changes will have to be made in the economic development model. We must also consider the fact that if the Estonian economy, as measured by per capita GDP, should reach 75% of the EU states in the near future, the contribution made to Estonia by EU structural funds will be reduced (the "phasing-out period" will have arrived) and our continued economic and welfare growth will have to rely increasingly on our own efforts. A suitable means must also be found to update the welfare model in order to improve the connection between social policies and economic development so that the grants typical of a welfare society will have a stimulating impact on economic development, and will not smother it with constantly increasing grants.

It turns out that the comparative level of welfare and the proportions related to it are characterised by relatively high inertia. From several reports dealing with the state of welfare and development in Estonia (*Estonian Cooperation Assembly 2011; Estonian Cooperation Assembly 2013; Bertelsmann SGI 2013*), it appears that the problems related to the state of wel-

fare are more or less the same as before the crisis. Convergence with the average EU household income and purchasing power is occurring slowly. Based on real consumption, related to everything including the goods and services provided by the state (e.g. education, health care), Estonia is still among the poorest in Europe. Based on purchasing power parity, Estonians consume only 65% of the EU 28 average (see Figure 1.1.1).

An even larger gap exists in social protection expenditures, which, in Estonia, comprise less than 40% of the EU average per capita. Viewed in the long term, it turns out that the social protection expenditures per capita increased in Estonia from 2003 to 2009, but thereafter the increase has halted despite the gradual recovery of the economy. This trend distinguishes Estonia from the countries of Western Europe (EU15), where the purchasing power of social protection expenditures has constantly increased (see Figure 1.1.3).

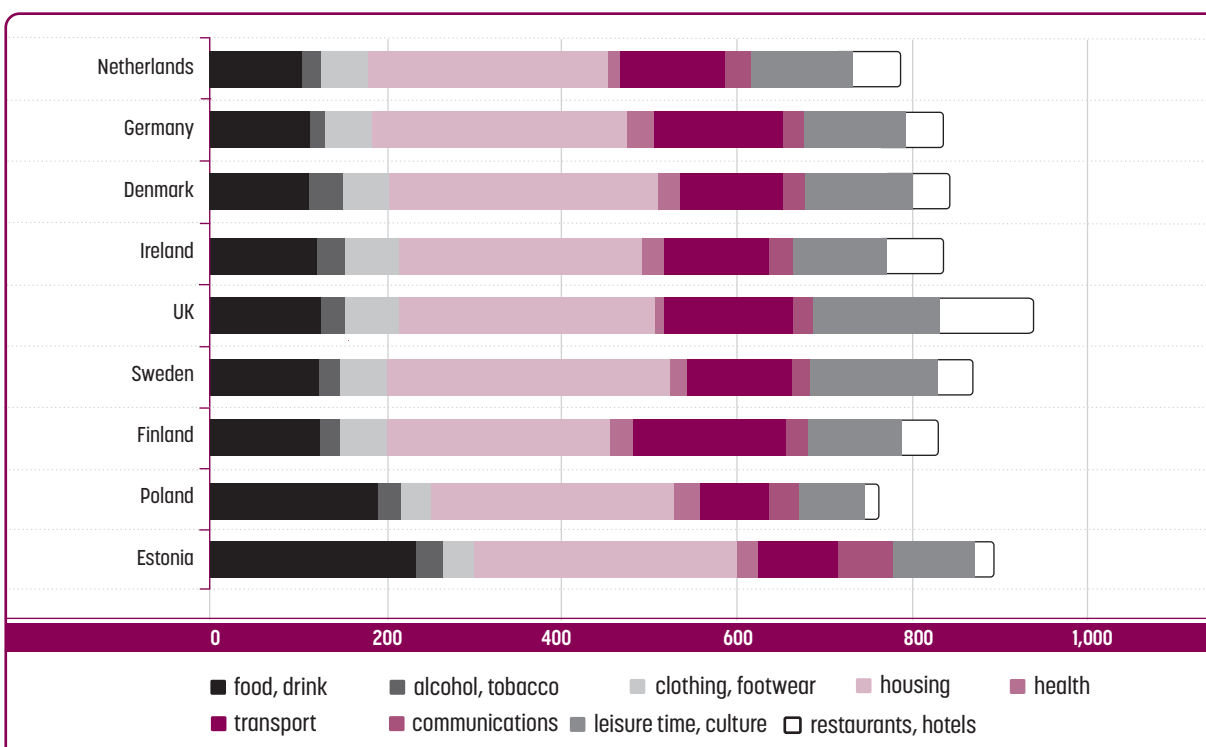
As far as security is concerned, the economic crisis definitely caused a decrease in people's sense of security because of the increased risks related to unemployment and the loss of housing. At the same time, criminal activity in Estonia has been laudably on the decrease (according to the European Union Statistics on Income and Living Statistics – EU SILS – on crime and violence). And in most cases, the dynamics of the indicators for the attractiveness and diversity of life in Estonia have mostly been positive. For example, people's consumption of culture essentially did not decrease even during the most difficult years of the economic crisis (see subchapter 1.5).

1.1.2 Changes in the structure of consumption expenditures

Income and consumption levels that are significantly lower than the EU average evoke the question: what is the structure of household consumption expenditures? After making the necessary expenditures will there be any resources left for intellectual and social development? Compared to other countries, people living in Estonia spend proportionally more on food and less on leisure time activities and culture (Figure 1.1.4). For example, if 100 of 1000 units of purchasing power are spent on food in the Netherlands and 116 in Germany, then in Estonia 233 is spent. True, from the perspective of time, things have improved in Estonia, since food comprised one third of a household's expenditures in 1999 (Figure 1.1.5). It is also true however that consumption related to leisure time, transport and housing has increased somewhat over time. However, in regard to the last two items, it is difficult to assess whether we are dealing with compulsory expenditures or the freedom to choose a pleasing lifestyle.

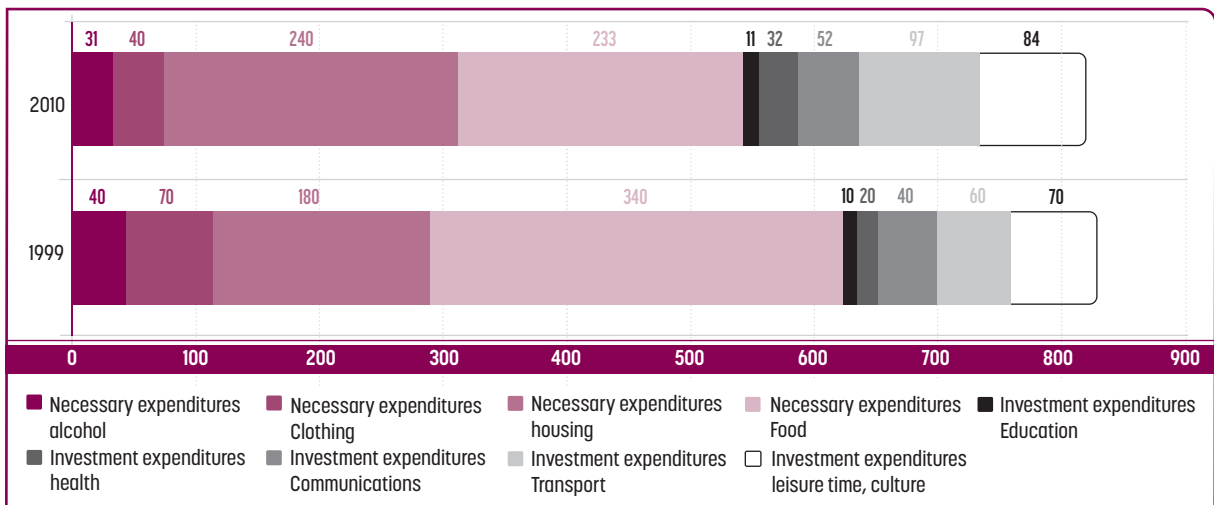
In order to analyse the options for the further development of the Estonian welfare model, in the diagram below, we have divided the expenditures into two groups: necessary expenditures and investment expenditures. As we can see, the percentage of necessary expenditures has decreased somewhat and the percentage of investment expenditures has increased.

FIGURE 1.1.4 Structure of consumption expenditures in various countries. Overall structure of consumption expenditure by detailed COICOP level (1,000)



Source: Eurostat (2014).

FIGURE 1.1.5 The change in the consumption structure in Estonia 1999–2010, the structure of consumption expenditures in terms of the UN’s Classification of Individual Consumption According to Purpose (COICOP) level (1,000)



Source: Eurostat, authors’ calculations.

Both economic growth and the economic crisis have affected different households and population groups in different ways. In this chapter, we try to ascertain which households were the “winners” and which the “losers” in the economic crisis and what factors have caused their success or failure. The following analysis is based on the data from the Estonian Social Surveys (ESS) between 2005 and 2011. The ESS is part of the EU-SILC, a pan-European survey of incomes and living conditions, which enables the welfare of Estonian residents and changes therein to be analysed and the level of poverty, material deprivation and social exclusion to be assessed. The ESS is a panel study, with one and the same household being queried for four consecutive years (for more about the methodology see the [Estonian Social Survey Methodology collection 2010](#)). The data for the period under examination comes from four panels: 2005–2007, 2006–2009, 2007–2010 and 2008–2011.

The analysis includes all the households who participated in three (the first panel) or four consecutive years in the period from 2005 to 2011. However, in the analysis and interpretation of the results, one must consider the fact that the ESS income data is collected retrospectively for the previous year, which essentially means that the 2005 data reflects the actual situation in 2004, the 2006 data the situation in 2005, and so on.

The change in household income is analysed on the basis of equivalent net income, which is calculated using a consumption or equivalency scale. The basis for applying the consumption scale is the presumption that some income is spent on the household as a unit, but some is spent on the individual needs of the household members, and this amount depends on their age. In the Estonian Social Survey (and in this analysis) the modified OECD consumption scale recommended by

Eurostat has been used. This assigns the first adult member a weight of 1.0; each remaining adult a weight of 0.5; and all those who are 13 years old or younger, 0.3.

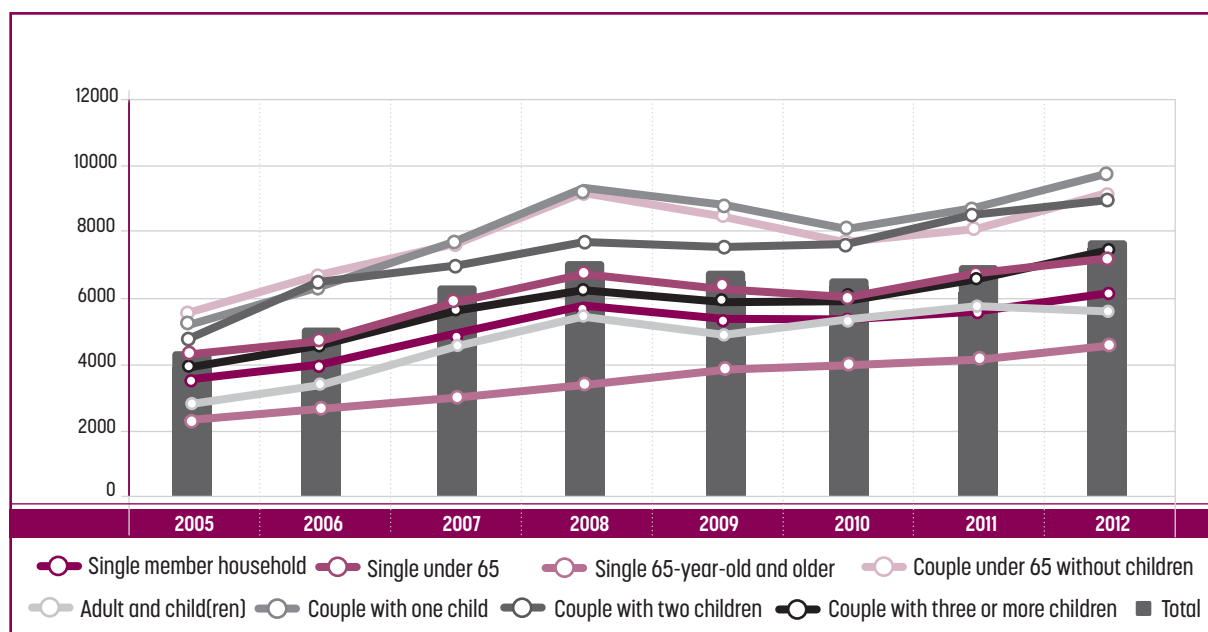
In [Figure 1.1.6](#) we see the change in the average net incomes of various types of households between 2005 and 2012.

We can see from the figure that the incomes of all the household types increased evenly at an accelerating rate until the end of 2008 – the fastest increase was among households with two working-age adults who are childless or have one or two children; the slowest among elderly people over 65 years old who live alone. A decline in income occurred in 2009, which affected all the household types. The only group to experience a modest increase were elderly people living alone. In 2011, the incomes started to accelerate again; the only exception was single-parent households, where a small decline occurred in 2012 compared to 2011.

In the period between September 2008 and December 2012, the number of people receiving subsistence benefits increased 2.5 times, and the total amount of benefits paid out 3 times. Of course, the payment of unemployment insurance benefits and assistance for the unemployed also increased sharply. As a whole, significant changes were not made in the social protection system during the economic crisis.

By analysing the change in household welfare based on the dynamics of income, the consumer price index for the corresponding period must also be calculated, which indicates the change in the purchasing power of the income that was received during the given period. Thus, for example, the consumer price index increased more than 11% in the period between 2005 and 2007; by 10% from 2007 to 2009; and by more than 30% during the entire period under examination.

FIGURE 1.1.6 Change in the yearly income of households in the period from 2005 to 2012 (cross sectional data)



Source: Statistics Estonia.

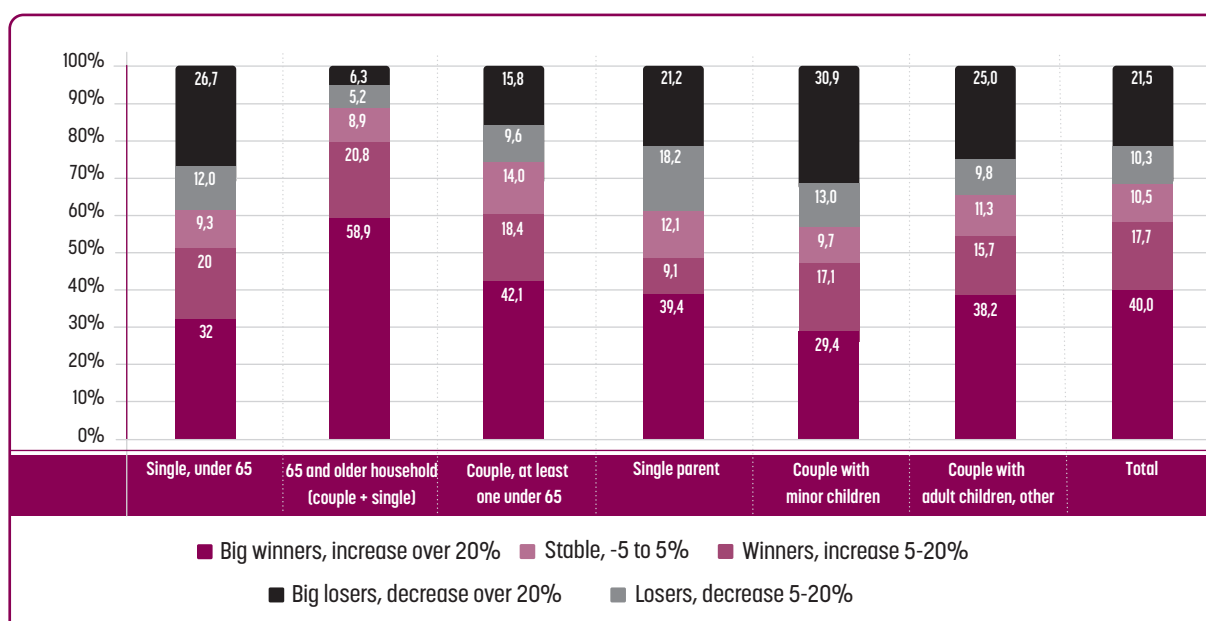
1.1.3 Winners and losers in the economic crisis

Which households coped best with the crisis and for whom did it mean a decline in income and in the ability to cope economically (see Figure 1.1.7)? Since changes in the household structure also impact income equivalency, we will first look at how incomes changed in the households whose composition remained the same throughout the period under examination.

It turns out that, in comparison with 2007, retired people have been able to increase their incomes the most. They are followed by childless couples, of whom at least one is working-age, as well as working-age people with adult children. However, the greatest losers were the households with minor children, single parents and single working-age people. Of the households with minor children, those with one child lost 45% of their income and those with three children, 53%.

Between 2007 and 2010, the composition of 17% of all the

FIGURE 1.1.7 Change in equivalent net income in the period 2007-2010 by household type (%)



Source: ESU.

FIGURE 1.1.8 Dynamics of household income based on the ethnicity of household members 2007-2010



Source: Eurostat, ELFS.

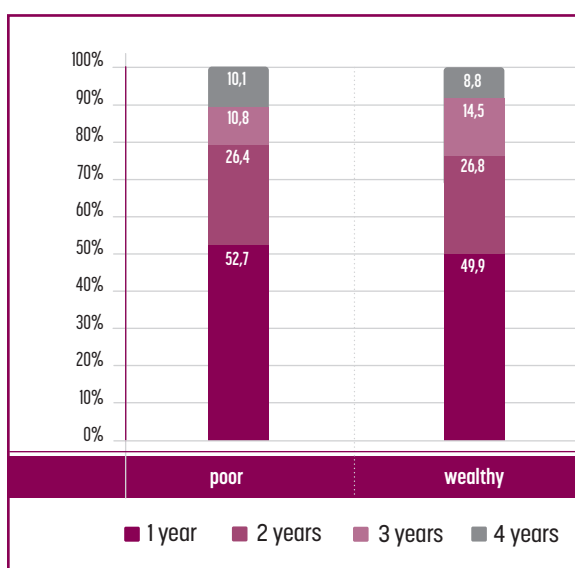
analysed households changed. In some cases (40%), this resulted in a reduction of income; in some cases (in slightly more than half the households) their income increased by at least 5%. Based on the household structure, in 30% of the cases the increase in income was related to starting a relationship as a couple (including single parents); and in a quarter of the cases with the children becoming adults. In the households where the incomes declined, in more than 20% of the cases this was caused by a reduction in the number of household members (adult children moving out or a family member becoming single). However, in a third of the cases, it was related to the household becoming larger (singles becoming couples, the number of children increasing, etc.).

Below we will look at how ethnic composition and the gender, education and social status of the head of the household influenced whether they are winners or losers.

The households are divided by ethnicity into three groups: (1) households where all the members are Estonians; (2) households where there is at least one Estonian and one non-Estonian; and (3) households where all the members are non-Estonians. If we examine the income dynamics of the three groups, one can say that although 5% more households increased their income among the Estonian households (see Figure 1.1.8), the differences that appear based on the ethnicity of the household members are relatively small. At the same time, if we look at the median equivalent net income of the given groups in 2007 and 2010, then, in 2007, the median of the households with Estonian-only members was 78,670 EEK, the median for households with different ethnicities was 82,266 EEK and the equivalent net income of households with non-Estonian members was 68,597 EEK. In 2010, the corresponding indicators were the following: Estonian household – 81,823 EEK; mixed households – 86,189 EEK; and non-Estonian households – 68,118 EEK. The decline in income of the non-Estonian households resulted to a great extent from a higher rate of unemployment during the economic recession. In 2010, almost 20% of the non-Estonian households included at least one unemployed person. Apparently this situation was caused by their greater rate of previous employment in the secondary sector, which suffered more during the recession.

Generally, international studies have found that women are more economically vulnerable than men (Gradin et al. 2010; Barcena-Martin, Moro-Egido 2013); that their material deprivation is greater (Halleröd et al. 2006); and that working does not necessarily reduce women's risk of poverty (Crettaz 2013). Thus, it has been observed that single working-age women have a greater risk of poverty than single men (Wiepking, Maas 2005; Barcena-Martin, Moro-Egido 2013). The data for Estonia, however, confirms that the economic crisis has impacted men more than women. If in 2008, there were 0.74 men for every woman receiving unemployment insurance benefits, than this ratio was 1.10 men in 2010, while the total number of people receiving unemployment insurance benefits had increased almost 3.9 times. Therefore, below, we will take a look at how important the gender of the head of the household is in shaping the dynamics of the household

FIGURE 1.1.9 Division of households by the number of times they appear in the lowest or highest income group (%)



Source: Eurostat, ELFS.

income, looking only at households with one adult. It appears that income increased for more working-age single men than women of the same status, 56% and 47% respectively. Also, the percentage of men who maintained their income was greater than the percentage of women.

1.1.4 Persistence of poverty and wealth

Below we will take a look at how the economic crisis was reflected at the extremes of the income scale – in the wealthiest and poorest households. Various studies have shown that the earnings of the people with the lowest and highest incomes were the most stable. The poorest members of society lack the social opportunities and individual capacity to improve their situation and to climb higher on the social ladder, while wealthier people have sufficient resources to protect themselves from various risks and maintain their achieved positions and income levels.

At this point, we are using the earnings group classification to define wealth and poverty: the 20% of households with the lowest income are defined as poor; and the 20% with the highest income as wealthy. In Figure 1.1.9 we see that, very generally speaking, both “poverty” and “wealth” are a “temporary one-time experience” in about half the cases, while in approximately 10% of the cases, it has been a constant condition throughout the period under examination, and for 10–15% of the households, it has lasted for at least three years.

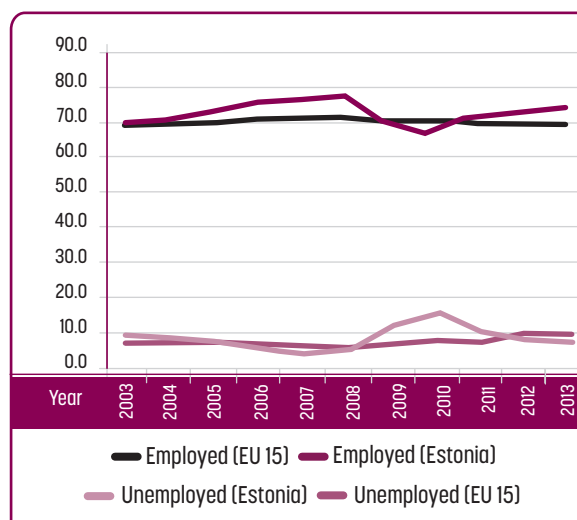
By household type, the percentage of households that have experienced constant poverty (throughout all the years) is greatest among single-member households that are under 65 (33% of all households experiencing poverty and 18% of all households with a similar structure) and single-parent families (28% and 17% respectively). Poverty is suffered least permanently by households with two adults and minor children (15% of the families experiencing poverty and 4% of all families with a similar structure).

We see that those families who are persistently wealthier are typically two-parent families with minor children (32% of the households that have ended up in the wealthier income group at least once during the period under examination and 13% of all families with minor children) and working-age couples without children (31% and 15% respectively).

1.1.5 The level of welfare and position in the labour market

Most analyses confirm that the main reason for a low level of welfare and poverty in Europe today is unemployment, or a poor position in the labour market. Therefore, in the assessment of Estonia’s level of welfare, we will focus on the indicators related to employment (see Figure 1.1.10). Compared to

FIGURE 1.1.10 Rate of employment and unemployment in Estonia and the Western European countries, 2003-2013, employed - 20-64, unemployed 25-74



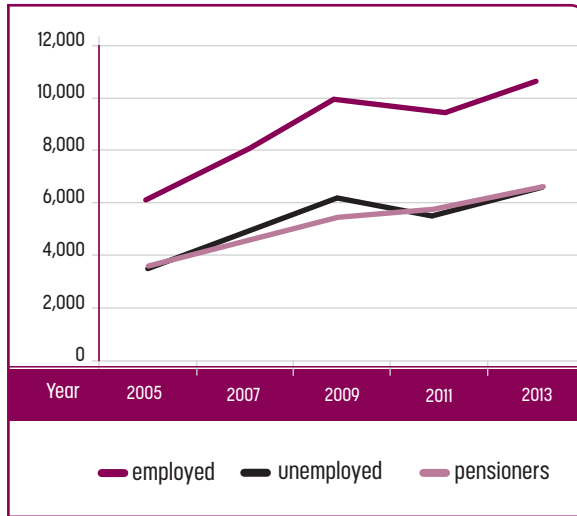
Source: Eurostat, ELFS.

“old” Europe, the Estonian labour market is in better health – the employment level is higher and unemployment lower. Still, employment has not returned to the level of the boom period in Estonia (2008); of 20- to 64-year-olds, one third do not work, which is clearly too high for an acceleration of economic development.

As in the other European countries, the employment rate is reduced by young people who do not study or work, and among whom there are three times more long-term unemployed than among young people on average. Employment can be increased in two ways – by bringing the unemployed back into the labour market or by expanding the number of employed people on account of those who have left the labour market earlier. Estonia has been able to achieve success mainly by bringing the unemployed back to the labour market. A role in this may have been played by active employment policy measures, among which training focusing on the unemployed has been a priority. There has been much less participation by economically non-active people in training/lifelong learning, and this has changed little over the years. Compared to Europe’s average indicators, in Estonia the participation of the unemployed in training has been higher than average, but the participation of economically non-active people has been lower (in regard to the latter indicator, the difference with the Nordic countries is especially great). The reform designed to bring disabled people into the labour market (work capacity reform) should improve the situation in the future.

Along with the quantitative indicator, the quality of employment has become increasingly important. Any job at any price will not ensure the sustainable development of society. If “smart jobs” are a long-term strategic goal, then working

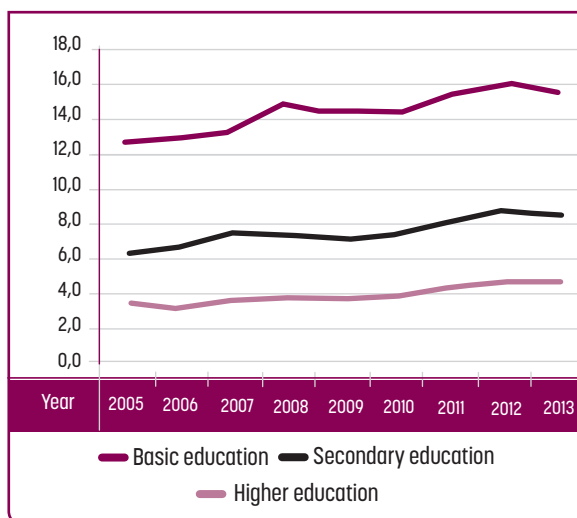
FIGURE 1.1.11 Median net income by social group (in purchasing power standards €)



Source: Eurostat, SILC.

must already have a positive impact on people's level of welfare today. What developments have occurred in Estonia to date? Generally, statistics show that the income of those employed in the labour market is considerably higher than those who are not in the labour market. On the other hand, the decline stage in an economic cycle affects both those who work as well as those who do not, but to a different degree. Pensioners, whose level of welfare has undergone a slower but steadier increase, are best protected against fluctuations in the economy (Figure 1.1.11).

FIGURE 1.1.12 In-work at-risk-of-poverty rate by education level. Risk of poverty level, calculated as 50% of the state's median income



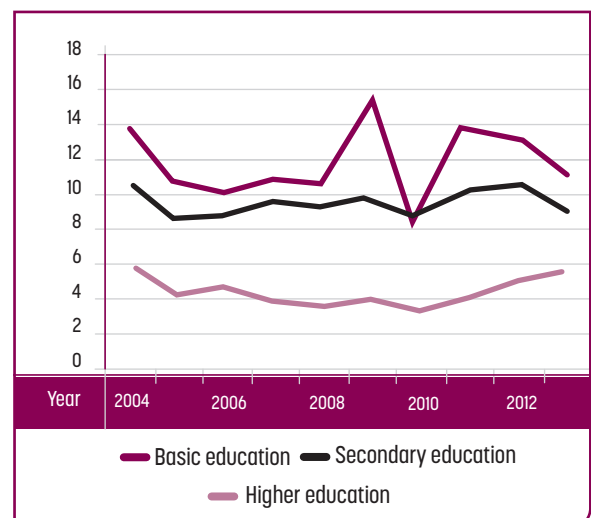
Source: SILC.

Today's labour market is diverse; in addition to smart and well-paid jobs there are many simple, routine and poorly paid jobs. This diversity is supplemented by forms of employment related to the shortage of work, like compulsory part-time work or work as a sole proprietor. The result is the appearance of the working poor, a phenomenon that was barely known in the Western Europe of the 1960s and 1970s (see Figures 1.1.12 and 1.1.13).

Insufficient or inadequate education is often mentioned as the reason why working does not provide a sufficient income. As a rule, the level of income is correlated to the level of education. Although this general rule also applies in Estonia, specific trends can also be observed. Firstly, Estonia is characterised by greater instability related to the risk of poverty, depending on the economic cycle, especially when it comes to workers with only a basic education. Secondly, in Estonia the incidence of the "working poor" among people with higher education is increasing. The latter can be explained by, among other things, the vertical incompatibility of the labour market, which in Estonia is one of the highest in Europe and which was also pointed out in the EDHR 2012/13 (Toots, Lauri 2013: 34).

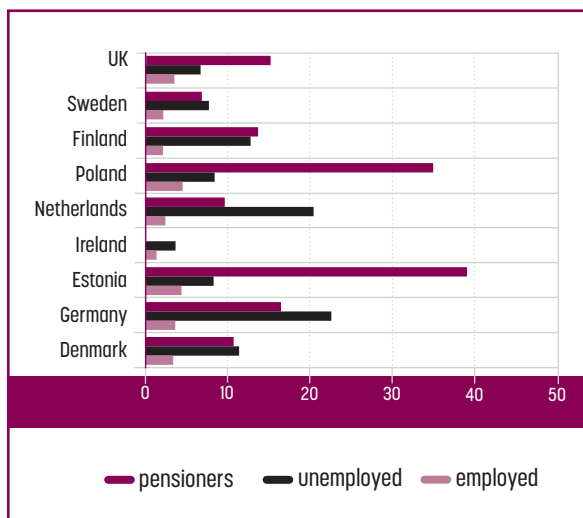
In addition to education, the connection between wage levels and workers' ages is also characteristic of Estonia. If the wage levels in Europe increase with age, then in Estonia the opposite is true. Here too, we may be dealing with an educational impact factor, because in Estonia participation in life-long learning is very low in this age group (4.7% compared to 15.6% on average). The data from Finland, where the participation of the 50+ age group in training is quite high (13%), shows that the percentage of low-paid workers is very low.

FIGURE 1.1.13 Risk of in-work poverty in Estonia by education level



Source: SILC.

FIGURE 1.1.14 Percentage of people who consider their health to be poor or very poor, 2012



Source: Eurostat, SILC.

The relationship to the labour market not only affects one's income, but several other important aspects of welfare such as health, satisfaction with life and social inclusion (see Figure 1.1.14). There are great differences between countries related to the non-working categories. Estonia stands out in terms of the poorer health of its pensioners (compared to the unemployed as well as to other EU countries).

In conclusion

As a whole, the factors supporting and weakening welfare in Estonia have remained roughly the same throughout the years. The main concern continues to be the gap in income and consumption ability compared to the EU average, and the sensitivity to economic cycles. The economic crisis primarily impacted the people participating in the labour market – their wages and business income. Therefore, the decline in wages that occurred was greatest in the households with working-age members.

Based on several average indicators related to the entire population, Estonia's development has been a "good average" but by social groups, the dynamics differ and therefore the level of welfare in the various groups also varies. One of Estonia's doggedly persistent problems is the small impact of education on the return received from the labour market. And secondly, the poorer state of the elderly with respect to many welfare components. This indicates a need for an integrated policy for the elderly and a holistic education policy that is better coordinated with the economy. An example of a positive result that has been achieved during the last few years is the employment policy, which has helped to reduce the unemployment rate and has improved several parameters of welfare (and potential welfare) for the unemployed (including health and training). ●

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1.2

Paradigmatic shift in welfare state theory and policy responses: Does Estonia fit in?

► TRIIN LAURI & ANU TOOTS

Introduction

During the past few decades, there has been a constant debate about the outlook for the welfare state. Today, Europe requires economic growth more than ever before, but according to the traditional approach, it is not possible to reconcile an extensive welfare state and economic growth. Previous obligations to pay pensions and protect jobs tie the hands and feet of the governments when it comes to making the necessary reforms.

However, despite the pessimistic scenarios, most social scientists still agree that the welfare state has survived several stress tests and does not seem to be going away. Some (Hay 2012; Van Kersbergen, Vis 2014) even say that, if in the 1980s the welfare state was thought to have been the cause of the economic crisis, now, in the context of the recent global economic crisis, it can be seen as the solution for recovering from stagnation. Therefore, the key question related to the welfare state today is not how to abolish poverty, but how to support economic sustainability.

The conceptual renewal of the welfare state is still an “emerging paradigm”, and many of its claims are debatable and in the testing stage (Morel et al. 2012). The principal idea of the new paradigm is the finding that the key to a sustainable welfare state is not how much of the wealth is redistributed but how social investments are supported and people’s coping capacity increased while still meeting existing obligations. Thus, the measure of the sustainability of a welfare state is not so much its cost, but the structure of the expenditures and the target groups; i.e. 1) to what extent should expenditures be allocated to compensation and to what extent to increasing capabilities; and 2) to what extent are the expenditures related to the “old” social risks (old age, unemployment, disability) and to what extent to new social risks

(insufficient or mismatching education, single parenthood, immigration and emigration).

We will first introduce the change in paradigm from a distributive and compensatory welfare state to an investing and empowering state. We will also analyse to what extent Estonia’s development corresponds to these paradigms. Then we will examine the distribution of the compensatory and investment indicators in Estonia and eight European countries that have been at the forefront of the welfare state reform. If Ireland has been referred to as the “Celtic tiger” then Poland is becoming the new “Baltic tiger”; from the 1990s, the Netherlands have been seen as a successful reformer of the welfare state and Germany joined this league in the 2000s; Scandinavia has successfully weathered the economic shock, although during the last decade its regional unity has declined and the differences between the Nordic countries are increasing; Estonia’s neoliberal orientation toward the provision of welfare, which leans toward the UK model, has resulted in a similarity of these two countries in key indicators of social inequality (such as poverty levels).

The chapter concludes with assessments about the sustainability of Estonia’s welfare policies and their ability to adapt to new challenges.

1.2.1 The emergence of the social investment paradigm

Accounts from the 1990s about the welfare state as a rigid, or even “sclerotic” monolith, which cannot be reformed because of the risk of electoral punishment, are no longer relevant in

TABLE 1.2.1 The connection between the welfare state and economic growth according to the main paradigmas

	Keynesian paradigm 1st half of the 1950s to 1970s	Neoliberal paradigm from the late 1970s onwards	Social investment paradigm, from the 1990s onwards
Main cause of unemployment	Low growth and weak demand	Limited jobs available due to welfare state (high labour costs; excessive protection of labour relationships)	Inadequate skills for smart jobs
Relation between social policy and economy	Positive: social security promotes growth	Negative: welfare state is costly and causes economic depression and inflation	Positive: where social policy invests in human capital and improves the employment capacity important for economy
Key values	Social equality, jobs for all (men), decommodification	Individual responsibility; any jobs, activation	Social inclusion, quality jobs, capabilities approach, equality of opportunity
Key norms for public action	Big state; central economic planning welfare state development; compensation of risks	Lean state; deregulation dismantling of the welfare state; minimum compensation for risks	Empowering the state; investment; recasting the welfare state Prepare rather than repair
Key instruments	Policies to support demand; development of social insurance schemes for income maintenance; development of the public sector by creating jobs and services	Monetarist economic policies to fight inflation; deregulation of the labour market; privatisation of social services; activation and workfare	Human capital investment policies to increase employment capacity; development of social services and policies to support the labour market (early childhood education and care, lifelong learning and higher education) flexi-security

Source: Morel et al. 2012: 12–13.

the context of current European reforms. However, this does not mean that everything is fine with the welfare state. Why should the welfare state change and in what direction? A relative consensus exists among researchers regarding the fact that the key is how to efficiently link social and economic policies? Historically, there have been three fundamental approaches to this problem— the Keynesian, the neoliberal and the social investment approach (Table 1.2.1).

As we can see, the connection between the welfare state and economic growth is far from a new problem. But the understanding of the role of the welfare state in this context has changed. Keynesian theory sees the welfare state as the balancer of the economy and simulator of growth. In neoliberalism the welfare state becomes a burden and expense. In the social investment approach, the primary role of the welfare state is to support the competitiveness of the economy. However, support for economic growth can only become a reality in the case of a quality-based and not a cost-based competitive advantage (Hay, Wincott 2012). In the case of a quality-based competitive advantage, the emphasis is not on achieving the advantage by the simple hiring-firing of workers, but on the need to constantly deal with innovation at the business level and with ensuring stable investments both into human and physical capital. According to this approach, the welfare expenditures are not a burden, but a necessity that is unavoidable under competitive conditions.

However, the emergence of the investment paradigm does not mean that neoliberal ideas have been totally abandoned. Moreover, neoliberal and investment paradigms approach the macro-economy in a similar way, and in contrast with the Keynesian approach. For instance, in regard to labour policies, both neoliberals and advocates of the investment paradigm

favour the activation of workers and the unemployed, not their protection. The main argument is that current structural unemployment cannot be addressed by unemployment insurance, which was intended to mitigate the fluctuations in the economic cycles (Hemerijck 2012: 52). However, in the search for a suitable “cure” the neoliberal views and those of the investment paradigm part ways. The neoliberals believe that unemployment can be alleviated by the requirement for people to accept “any job”, along with the tightening of the qualification conditions for unemployment benefits. But according to the investment paradigm, the state should apply retrenchment, yet only in order to make possible new expenditures that will have a positive effect in the future. Structural unemployment requires changes in the structure and skills of labour, or in other words, training, retraining, and flexible forms of employment.

One of the challenges of the investment objective is to reach those social groups whose risks current welfare programmes oriented towards protection of the workers have not generally considered – such as mothers, single parents, young people, migrants, etc. (Esping-Andersen 1999). The new social risks, which result from post-industrial employment or demographic and social changes and which are accompanied by income and service losses, are a significant incentive for change in today’s welfare state (Jenson 2012: 33). One of the most complicated problems of a post-industrial economy is the increasing share of the low-paid service economy, in combination with high requirements for those who do “smart work”. In addition to the increasing demand for highly skilled employees, this brings workers with poor qualifications into the focus of the welfare state. Previously their welfare was depending on economic growth, but today they are often

TABLE 1.2.2 Compensatory and investment expenditures by main policy areas

COMPENSATORY MEASURES	MANAGED RISKS	INVESTMENT MEASURES
Unemployment benefits	Unemployment	Active employment measures
Old-age pensions	Old age Limited or inadequate work or social insurance qualification	Funded pension
Family and child benefits Parental benefits	Coping of families with children Smaller employment capability due to a family member that needs care	Parental training Favouring untypical employment Child and family member care services
Subsistence benefits	Unsuitable qualifications Working poor	Education, training and retraining
Sickness benefits, compensation for medicines Benefits for incapacity for work and occupational diseases	Illness Disabilities and health problems	Public health programmes Preventive healthcare, occupational healthcare

Source: Niklolaž (2012), with adjustments by the authors.

unemployed or among the working poor. Another significant force for change is population ageing, which is accompanied by the need for extensive female employment (Esping-Andersen 2009; Häusermann 2012). However, this requires the option of part-time or flexible-time employment and family policies that combine parental leave schemes with quality childcare.

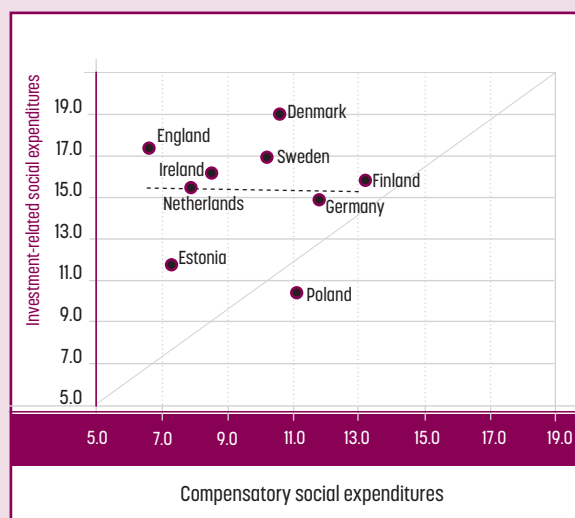
The new social risks endanger younger cohorts more than the elderly, who are protected by the classical welfare state measures. Therefore, the resources of the welfare state should be redirected from the old to the young, in order to develop childcare, family services, labour-market training, study grants, etc. However, the main message is not the redistribution of resources between the generations, but the “stretching” of the welfare state over the entire lifecycle. In order to accomplish this complicated task, we need a “new welfare state” (Esping-Andersen 2002).

A life-course welfare state does not mean that the “old” risks, which have been at the core of welfare provision, should not be dealt with. Rather, the question is whether and how the government is able to restructure welfare expenditures so that it can simultaneously: 1) cut its current costs, 2) ensure need-based benefits, and 3) find resources for investment. This means diverse measures in all fields of activity. In order to achieve sustainability, services should be given preference over benefits (for instance, readily-available, quality early-childcare, instead of child allowances), as should benefits that are capacity-enhancing be given preference over those that are redistributive (e.g. study grants instead of unemployment benefits) (Greve 2013).

► **COMMENT:** The chart reflects only the main social expenditure groups and expenditures made from public resources.

The social investment paradigm is so new that there is no clear understanding of how to assess the success of the countries implementing it or how to exactly calculate the social investment costs. Hemerijck (2013) recommends that costs related to services that increase capacity be separated from compensatory income transfer. The former includes childcare, education and research, active labour market policies, the rehabilitation of disabled people, among other things. Compensatory income transfers include pensions, disability and unemployment benefits. Unfortunately, this division simplifies reality, because many welfare programmes (for instance, those related to

FIGURE 1.2.1 Comparison of the investment and compensatory expenditures of Estonia with EU benchmarking countries; % of GDP 2011



Source: OECD Social Expenditure Database (SOEX).

health) are not included in the analysis or are treated superficially (just as education is treated generally, without a distinction between pre-school, higher, and vocational education, as well as lifelong learning). In addition, as **Table 1.2.2** shows, many social policy areas include both compensatory and empowering measures. For instance, one of the most costly fields of activity in a welfare state – healthcare – falls into this category and it is not easy to decide when the compensation of disability transforms into enhancement of work capacity. It is possible that this is the reason that the current empirical analyses of the investment paradigm (**Hemerijck 2013; Nikolai 2012**) do not have the health component in the models.

1.2.2 Is the paradigmatic shift being implemented in public policies?

Inspired by the logic of the investment paradigm and the current attempts to measure its dissemination, below we map the relevant developments in Estonia and compare them with eight EU benchmarking countries. This allows us to elaborate the current models by including healthcare indicators with the investment measures.

The table given in **Table 1.2.3** divides the public sector's welfare costs into compensatory and social investment-related expenditures. As expected, the largest compensatory expenditure is pensions; in the countries where generous obligations were previously taken on for the pension payments and where the population is aging rapidly, the pension costs have also increased more rapidly. Of the social investment expenditures, closer attention should definitely be paid to the increased cost of family policies. In several countries these are approach-

ing education costs and have surpassed the costs for labour-market policies. This is undoubtedly a noteworthy change, which shows that the “new welfare state” is no longer just an academic vision.

As shown in **Figure 1.2.1** among the significant expenditure groups in the benchmarking countries, investment-related social expenditures predominate. At the same time, we do not find any wealthy or economically successful countries that had contributed predominantly to compensatory measures and neglected the investment-related ones. However there are noteworthy differences between the countries, including between the wealthier welfare states. The Anglo-American countries stand out for the high level of their social investment-related expenditures and the low level of their compensatory expenditures. This division is affected by their smaller pension expenditures and larger family-policy expenditures compared to other countries. A high level of both social-investment-related and compensatory expenditures is typical for Scandinavia, but somewhat surprisingly the distance between Finland, Denmark and Sweden is considerable. This trend suggests that the uniform Nordic welfare model of the 1970s is disappearing and nationally-specific choices are being made in the welfare state reforms. Despite their common recent political past, the less-wealthy Estonia and Poland are also positioned far from each other in regard to the compensation-investment dilemma. If, as wealth increases, Estonia could approach the Anglo-American or Dutch model, then Poland seems to head toward the management of old risks similarly to Finland. In terms of economic development, Poland has been more successful than Estonia, but in regard to the capacity for innovation and general competitiveness Poland scores significantly lower than Estonia (**The Global**

TABLE 1.2.3 The main compensatory and investment expenditures in EU welfare states, % of GDP 2011

	COMPENSATORY EXPENDITURES				INVESTMENT EXPENDITURES				Total investment expenditure
	Pension	Labour market (passive)	Survivor's pension	Total compensatory expenditure	Family	Education	ALMP	Healthcare	
Estonia	6.9	0.3	0.1	7.3	2.3	4.8	0.2	4.5	11.8
Netherlands	6.2	1.5	0.2	7.9	1.6	4.9	1.1	7.9	15.5
Ireland	4.7	2.7	1.1	8.5	3.9	5.6	0.9	5.8	16.2
England	6.1	0.4	0.1	6.6	4.0	5.3	0.4	7.7	17.4
Poland	9.0	0.2	1.9	11.1	1.3	4.2	0.4	4.5	10.4
Sweden	9.4	0.4	0.4	10.2	3.6	5.4	1.2	6.7	16.9
Germany	8.6	1.2	2.0	11.8	2.2	3.9	0.8	8.0	14.9
Finland	10.6	1.7	0.9	13.2	3.2	5.9	1.0	5.7	15.8
Denmark	8.4	2.2	0.0	10.6	4.0	6.1	2.2	6.7	19.0

Source: OECD Social Expenditure Database (SOCX).

Competitiveness Report 2014-2015). Thus, there is a risk that, if Estonia were to take the “Polish path” in the restructuring of social expenditures, this would not ensure economic success in the long term.

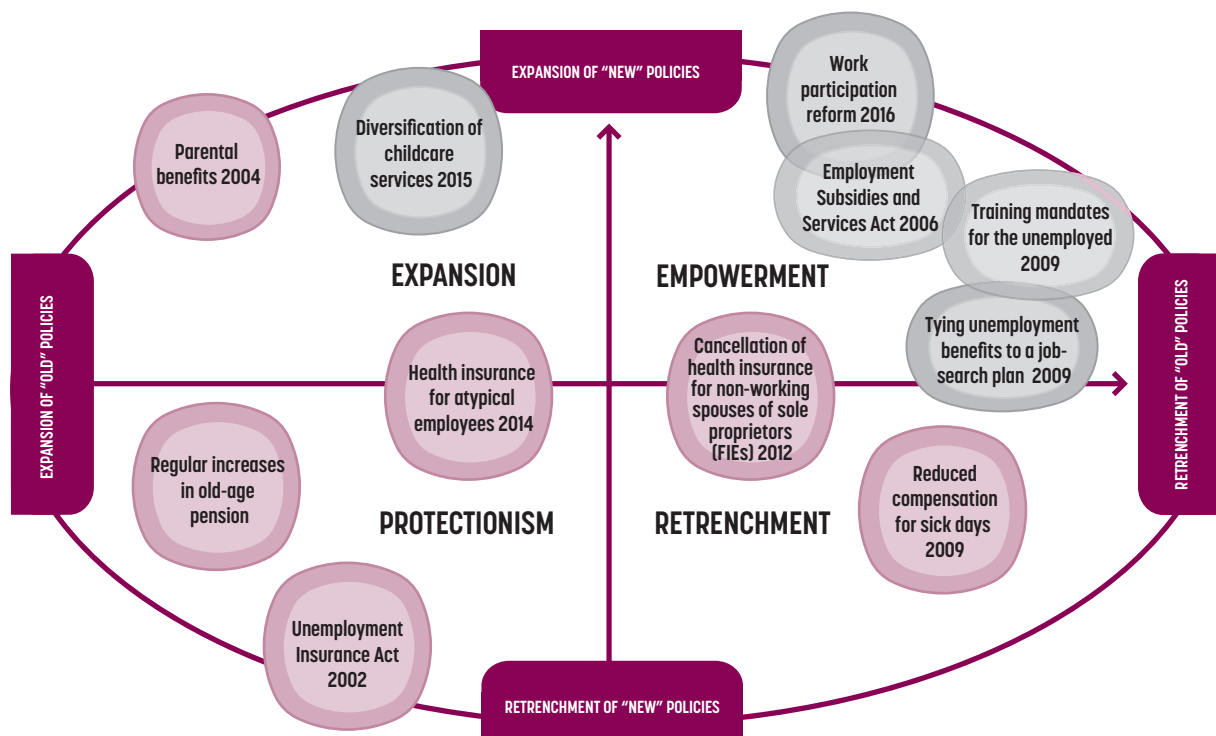
The position of the countries on the investment-compensation axis is at least partly the result of welfare policy reforms. The policy reforms can also be displayed on a two-dimensional axis, which distinguishes between the old and new social risks and shows whether they are headed for retrenchment or expansion. Combination of the dimensions brings us to the four basic strategies of welfare state development – protectionism, retrenchment, expansion and empowerment (Häuserman 2012). Although the protectionist strategy allows maintaining the level of welfare, economic and population trends predict that it cannot be sustainable as old social risks crowd out the capability to manage the new ones. Welfare could be increased with the expansion strategy, but here too sustainability is not ensured until it becomes clear where the necessary monetary resources for the old and new policies will be taken from. The empowerment strategy seems to be more focused on the income side of the welfare state, but here is no guarantee that empowerment measures will increase the material wellbeing of households. In sum, a future-oriented social policy is unavoidably multidimensional and the ability to balance those various dimensions will be the key task of welfare state governance.

Figure 1.2.2 shows Estonia’s social policy reforms of the

last few years. The empowerment strategy has been implemented relatively seldom, because unlike in the mature welfare states, there were no generous grant programmes to cut. Pension policies, which are focused on compensating the incomes of the elderly are quite prominent on the agenda. However, an active ageing policy has been very slow to be realised in Estonia. The largest number of future-oriented reforms have been realised in the field of employment, where measures can be found in several strategic “fields”.

Generally one can note the connection between reform activism and policy drift. In the policies that have been let to drift, such as pensions and healthcare, only the classical retrenchment instruments (as in health insurance) or expansion (as in pension plans) have been used, but new risks have not been addressed. The time factor also seems to play a role in reform strategies. Some reforms, which seemed progressive at the time of introduction (such as parental benefit in 2004), seemed to have become a hindrance to development today since they do not help to solve the problem of family-work reconciliation, and with its inflexibility may actually reproduce the gender wage gap. Luckily, most of the amendments to legislation made during the last two to three years help make the welfare state more flexible and also include the needs of new risks. Generally, the changes in the Estonian welfare state could be defined as multidirectional; they include retrenchment and cuts in certain benefits while also creating new opportunities.

FIGURE 1.2.2 The position of Estonian welfare reforms in the framework of contemporary strategic welfare reforms (pink - benefits in cash; green - benefits in kind)



Source: “Framework by Häusermann, 2012; position of Estonian reforms by authors.

Conclusion

The reasons why Estonia is moving in the modernisation of its welfare system toward the investing- and empowering-welfare state are mostly the same as for the other EU countries (population aging, difficulties in finding resources for traditional welfare expenditures, etc.). However, the focus cannot be limited to investments that will produce only future returns, because ignoring today's risks may result in an increase of poverty and exclusion. It has also been argued that redirecting resources to investments tends to strengthen the Matthew effect, i.e. the welfare profile has become less pro-poor and more pro-working-rich (Morel et al. 2012: 15). The current Estonian family-policy mix of a parental leave system and a shortage of places in early childhood care settings, for instance, tends to bring on the Matthew effect. Generally speaking, though, the empirical data presented in the previous sub-chapter show that during the recent economic crisis the hardest hit were not the population groups for whom the distribution-compensation approach would be the only solution (e.g. old age pensioners), rather it was the wage earners (through loss of employment). Therefore it seems that currently the prospects for moving toward the investment-empowerment model do exist in Estonia.

In some sense the turn toward the investment paradigm is similar to the task that had to be addressed during pension reform, when both the "pay-as-you-go" contributions had to be maintained and a new funded pension programme introduced. However, the scale is now significantly more ambitious and therefore there is a greater need for additional funds. Where can these come from? To date, two methods have been used in Estonia. Firstly, unemployment insurance funds have

been allocated to carry out activation reforms in the labour market. Secondly, EU Structural Funds have been used as a resource for education and employment reforms (e.g. the modernisation of vocational education, labour market reforms, career counselling). The dismantling of the 1980s Delors-era principles for the financing of employability reform can be seen as a good strategic step (since the reform increases employability and welfare in the long term), although it infringes on social justice (since the unemployment insurance contributions do not benefit the contributors). The financing of new social policies with money from the EU Structural Funds is more complicated to assess. As the **National Audit Office (2024)** notes, the government funds are used predominantly to cover fixed costs, and investments that contribute to long-term development have to be covered by foreign financing. This increases Estonia's dependence on EU decisions and threatens the continuation of the recent policies after the EU grants end. Apparently, it is not an accident that the reforms related to the empowerment strategy have been made mostly in employment policy, which is clearly the most important social policy for the European Commission.

Regardless of whether we are dealing with Estonian or European taxpayers' money, only the government can decide to allocate the funds for a paradigmatic change in the welfare state. However, this is very complicated as long as the dominant monetarist doctrine considers any form of social policy spending to be pure consumption, which permanently jeopardises macro-economic stability. Therefore, to start with, an open-minded and self-critical discussion about the link between the welfare state and economic growth within the framework of the three fundamental paradigms presented above is needed. ●

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1.3

Perceived Social Exclusion Before and After the Economic Crisis (2004–2012)

► KAIRI KASEARU & AVO TRUMM

1.3.1 Changes in the economic environment and the general wellbeing of the population

The dynamic changes occurring in Estonian society during the past ten years were obviously reflected by the indicators measuring its wellbeing (Figure 1.3.1). In the period before the crisis (2004–2007), the average wage increased more than 1.8 times even when considering purchasing power, while unemployment was nearly halved. During the crisis (2008–2010) the unemployment rate had tripled and the average wage had diminished by about a tenth; by 2012 the gross domestic product and wages had been restored to pre-crisis levels.

In conditions of rapid economic growth, the rate of absolute poverty¹ declined by half and the rate of material deprivation² by a third; during the economic crisis there was a rapid rise in both absolute poverty and material deprivation in almost all segments of the population. Primarily, there was a decline in households' ability to pay rent and utilities on time and to find financial means to cover unforeseen expenses (Laes 2013).

Several authors (Degutis et al. 2010; Easterlin 2009) have shown a strong correlation in their studies between the wealth of a society (measured by gross domestic product) and the general level of life satisfaction. However, in Estonia's case the sudden changes in the economic environment did not significantly influence the population's general satisfaction level. The explanation may be that the relationship between a country's increasing affluence and the population's satisfaction need not be linear, and likely depends on several additional factors (Veenhoven 1997; Easterlin 1995). According to Layard's (2005) study, further growth in average life satisfaction slows down when the state's per capita gross domestic product exceeds US\$ 12,000 (in Estonia, this level was surpassed in the late 1990s). The general level of life satisfaction is also related to income inequality – the greater the level of

material inequality, the greater are the material risks and consequently the lower the level of life satisfaction (Sanfey, Teksoz 2007). Estonia is characterised by a persistent relatively high level of material inequality, which is reflected in Figure 1.3.1 by the level of relative poverty. The stability of this high level of inequality can also partially explain the temporal stability of average level of life satisfaction assessment scores. It has also been shown (DiTella et al. 2001) that increases in inflation and unemployment levels correlate negatively with life satisfaction. A decrease in labour force participation and an increase in the unemployment that accompanies slowing economic development can lessen the sense of social safety and life satisfaction in people.

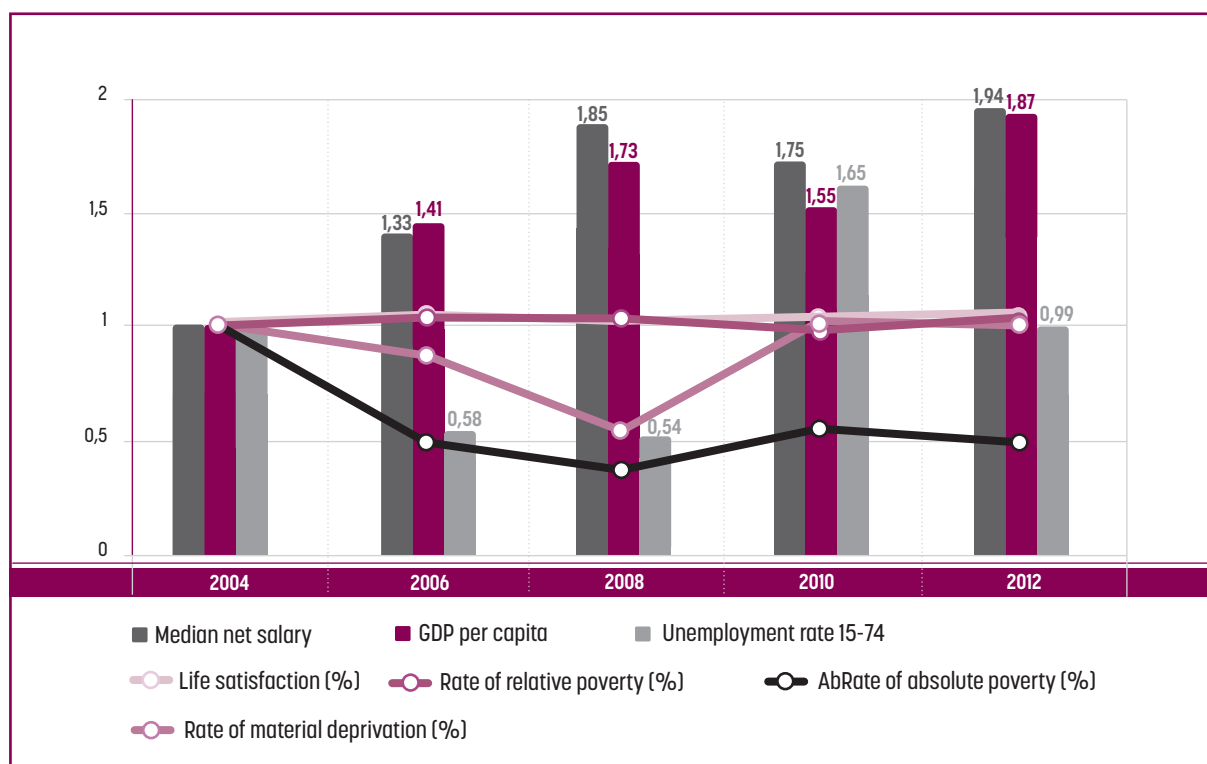
1.3.2 The impact of social exclusion on social cohesiveness

A low cohesion level in a society and a meagre involvement of its members increase the risk of poverty and social exclusion. While poverty is most often defined in terms of material lack and unsatisfied basic needs, defining social exclusion is

¹ The rate of absolute poverty is the percentage of population whose equivalent net income is below the level of absolute poverty. The level of absolute poverty is the calculated minimum level of subsistence. The calculated minimum level of subsistence is the smallest amount of necessary means of subsistence that covers a person's daily needs. The calculated minimum level of subsistence consists of a calculated minimum food basket (excluding alcohol and tobacco expenses) and the individual's non-food related expenses (including cost of housing)

² The rate of material deprivation shows the percentage of population who cannot afford at least 3 of the following 9 components: 1) paying for rent and utilities, 2) keeping the home warm enough, 3) unforeseen expenses, 4) eating meat, fish or equivalent protein every other day, 5) a week-long vacation away from home, 6) car, 7) washing machine, 8) color TV or 9) telephone.

FIGURE 1.3.1 The dynamics of the indicators reflecting the Estonian economic environment and the wellbeing of the population between 2004–2012 (2004 = 1)



Source: Statistics Estonia.

considerably more complicated. It can be generally defined as a process of accumulation of different wellbeing deficiencies with their consequent social problems, which results in diminished societal participation, an increase in feelings of powerlessness and disappointment, and a distancing from the life of society (Trumm 2010; see also Kutsar 2010; Trumm 2011). Social exclusion means the shattering of social bonds, a process in which people or groups are completely or partially left out of participation in society (Eurofound 1995). Researchers of exclusion (for example Kronauer 1998; Atkinson, Davoudi 2000; Pirani 2013) have found that social exclusion indicates a lack of social integration and an inability to participate in the political, economic and social structures by members of society. Room (1990) characterises social exclusion as a situation where some people are in worse circumstances than others due to deficiencies in education, work status, economic resources, place of residence, etc., and where access to the main social institutions is more limited, with the aforementioned deficiencies being constant over time. The term “social exclusion” unites many different social and economic problems: poverty, inequality, geographical isolation and exclusion, discrimination, small social capital, deficits of trust, unsuitable value-judgments and behavioural models, helplessness in using public services, etc.

In this chapter we are interested in how the socio-economic changes of the past decade have influenced the general cohesion of Estonian society and the social inclusion of its members: What has been the influence of the changes in the economic environment on the level of social exclusion in

society? Has the crisis increased exclusion or rather united members of the society? How has the nature of social exclusion changed in terms of the sub-components of the social exclusion index? Which are the social exclusion risk-groups in terms of different social and demographic categories and how have they changed over time?

1.3.3 Measuring social exclusion

Measuring social exclusion is based on objective indicators that show access to opportunities and resources in different areas. For example, the multidimensional Social Exclusion Index developed by Eurostat (Eurostat 1998) includes attributes that express (1) financial coping difficulties, (2) unsatisfied basic needs, (3) below-average living conditions, (4) lack of necessary durable goods, (5) poor state of health, (6) inadequate social contacts and (7) general dissatisfaction with life. Later studies have brought out the importance of subjective indicators in measuring social exclusion (Böhnke 2001a; 2001b; 2004; Robila 2006; Bude, Lantermann 2006). For instance, Robila (2006) measures social exclusion based on the extent to which people perceive that they are left out of society and they have experienced unjust behaviour towards themselves. It is important to stress the aspect of relativity in cases of social exclusion: one is socially excluded in comparison to others, in comparison to the mainstream of society – thus the factors influencing social exclusion can vary depending on the location and time (Atkinson, Davoudi 2000; Pirani 2013).

TABLE 1.3.1 Components of the Social Exclusion Index in terms of individual characteristics with scales and average values (% of population).

	2004	2006	2008	2010	2012	SCALE
POVERTY - poor	44,5	30,4	28,6	29,5	35,7	
Difficult/very difficult to cope with current income (%)	44,5	30,4	28,6	29,5	35,7	1- coping well ... 4- coping with much difficulty
INSTITUTIONAL DISTRUST - does not trust	39,2	26,3	42,4	35,8	43,4	0 - trusts completely ... 10 - does not trust at all; Distrust is defined as values 6 -10
Does not trust: Parliament	52,2	45,3	57,1	49	55,8	
Justice system	40	38,1	42	35,3	39,6	
Police	27,6	29,9	22,4	20,8	24,2	
Politicians	68,6	63,8	67,2	62	67	
Political Parties	73,6	64,2	69,1	64,9	69,3	
SUBJECTIVE WELLBEING - low satisfaction	18,1	11,5	13,1	10,8	14,3	Low wellbeing - values 6 - 10
Assessment of happiness vs unhappiness	17,2	10,2	11,2	10,2	11,5	0 - very happy... 10 - very unhappy
Satisfaction with life - low satisfaction	23,8	17,9	19,4	15,6	21,2	0 - very satisfied ... 10 - completely unsatisfied
INTERPERSONAL DISTRUST	26,6	26,5	23,3	18,6	21,5	Distrust - values 6-10
Cannot trust people	31,7	28,3	27,8	24,4	27,7	0 - most people can be trusted ... 10 - you can't be too careful
People try to use other people	29,8	26,7	24,6	21,7	24,2	0 - enamik inimesi on õiglased ... 10 - enamik püüab teisi ära kasutada
People look out for their own personal interests	41	43,3	39,4	31,6	34,7	0 - most people try to be fair ... 10 - most people try to take advantage of me
ISOLATION - is isolated	42,2	35,9	39,1	46,4	47,6	Isolation is defined as values 4-6
Socialises little with friends/relatives/peers	32,7	23,8	30	36,2	35,3	1 - every day ... 7- never
Participates less in events, compared to peers	51,3	52,4	48	51,6	53,3	1 - much more than most ... 5 - much less than most
PERCEIVED DISCRIMINATION The person considers himself/herself to belong to a social group that is discriminated against	9,8	14,5	8,6	6,1	11,3	
SOCIAL EXCLUSION	27,6	20,8	20,7	19,9	25,7	At least 3 of the aforementioned 6 risks are present

In Estonia, the risk of social exclusion was measured for the first time in the 1990s (Kutsar 1997) and there have been several later studies on social exclusion and life satisfaction (Kasearu, Trumm 2008; Trumm, Kasearu 2009). These analyses have shown that the main socio-demographic factors influencing social exclusion in Estonia are gender (women have a higher risk of social exclusion), age (exclusion is characteristic of the elderly), nationality (the risk of social exclusion is higher among non-Estonians than among Estonians) and education (the risk of social exclusion is nearly twice as high for persons with primary and secondary education in comparison with those possessing higher education).

In this study we are analysing social exclusion on the basis of the European Social Survey data from 2004–2012³. This collection of data allows us to measure social exclusion via six sub-components: dissatisfaction with life, poverty, institutional distrust, interpersonal distrust, perceived discrimination and isolation. In order to measure social exclusion and each of the sub-components of it, mentioned above, we developed a composite index (Table 1.3.1). Index values were converted to a two-point scale based on the distribution of the characteristic: value “0” indicates absence of the risk of a particular component (for example, poverty) and value “1” indicates its presence. The social-exclusion aggregate index was formed by adding the sub-components (0 – none of the risks are present... 6 – excluded in all sub-components (see Figure 1.3.2). For further analysis, the people who had at least three of the 6 risks of exclusion present were defined as socially excluded.

1.3.4 Changes in social exclusion 2004-2012

Considering the dramatic changes in the economic environment during the period in question, the level of social exclusion as measured by the aforementioned social exclusion index has changed relatively little. The level of exclusion in society was the highest in 2004, at the beginning of the period of economic growth, when over a quarter of the population was excluded; by the beginning of the economic crisis the level of exclusion diminished to a fifth. Surprisingly, the crisis neither increased nor decreased the general level of exclusion, and even more surprising is the considerable increase in the level of exclusion in the post-crisis period.

People can be more or less excluded/included in society, depending on how much they experience problems/deficits in different components. In Figure 1.3.2, the Estonian respondents have been divided into four different categories based on the level of exclusion: the included that don't have risks of exclusion or have them in only one sub-component; the less-included (2 risks); the less-excluded (3 risks); and the excluded with 4 or more risks.

The largest proportion of the population that felt fully included in society was observed in 2010 – nearly 60%; the smallest in 2004 – a bit less than half of the population; the portion of the population that was excluded based on at least four sub-components was less than 5%, with the highest

³ The European Social Survey is an international social survey with the general agenda of mapping and explaining the changes in the political and economic structures of Europe and in the behaviors and attitudes of European population. The Survey has been commissioned with the support of the 5. and 6. Framework Program of the European Commission and the European Science Foundation. The Survey was first conducted in 2002, followed by five survey waves (see www.europeansocialsurvey.org). Archivist and distributor of data is Norwegian Social Science Data Services (NSD).

FIGURE 1.3.2 The distribution of the Estonian population based on the level of social exclusion/inclusion

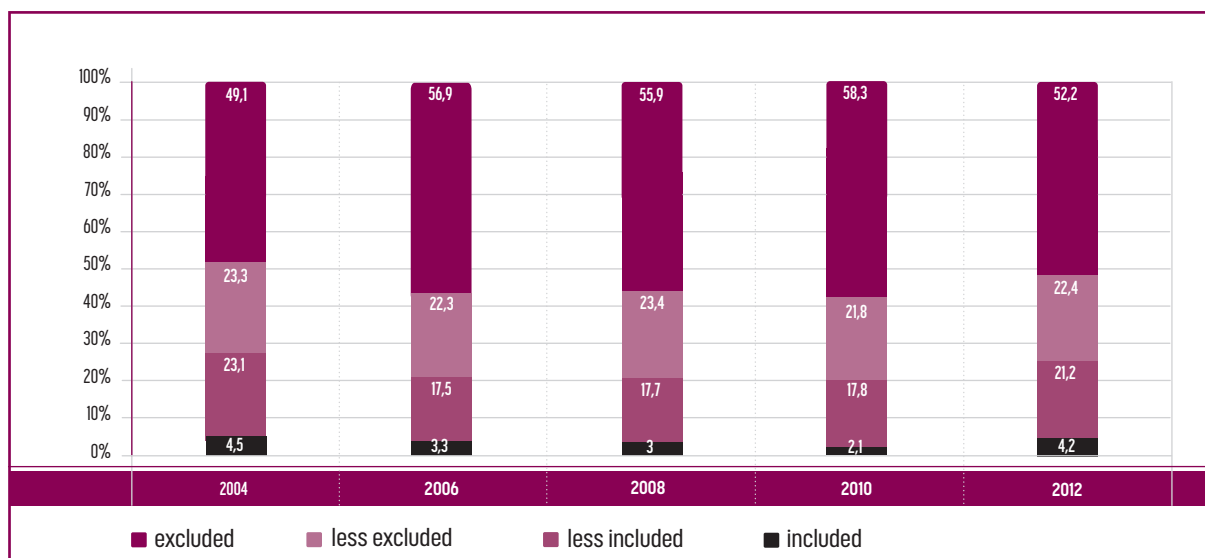
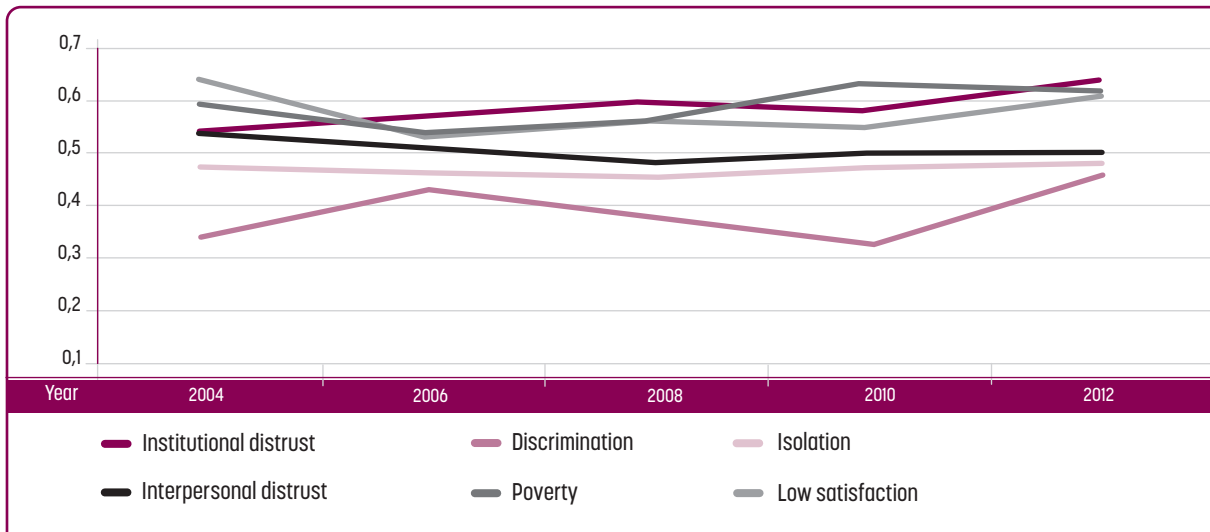


FIGURE 1.3.3 Correlation between the sub-components and the Social Exclusion Index between 2004–2012



levels of exclusion occurring at the beginning and at the end of the period.

Has the structure of social exclusion changed, and if so, how? In order to discern this, we will now look at exclusion based on individual sub-components.

Subjective wellbeing includes the evaluations of happiness and life satisfaction. Compared to 2004, the number of people who rate their wellbeing as low has decreased. Based on the frequency of occurrence of particular sub-components of social exclusion, one can discern three periods: 1) 2004–2006 – decreasing social exclusion primarily due to an increase in subjective wellbeing and institutional trust and a decrease in isolation. 2) Despite the economic recession of 2008, the proportion of the excluded remained unchanged from 2008–2010. Comparison of the 2008 sub-components shows that while subjective dissatisfaction with life and distrust in institutions rose, there was a simultaneous drop in discrimination, perceived poverty and distrust in people. The proportion of the excluded was lowest in 2010. Emergence from the economic crisis is also expressed by greater trust in institutions and by a rise in subjective wellbeing. 3) However, the 2012 data confirm once again a rise in the number of the socially excluded. There is a significant rise in the proportion of the dissatisfied, in distrust of institutions, isolation and economic difficulties.

Next we will look at which sub-component contributes most to the formation of social exclusion. Figure 1.3.3 shows the correlations between the social exclusion index and its sub-components. Lack of trust in institutions, low level of happiness and life satisfaction, and financial difficulties contribute the most to the development of social exclusion. While low life satisfaction was the leading component contributing to the development of social exclusion in 2004, during the recession institutional trust rose in importance. As the economy stabilised, personal economic circumstances became more important again. The importance of interpersonal distrust as a

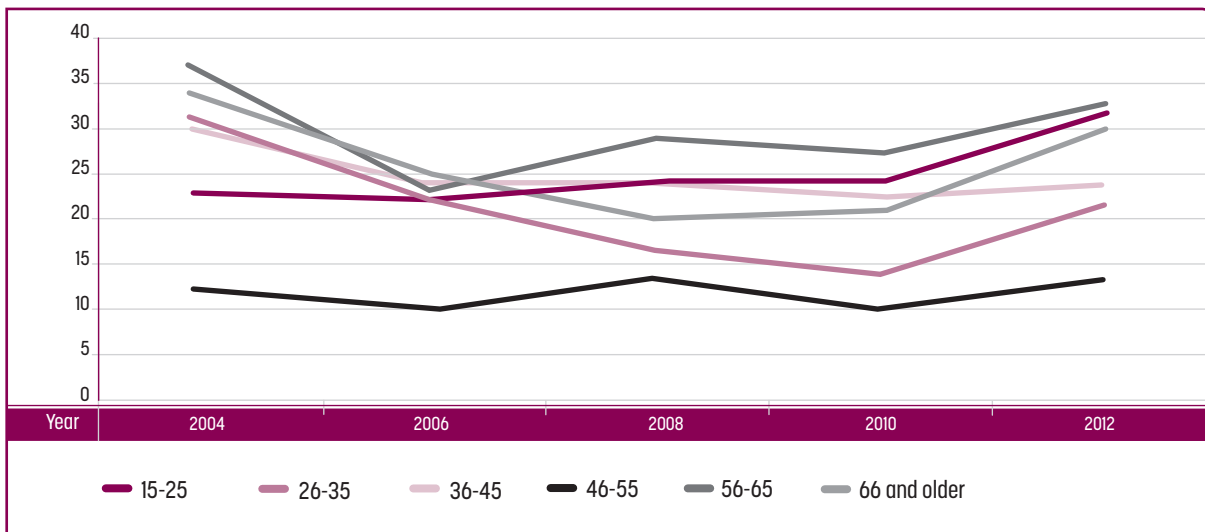
component of social exclusion had declined compared to 2004.

Perceived discrimination and isolation are the most weakly related to the other sub-components. Therefore we can conclude that a person may perceive him/herself to be discriminated against, but this does not necessarily express as social exclusion. One could assume that isolation (meagre amount of socialising with others) and interpersonal trust are strongly correlated, but our analysis shows a very weak correlation.

1.3.5 Socio-demographic risk factors of social exclusion

A person's gender and age are important determinants of social wellbeing. Earlier studies (see Dolan et al. 2008) have revealed that subjective wellbeing varies based on age groups and forms a U-curve, meaning that the younger and older age groups rate their wellbeing higher than the middle-aged. Nevertheless, one could assume that in a period of rapid changes in the economic environment, the more socially vulnerable target groups are at greater risk of exclusion. Although earlier studies have indicated that the unemployment rate is high among youth and many young people neither study nor work (see Kasearu, Trumm 2013), they nevertheless don't consider themselves to be socially excluded. During the period in question, the proportion of the socially excluded varies least among 15–25 year-olds (Figure 1.3.4). For 26–35 year-olds, the risk of social exclusion diminished during the economic recession, but had grown again by 2012. One can say that in recent years the level of social exclusion has been the most stable among 36–45 year-olds. While the proportion of the excluded has grown in the post-crisis stabilization phase among other age groups, in this particular age group it has remained at the same level. When comparing the age groups, the elderly

FIGURE 1.3.4 Proportion of the socially-excluded according to age groups, 2004-2012



(65+) emerge as the so-called “winners” of the recession period. For them, the level of exclusion was the lowest during 2008–2010. The older middle-aged group (56–65 year-olds) is most in danger of social exclusion and it seems that this age group is most sensitive to changes in the economic environment.

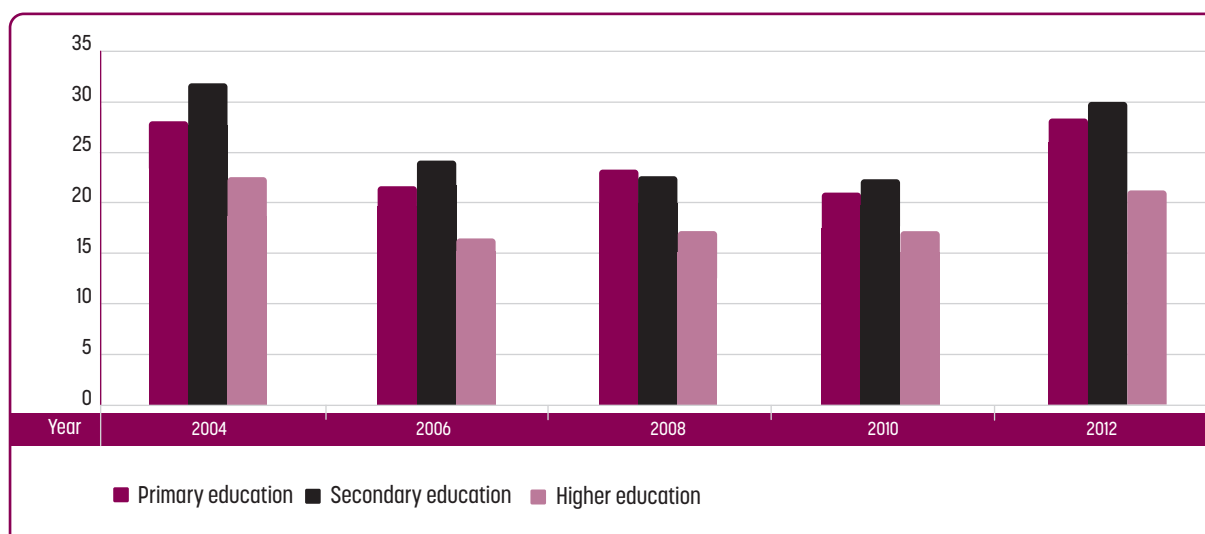
While taking a closer look at the variability of the sub-components of exclusion among age groups (Figure 1.3.4), it becomes apparent that the main cause of exclusion among the youth is distrust of institutions, followed by financial coping difficulties. In the case of the older age groups financial situation and subjective wellbeing are important, and institutional trust is only in third place. One’s situation, wellbeing, and social and economic capability are rated in comparison to other people or societies (see for example Fahey, Smyth 2004). Dissecting the changes of the sub-components of social exclusion among age groups, it becomes apparent that the risk of social exclusion of those who are over 65 diminished during the recession thanks to their more positive assessment of their economic situation. In other words, in difficult economic conditions they perceived and assessed their own economic capability higher, partially because the situation of working-age people (increased unemployment, difficulties repaying loans, etc.) became more difficult. On the other hand, this period also saw an increase in the average retirement pension: the average retirement pension was 175 Euros per month in 2006, according to Statistics Estonia, reaching 304 Euros by 2010. Thus the economic situation of elderly people rather improved, which is clearly expressed by the lower level of social exclusion in this age group. For other age groups, growth in average income turned negative after 2008 and it took a couple of years to regain pre-crisis income levels. However, the proportion of 36-year-old and older people in economic difficulties was the lowest right at the beginning of the economic crises, in 2008, and the differences between the age groups were the smallest then as well. It becomes apparent that the effects of the crisis reached the under-35 age group faster: com-

pared to 2006, the proportion of younger people who rated their economic coping as difficult rose by 6% by 2008, while the proportion of people aged 36 and older in poverty decreased by 5.3%. The economic crisis increased institutional distrust mainly among the middle-aged (36–55 year olds) and the 56–65 year olds began to doubt the helpfulness of people the most. Nevertheless, variability in the assessment of interpersonal trust among age groups has declined year-to-year. On the other hand, the subjective wellbeing of age groups rather equalised during the crisis-years, even though variability increased again in 2012, mostly because the subjective wellbeing of people over 46 had declined compared to 2008, while the wellbeing assessments of the under-25 age group have turned more positive. In conclusion we can state that the economic crisis equalised the gaps between age groups, mainly for two reasons: first, younger people were in a better position in the pre-crisis period, but their economic security was more impacted by the economic crisis, and secondly, the material security and wellbeing of younger people has improved in the economic stabilisation phase, while according to the assessments of older people, their situation has worsened.

Education is still an important determinant of social exclusion: in line with earlier studies (see Kutsar 1997; Fahey, Smyth 2004), people with higher educational levels are less socially excluded (Figure 1.3.5). Compared to 2004, the proportion of the excluded decreased among all educational levels; in the 2006–2010 period the proportion of the excluded remained relatively unchanged among educational levels. Although one could assume that an unstable economic environment means greater individual risk precisely for those people with lower educational levels, we cannot state this based on the given data.

The dynamics of social exclusion are relatively similar in the case of men and women. Thus the risk of being socially excluded was equal for both women and men during 2006–2010, and in the two years when the proportion of the excluded was higher,

FIGURE 1.3.5 Proportion of the socially-excluded according to education level, 2004-2012



the increase comes mostly amongst men. However, it is necessary to look at the dynamics of social exclusion with respect to men and women in relation to their socio-economic status.

Since subjective wellbeing is lowest among the unemployed, unemployment is accompanied by a higher risk of social exclusion as well (Figure 1.3.6). There is a higher-than-average proportion of the socially-excluded among disability pensioners and also people on sick leave. Compared to working people, there are indeed more socially-excluded people among the retired, but the differences are not large, with year-to-year variations between 6–11%. Within the given time period it is apparent that the differences among the statuses were the smallest in 2006 and 2008.

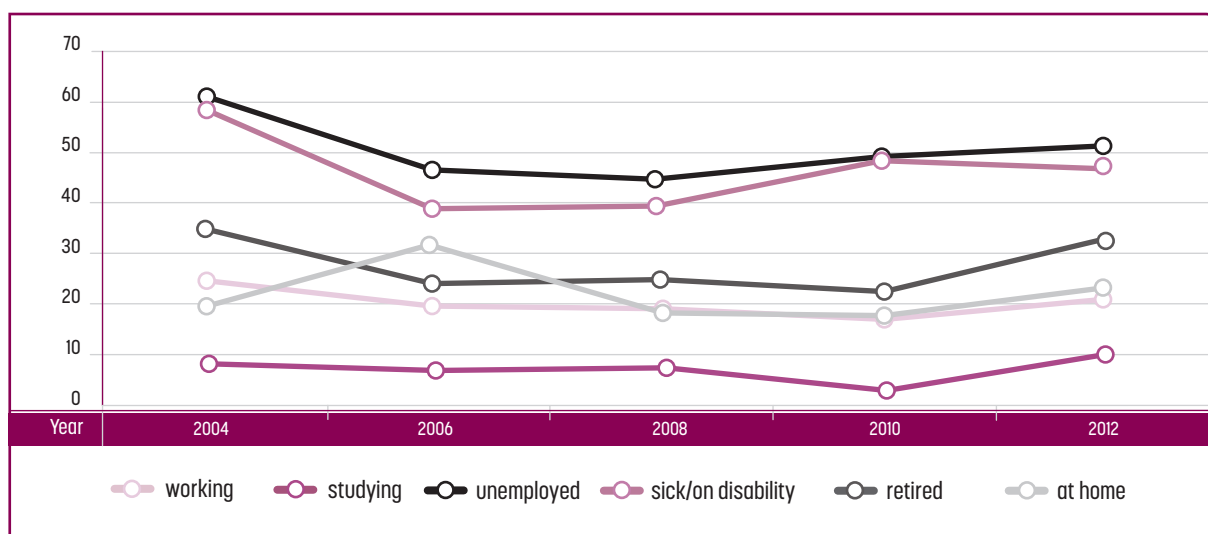
Citizenship and language spoken at home. The Estonian Human Development Report of 2007 pointed out that the social gap between Estonians and non-Estonians significantly deepened during the first part of the 2000s because of non-citizens' higher risk of being socially excluded (Kasearu, Trumm 2008). It is apparent that the economic crisis has had a lesser impact on the level of social exclusion among Estonians than among non-Estonians (Figure 1.3.7).

By 2012, the proportion of the socially excluded among the Russian-speaking population had grown 1.3 times compared to 2008. More than half of Russian-speaking non-citizens were socially excluded in 2012. What is the origin of greater social exclusion among the Russian-speaking population? The main factors in the increase in exclusion among non-Estonians during recent years are growing distrust in institutions (growth by 12 percentage points), perceived discrimination (growth by 10 percentage points) and distrust of people (growth by 7 percentage points). While the main component of Estonians' perceived social exclusion is assessment of one's ability to cope economically, the Russian-speaking population emphasises institutional distrust and perceived discrimination instead.

Who is most at risk of social exclusion in Estonia, and to what extent is this pattern persistent through time? If we

compare the social groups delineated in our study based on the aforementioned socio-demographic factors, it becomes apparent that non-citizens, people with low levels of education and the unemployed have the highest risk of social exclusion. The positive effects of being employed are smaller for non-Estonians than for Estonians. Being unemployed, compared to being employed, increases the risk of exclusion by 4.8 times for Estonians; the same figure is 1.8 times for non-Estonians. Among Estonians, differences between age groups are more clearly apparent, however in the case of non-Estonians, age groups are more homogenous in terms of the presence of social exclusion. In addition to education, age and socio-economic status, we also checked how important the presence of a partner is. Presence of a spouse or a life partner is a factor that reduces the risk of social exclusion for both Estonians and non-Estonians. We conducted a regression-analysis for all the years in order to determine how societal context impacts various groups' risk of exclusion. At the beginning of the period in question, social exclusion was largely determined by a person's socio-economic status, and the impact of education was stronger than during the economic crises as well. On the other hand, differences based on nationality were smaller in the first half of the 2000's than they are now, and polarisation within the Russian-speaking population based on citizenship is increasing. Taking into account the aforementioned factors, it appears that differences between age groups are no longer so significant. Therefore certain age groups' higher risk of social exclusion comes from their socio-economic status and level of education.

FIGURE 1.3.6 Proportion of the socially-excluded according to socio-economic status, 2004-2012



1.3.6 The psychological cost of social exclusion

What does social exclusion mean for the psychological/emotional wellbeing of a person? The European Social Surveys of 2006 and 2012 contained a special module on personal wellbeing, within which questions were asked regarding the psychological aspects of social exclusion and people's prospects for the future. In the case of both years it seemed apparent that socially-excluded people are more likely to be frequently depressed, enjoy life less, be rather negatively disposed towards their own future, and perceive greater limitations on actualising their skills and capabilities than non-excluded people (Table 1.3.2). Also, they see society's general wellbeing and development potential in a more pessimistic way.

More than half of the excluded are pessimistic about the future of the world. Comparing the years 2006 and 2012, it is apparent that assessments of aspects of personal wellbeing vary less than expectations about the development of society. The negative change in expectations regarding living conditions in Estonia both among the excluded and the non-excluded becomes sharply apparent. While in 2006, 45% of the excluded and 20% of the non-excluded found that life in Estonia is getting worse, six years later the corresponding figures were 49% and 80%. On the one hand one can see a correlation with economic cycles here: 2006 reflects the expectations of the beginning of an economic boom-time, therefore the level of general optimism is higher among the excluded as well. Although we lack data for the economic crisis period, the 2012 survey shows that the fears accompanying the crisis are still present and people are rather cautious regarding the future.

FIGURE 1.3.7 Proportion of the socially-excluded based on language spoken at home and citizenship status, 2004-2012

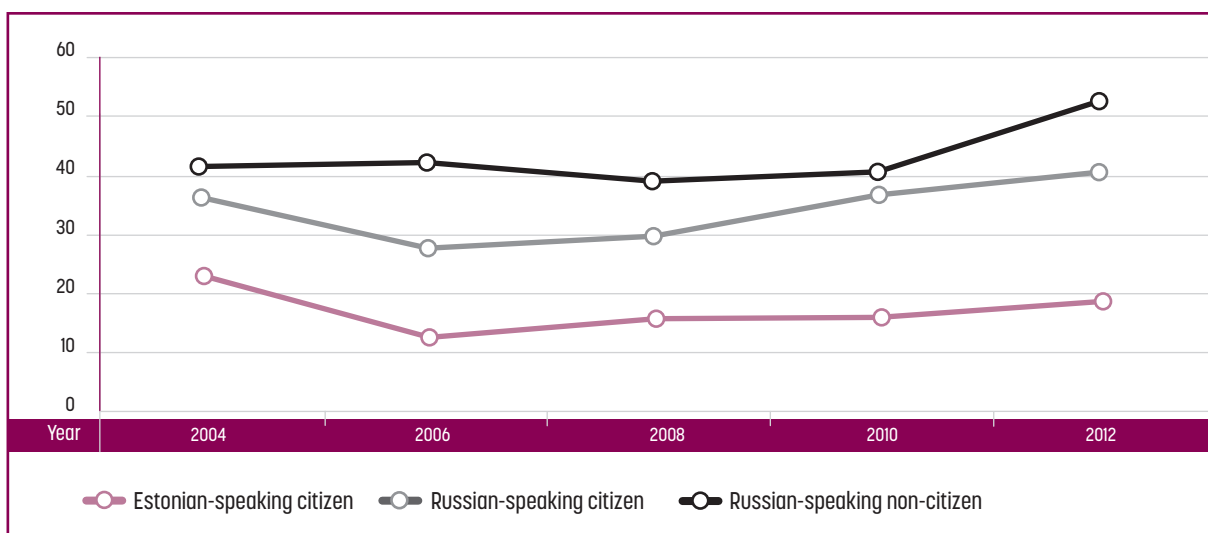


TABLE 1.3.2 Assessments of personal wellbeing and expectations for the future according to the risk of social exclusion in the years 2006 and 2012 (%)

	2006		2012	
	At risk of social exclusion	No risk of social exclusion	At risk of social exclusion	No risk of social exclusion
Was depressed (most of the time + almost all the time)	15,6	5,1	18,4	4,7
Enjoyed life (not at all + very seldom)	56,9	29	52,6	21
I am always optimistic about my future (do not agree + do not agree at all)	27	8,8	22,5	8,3
I have few opportunities to show how capable I am (agree + fully agree)	41,9	22,6	47,5	24,7
Life in Estonia is getting worse for most people rather than better (agree + fully agree)	44,8	20,5	80,1	49,3
In the current state of affairs, it's difficult to be hopeful about the future of the world (agree + fully agree)	60,7	40,4	69,8	43

Conclusion

In this article we tried to analyse how and to what extent the changes in the economic environment that took place during the past 10 years – the rapid economic growth of 2004–2007, the economic crisis of 2008–2010 and the following stabilisation during 2010–2012 – have influenced the subjective wellbeing and level of social exclusion of Estonia's inhabitants. Following conventional logic, one could assume that during a period of economic growth people's level of subjective wellbeing and social inclusion increases, and during difficult times it declines. However, our analysis shows that the impact of economic changes on people's level of social exclusion is relatively modest: in the middle of the growth-boom in 2006, at the beginning of the crisis in 2008 and at the emergence from the crisis in 2010, the level of exclusion was more or less the same (20%), starting to rise only in the stabilisation period, and reaching 25% by 2012. However, the economic environment does indeed influence the inner structure of exclusion according to the sub-components of this complex phenomenon. Economic growth improves the general material well-being of people, but at the same time it increases inequality and inhibits interpersonal and institutional trust and solidarity; the danger of discrimination increases. During more difficult times economic wellbeing indeed declines, but people's sense of togetherness and helpfulness seems to increase.

Every member of society is not at equal risk of exclusion. Analysis shows that persistently higher risks of social exclusion exist for people who are older, with lower education levels, unemployed and using Russian as their primary lan-

guage. In the conditions of economic crisis period, the risk of exclusion increased for people at the peak working age, and simultaneously decreased among the elderly; stabilisation of conditions increased the risk of exclusion for the elderly members of society again.

Social exclusion expresses primarily through people's lessened connection with societal structures and with other people, but it brings with it emotional and psychological problems as well. Compared to the non-excluded, the excluded have two times less probability of enjoying life and actualising their capabilities, they are more than three times as likely to experience depression, and they are significantly more pessimistic about the development of society as well. Furthermore, several studies (MacDonald, Leary 2005; Rose 2000, among others) have clearly proven the correlation of social exclusion with many health problems.

In conclusion one can state that the integrity and cohesion of a society are not solely dependent on economic development. Purposeful conscious action is needed in order to achieve greater cohesion and reduce social exclusion of society's members. The strategic plan "Sustainable Estonia 21", adopted in 2005, specifies the creation of a cohesive society as one of its development goals which, in order to be achieved, requires greater inclusion of society's members, regionally-balanced development and a strong civil society. The situation where a quarter of Estonia's population is at risk of social exclusion (nearly the same proportion as in 2004) shows that during the past ten years, we have not come significantly closer to reaching the set goal. ●

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1.4

A knowledge-based economy as an objective for Estonia: are we approaching it or not?

► KADRI UKRAINSKI & URMAS VARBLANE

Introduction

The economy, and also the productivity of individual companies, depends on the efficiency of sharing, dissemination and use of knowledge as well as on the speed of creating and disseminating new knowledge. It has been argued that the main source of value creation and profit has shifted from physical labour and manual skills to intellectual skills and knowledge. “It is assumed that the most fundamental resource in the modern economy is knowledge and, accordingly, that the most important process is learning.” (Lundvall 1992: 1).

This sub-chapter will examine the development of the intellectual support necessary for the creation of a knowledge society and the use of knowledge in the economy during the last ten to fifteen years. We will provide a brief formulation of the steps prescribed by the strategic document Sustainable Estonia 21 (SE-21) for a transition to a knowledge-based economy and try to ascertain whether Estonia is moving in that direction.

1.4.1 Various aspects of a knowledge-based economy

The Organisation for Economic Co-operation and Development (OECD) defines knowledge-based economies as ones “which are directly based on the production, distribution and use of knowledge and information” (OECD 1996: 7). Such a general definition can be made more operational by distinguishing the four aspects of knowledge as suggested by Smith (2002: 8).

These are:

1. Knowledge as an input into all kinds of production and management. The input of knowledge has become increas-

ingly important in both the qualitative and quantitative sense.

2. Knowledge as a product. The share of the fields of economic activity that deal with the sale of knowledge is increasing. This is related primarily to research-intensive business services and high-tech branches of the economy.

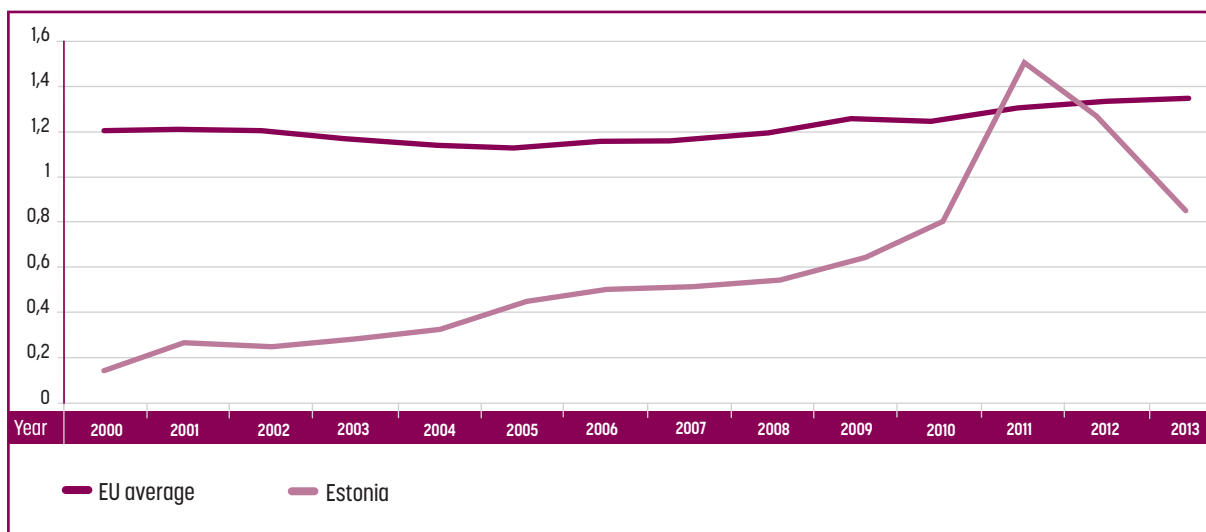
3. Codified knowledge as opposed to tacit, person-incorporated skills. The importance of the former is increasing, but the latter will also remain important.

4. Information and communication technologies as extremely important resources, the use of which create new opportunities for managing and disseminating knowledge. This includes, for instance, platforms for exchanging knowledge, electronic systems for managing knowledge, etc.

In academic literature as well as in practice (internationally as well as in Estonia), a knowledge-based economy primarily refers to the research-intensive branches of the economy. This definition is actually too narrow since it ignores the universal set of problems that accompanies the implementation of knowledge, as well as the significance of experiential knowledge. The latter is very important, for instance, in traditional branches of the economy (middle- and low-tech) (Cooke et al. 2007), but also in developing the provision of public-sector services (Pärna 2014).

Usually, the articles that examine the development possibilities of small countries (e.g. Walsh 1988) emphasise the limited resources, limited options, and other factors that hinder the diverse development of technologies in these countries. Based on this, small countries can supposedly only choose between two alternatives – overloading their domestic resources or ending up under the neglectful control of multinational companies (Davenport, Bibby 1999). On the other hand, based on the fact that knowledge is a resource that does not disappear when it is used or transferred but rather grows and develops, and also because of the integration of the world

FIGURE 1.4.1 Relative importance of companies' R&D expenditures (as % of GDP) in Estonia compared to the EU average



Source: Authors' calculations based on EUROSTAT-I data.

economy and the increased “leaking” of knowledge, Griffith (2007) states that if a small country is able to accumulate sufficient knowledge and skills, its economy can be diverse and attractive to foreign investors who are interested in the implementation of the knowledge that is developed. All the parties could win in this situation. The smallness of a country need not be a negative – it can also provide a series of advantages when it comes to managing and implementing knowledge. These should be considered when formulating research, development and innovation policies (Roolah 2012). Such opportunities will be discussed in more detail at the end of this sub-chapter.

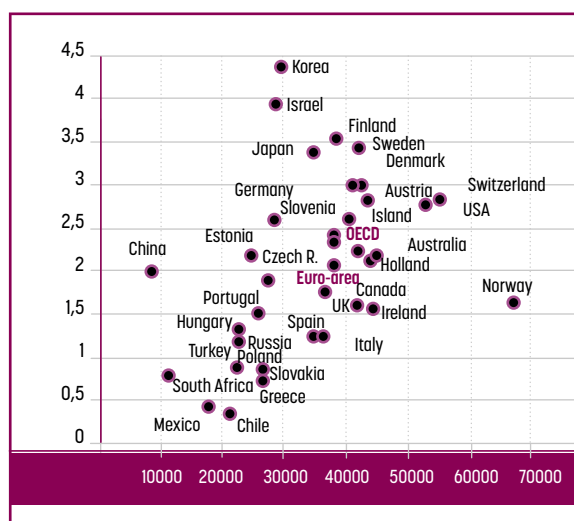
Below, based on the goals stated in SE-21, we will examine the dynamics of the indicators related to them in order to ascertain the progress of Estonia's development into a knowledge economy, domestically as well as in the international context.

1.4.2 The first area of focus: knowledge as production input

SE-21 (2005: 69) prescribed several different steps for moving toward a research-intensive economy, the first of which called for increasing the expenditures for research and development (R&D) activities to 3% of the GDP (in line with the objective set forth in the EU's “Lisbon Strategy” of 2000). The setting of the goal has been criticised because it does not reflect the innovative activities (e.g. design, the acquisition and implementation of new technology, non-technological innovations, etc.) that are not connected to R&D (basic and applied sciences and experimental and development work). However, the level of R&D expenditures is one of the main indicators used in various national and EU strategies, even today.

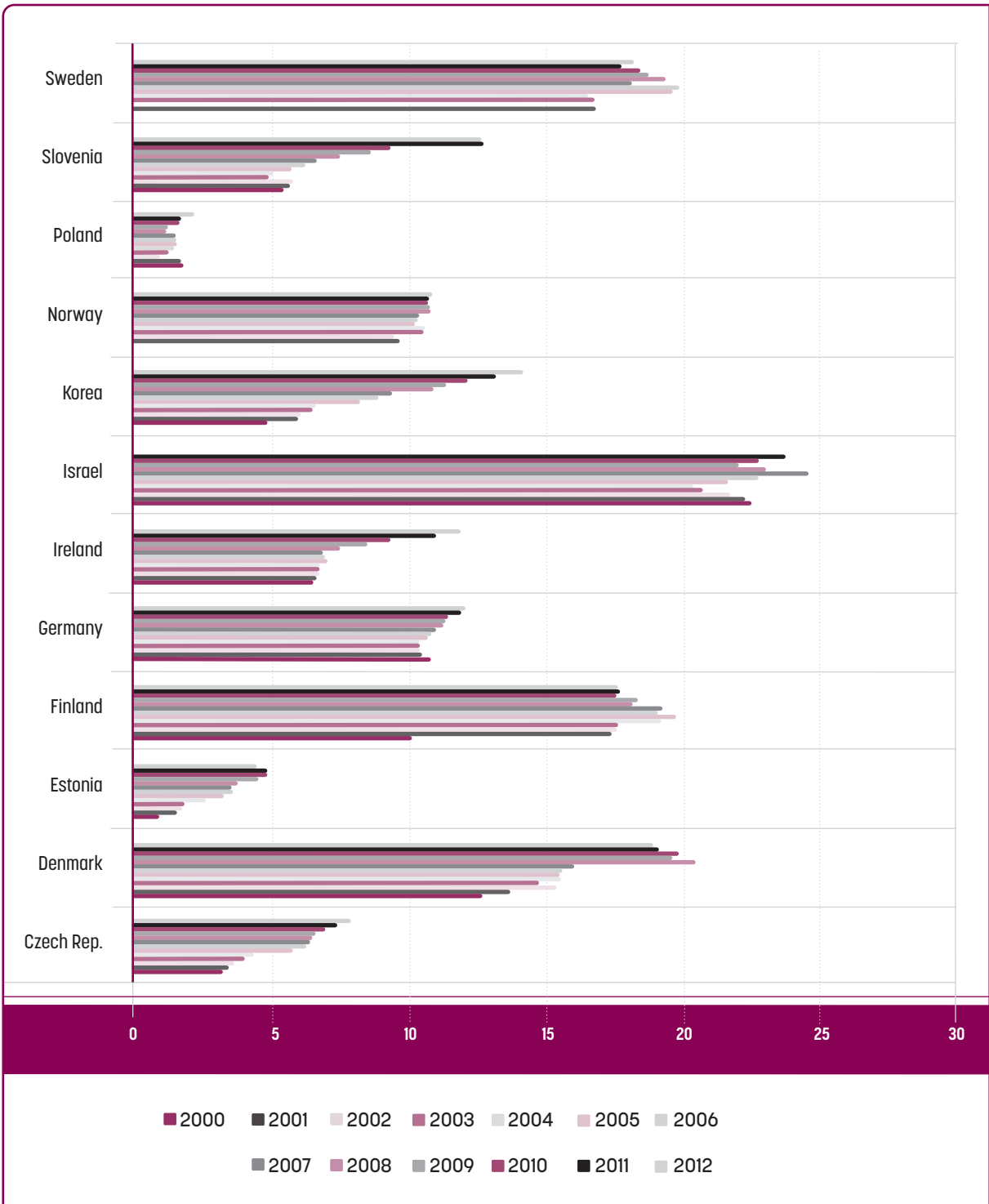
Compared to the other EU states, Estonia's movement toward this goal has occurred somewhat faster. This rapid growth (but also recent decline) has come primarily from private sector R&D investments (see Figure 1.4.1). At the same time, the public sector R&D investments have also grown steadily. Although this positive trend has been recognised, Estonia's development has also been reproached for being too dependent on the structural funds of the EU; for example in 2011, 64% of public R&D funding was financed in this way (ERAC Peer-Review 2012).

FIGURE 1.4.2 The percentage of the countries' R&D expenditures (% of GDP) on the vertical axis and GDP (PPP, thousands of USD) on the horizontal axis. 2012 data



Source: Authors' calculations based on EUROSTAT-I data.

FIGURE 1.4.3 The number of research workers per thousand workers in selected countries



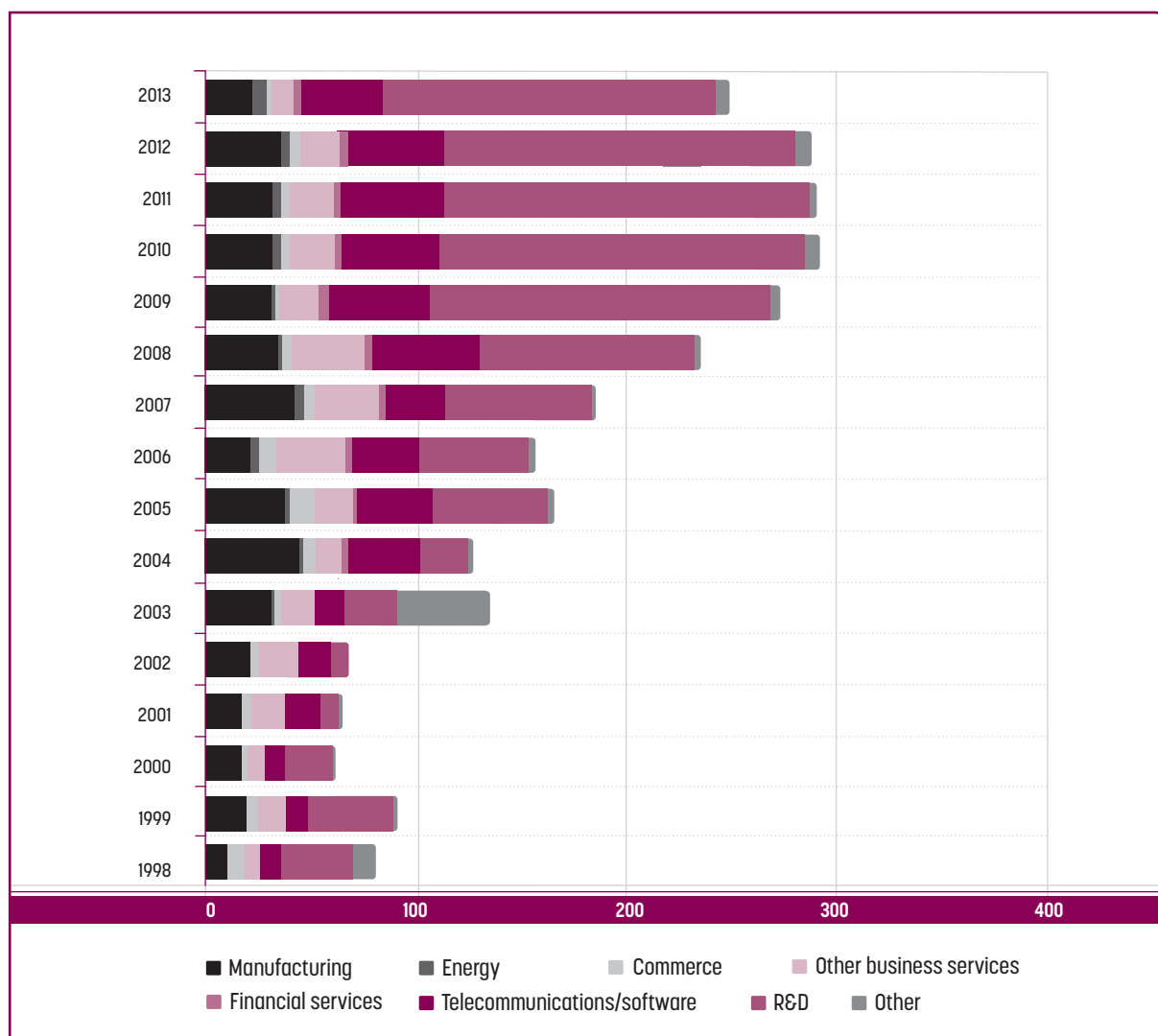
Source: Authors' calculations based on OECD data.

The R&D activities of firms are very concentrated, and in international comparisons, it has also been pointed out that it is difficult for Estonia to be successful as a knowledge-based economy if only 10% of businesses are involved with R&D (European Commission 2012). Our calculations based on Statistics Estonia data show that this concentration has even increased with time. In 2009, the expenditures of the 50 largest compa-

nies totalled 30%; in 2012, it was 85% of the total R&D expenditures. In other words, in Estonia the investments of only a few companies were behind the rapid increase in R&D expenditures.

Although the R&D investments are relatively well correlated with economic productivity (measured by the level and growth of the GDP), there are many countries where

FIGURE 1.4.4 Number of workers with Ph.D.s in Estonia by area of activity



Source: Authors' calculations based on Statistics Estonia data.

productivity is poorer when compared to investments (e.g. Finland, Sweden, Denmark and also Estonia) – as well as better (e.g. Germany, the Netherlands, Ireland, Austria) (Cooke et al. 2007).

Better productivity has resulted from the greater effectiveness of individual economic agents, as well as from greater cohesion and compatibility (Cooke et al. 2007; Lundvall 1992; Edquist 2005). It should be recognised that Estonia's innovation system is not yet able to turn R&D expenditures into results related to the knowledge economy as efficiently as necessary (and this is also confirmed by many other indicators discussed in this chapter).

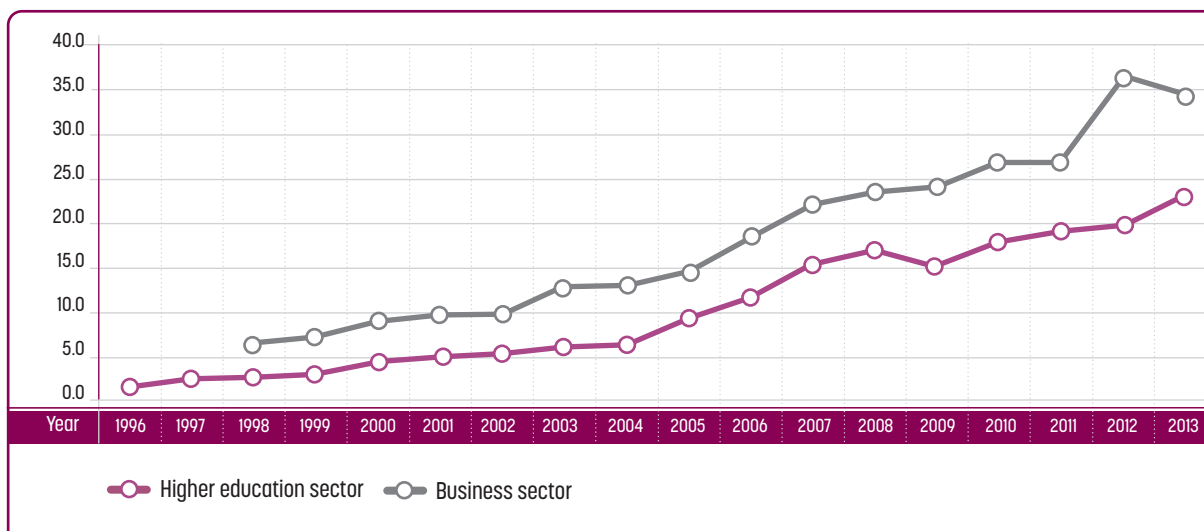
The most important input of a knowledge economy is the number of highly-educated people and the quality of their knowledge skills. Based on the percentage of highly-educated people in the society, Estonia leaves a good impression in international comparisons. Yet, if we look at the percentage of the people dealing with R&D in the entire labour force, (Figure 1.4.3), we see that, despite the increase in this indicator, Estonia's share in this regard is more than four times smaller than

Finland's, Sweden's and Denmark's, and several times below that of Slovenia and the Czech Republic (Poland is at a lower level than Estonia). Denmark is very interesting as a benchmark country because there are many small- and mid-sized research-intensive companies in Denmark. In the next Figure, South Korea was selected as an example of a country where the number of research workers is increasing rapidly, and Ireland as an example of a country where foreign investments have resulted in an increase in the number of research workers.

In Estonia, the number of people with doctorates had in past years increased primarily in R&D fields, although mostly in the public sector research system (Figure 1.4.4). In manufacturing, business services, telecommunications and software development, the number of people with doctorates has increased as a long-term trend, but there has been a decline in recent years. The reason is apparently the recent relocation of R&D-intensive services as well as production outside of Estonia.

Approximately 100 people with doctoral degrees work in the Estonian economy outside of R&D (as a comparison, there are approximately 150 people who receive doctorates from uni-

FIGURE 1.4.5 Dynamics of R&D labour costs (per worker) in higher education and the business sector



Source: Authors' calculations based on Statistics Estonia data.

versities annually and the strategic goal is 300 new Ph.D.s annually). If these numbers reflect the problems associated with guaranteeing the sustainability of the research system, in terms of the productivity of doctoral studies resulting in a “supply-side” imbalance, then the number of working researchers and engineers (Figure 1.4.3 and Figure 1.4.4) also clearly indicates that the economy (and the society as a whole) is not able to fully employ all the highly-educated specialists. This is a fact that in turn affects the productivity of doctoral studies in many fields, since there is little motivation for defending one’s degree if demand or employment opportunities do not exist.

Although a large part of the output from Ph.D. studies has been used to expand the research system itself, there are no signs that this trend may break. Namely, the R&D labour expenditures per worker in the business sector have exceeded those in the higher-education sector. This has made companies more attractive as employers for R&D workers (Figure 1.4.5).

Another field of activity where underutilised potential exists for increasing research-intensity is the public sector as a client for research-intensive products and services. To date, the contribution made by the state budget to development activities has been modest compared to the EU average, and this despite the fact that large amounts of resources are invested with the support of EU structural funds. The state’s R&D expenditures per capita have increased to about half the EU average (Figure 1.4.6).

Methodologically, the data presented in Figure 1.4.6 cannot be compared fully, although some conclusions can still be drawn. Proportionally Estonia makes significantly greater expenditures in R&D related to culture, transport, agriculture and education than the EU average, however the investments in energy-related R&D (which is a priority) are proportionally half as large as the EU average and proportionally many times

smaller than Finland’s (Ukrainski et al. 2013). A more focused approach to RD and innovation (RDI) policies has also been recommended to the other Eastern European states (e.g. see Chang 2002; 2006). At the same time, both international and Estonian researchers have pointed out the greater opportunities that the state, as a smart client, has to use various tools to stimulate innovation capacity in both the public and the private sector (Romanainen et al. 2014; Pärna 2014).

1.4.3 The second area of focus: greater cooperation and knowledge dissemination

The second step proposed by SE-21 for moving toward a knowledge economy is related to awareness and motivation, but also to the development of cooperation. When innovation policies are developed, the focus is often limited to the stimulus resulting from knowledge and how to utilise the latter. (Molas-Gallart, Davies 2006; Tiits et al. 2008) To some extent such an approach is understandable since, in the economy’s investment-based development phase, as well as due to Estonia’s small size, the capacity of business to be a stimulator of R&D is low. It must also be considered that in “transition societies” the level of trust is relatively low, which prevents the functioning of more complicated innovation processes, as well as those that involve many partners.

SE-21 saw an opportunity to increase the interest of scientists in contributing to solving applied problems by creating development centres:

“The current disciplinary fragmentation in Estonia due to the lack of scientific personnel and financing does not ensure the desired results. The launched creation of technological development centres will make it considerably more realistic

to motivate different research groups to work jointly towards a development outcome and to convince enterprises/investors of the achievability of applied outcomes.” (2005: 69)

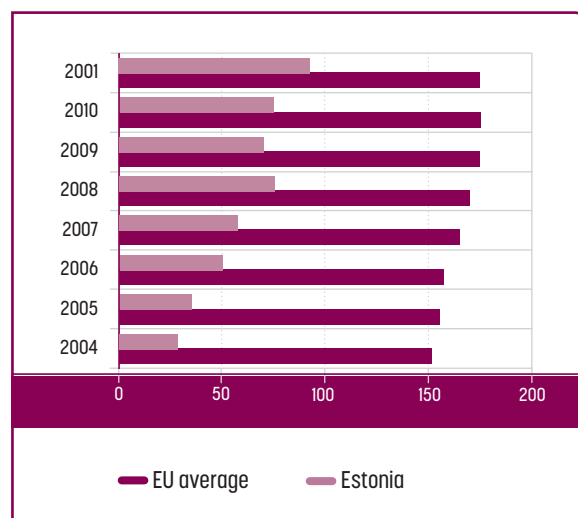
It must be admitted that today we face practically the same problem: compared to other countries, the Estonian research system provides little support for innovation in the economy (Figure 1.4.7). There is a series of reasons for this. The first is that our research funding system as well as the research career model is oriented toward high-level publishing, which is simpler than applied research-based publishing. In this regard, we need to learn from the reforms instituted by the Nordic countries in the 1980s, which led researchers to focus more on the needs of society, whereby it was also found that the “scientific productivity” of their research systems did not suffer as a result.

Another reason is the low innovation capacity of Estonian companies as well as the low motivation of the companies and the public sector to collaborate with the universities. Various studies have shown that Estonian companies act very pragmatically. Their main partners are those associated groups for whom the impact of the cooperation must be measured in money and be immediately achievable. For example, companies in the Estonian forest and wood industry very seldom use universities as a source of innovation (Varblane et al. 2008). 40% of the companies that participated in a mechanical engineering study stated that the reason for their limited cooperation with research institutions is lack of any need for such cooperation (Varblane et al. 2011).

Both policymakers and the universities have viewed the cooperation between companies and universities very narrowly – mostly related to the execution of applied research. However, for small- and middle-sized companies, it can be very important to contract consultation services from universities, to participate in in-service training, to involve trainers, etc. A positive step towards changing this way of thinking was made by the innovation voucher grant implemented by Enterprise Estonia, which has been a very flexible and appropriate first step for increasing cooperation between companies and universities. However, in addition to this small-scale support instrument, it is necessary to develop other more complex measures that support cooperation between companies and universities. Currently basically only the Technology Development Centres (TDC) programme is involved, but according to the recent National Audit Office report, this measure has had little impact on cooperation. (National Audit Office 2014: 24) In the spring of 2015 the development voucher was launched by Enterprise Estonia, which hopefully could fill the gap between the innovation voucher and the TDC.

SE-21 (2005: 23) considered it important to integrate research and the economy through educational cooperation. In the cooperation between universities and industry more attention should be given to the improvement of teaching quality. The basis for a knowledge economy is the existence of a labour force with excellent knowledge, skills and a dynamic attitude. To date, the participation of Estonian companies in the curriculum development of universities and its execution

FIGURE 1.4.6 The level of state budgetary expenditures per capita in Estonia compared to the EU average (in €)



Source: Authors' calculations based on Statistics Estonia data.

has been very modest.

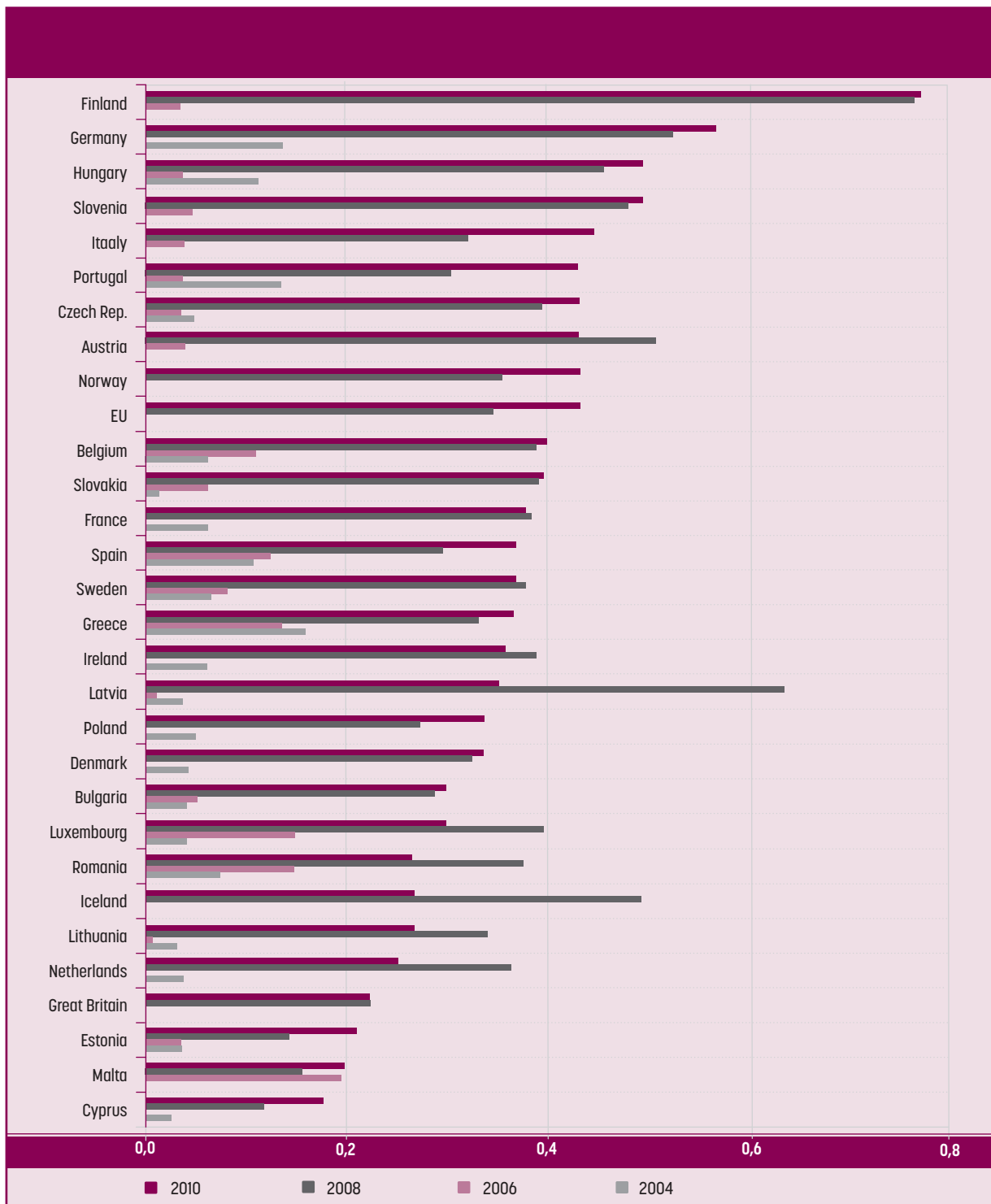
A recent study (Rõigas et al. 2014) showed that the companies that export and have foreign shareholders prefer to choose their cooperation partners from foreign universities; domestic universities are not able to provide them with the required knowledge. In all countries, when it comes to collaboration with domestic universities, government support is a significant factor. This increased the probability of cooperation in 12 countries out of 14 (Rõigas et al. 2014).

1.4.4 The third area of focus: the greater internationalisation of knowledge

The third development trend included in SE-21 was the greater internationalisation of the Estonian economy and society, in order to prevent the isolation of knowledge and to ensure the possibility of using contemporary knowledge.

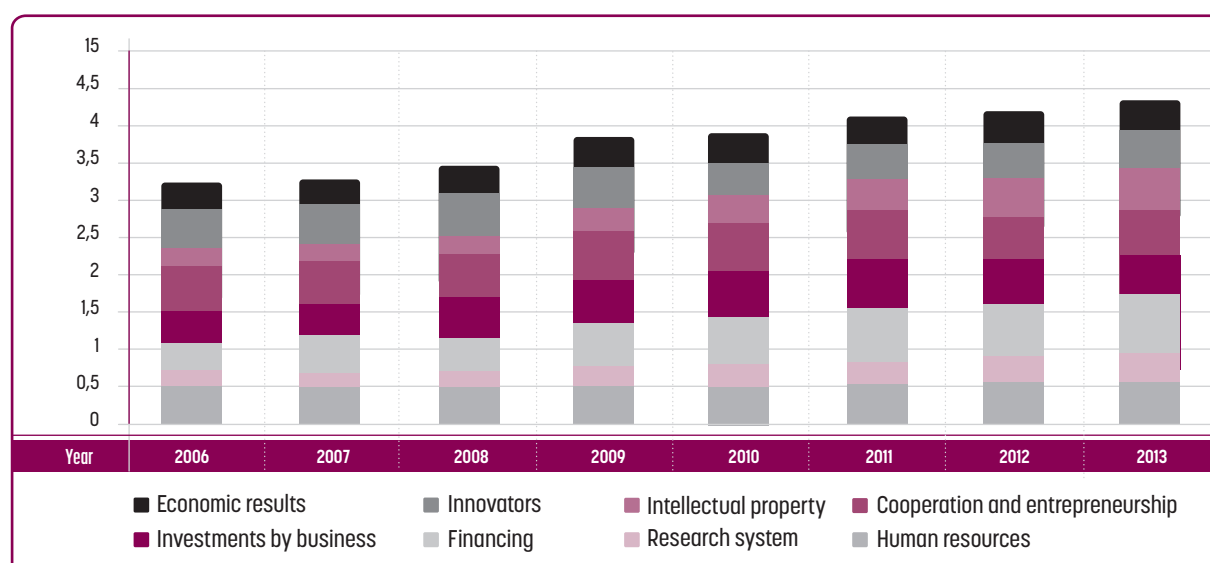
A knowledge-intensive economy presumes an RDI system that would create (and in a small country – as an even more important function – mediate) world-class, quality research results for the use of the domestic economy. In this regard, SE-21 focused attention on influencing the process (mobility and openness). Based on Statistics Estonia data, we can state that, in the ten years after accession to the EU, the number of foreign researchers in the Estonian higher education sector has increased eight-fold. This creates good potential for further internationalisation and helps to develop and raise research standards.

FIGURE 1.4.7 The percentage of companies that have engaged in innovation cooperation with universities and higher-educational institutions in comparison to the number of companies that have participated in innovation-related cooperation



Source: The authors' calculations based on EUROSTAT data.

FIGURE 1.4.8 The dynamics of Estonia's IUS composite index and its components 2006-2013



Source: Authors' calculations based on European Commission data.

As a whole, Estonia has been relatively successful when it comes to international research cooperation. However, the data from the last few years (e.g. the number of Framework Programme applications, as well as collaborative publications) show that the collaboration intensity has somewhat declined compared with the earlier period (Ukrainiski et al. 2014). One reason could be that with the great inflow of EU structural funds, the focus on supporting integration in the European research space has receded into the background.

1.4.5 The fourth area of focus: assisting social innovation

The fourth area of focus in SE-21 was the social innovation aspect, which emphasised the need to find new solutions and methods to cope with the challenges that society would face. In Estonia, as well as in the European Union generally, this area of activity has not been thoroughly explored, but it could provide potential possibilities for very different areas of activity, from healthcare to public administration (Jenson, Harrisson 2013). It should be possible for Estonia to make use of the advantages inherent to small countries in the social innovation field. If a small country is a technological leader in its niche (e.g. e-state services), it has good opportunities for creating inter-government partnerships and strategic unions. Small countries also have the opportunity to be an experimental or test market (a "living lab") (Davenport, Bibby 1999; Lepik et al. 2010).

With regards to innovation, the systemic development of policies and yardsticks is an important activity. Helpful here is the Innovation Union Scoreboard (IUS), which was already mentioned in SE-21, and which tries to reflect the innovative-

ness of the entire economy by being a composite indicator of the innovation inputs and outputs. The Figure 1.4.8 shows that in the period from 2006 to 2013 Estonia consistently improved its position among the other European countries in this regard.

Traditionally, Estonia's weakest indicators in the index have been in the areas of intellectual property, the economic outcome of the research system and innovation. These have improved during the last few years, but are still weaker compared to the other components (Figure 1.4.8).

1.4.6 RDI preferences or the key development areas

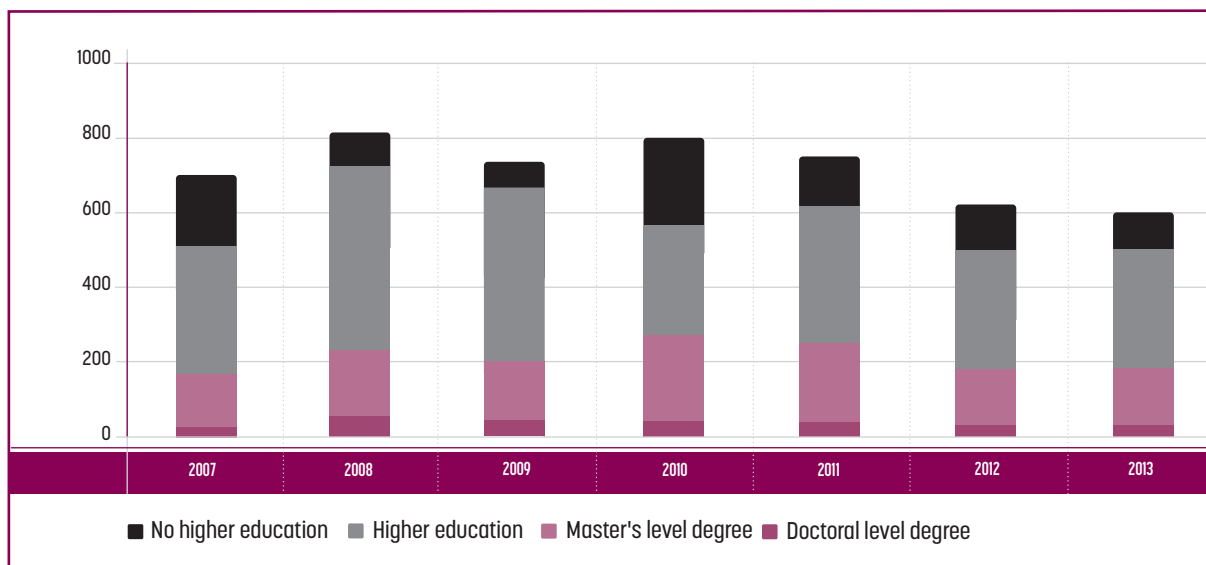
SE-21 specified the following three technologies as the key areas that were seen as being Estonia's development engines:

- User-friendly information technologies (IT) and the development of the information society,
- Biomedicine
- Materials technologies.

These areas of activity are interesting from the viewpoint of a knowledge economy since they can increase the knowledge-intensity of other fields of activity through various applications, as well as by being independent fields of activity providing knowledge-intensive products and services.

The development of user-friendly information technologies and the information society has occurred rapidly in Estonia, especially when it comes to software solutions and e-services. Tiits and Rebane (2009) highlight financial services, cyber security and e-governance as the strongest applied fields in the Estonian information and communications technology (ICT) sector. During the last five years, Estonian IT companies have been able to offer new products/services that

FIGURE 1.4.9 The distribution of R&D workers in programming, consultations and other fields of activity by educational level



Source: Authors' calculations based on Statistics Estonia data.

can be marketed internationally (Fortumo mobile payments, GrabCAD global network of engineering solutions, Transfer-Wise online currency exchange, etc.).

The aforementioned success stories are not accidental – behind them is an increase in the supply of IT specialists. An important role has also been played by the reorganisation of studies in which greater emphasis is placed on business studies and entrepreneurship. However, in the one area of activity that is considered to be the flagship of the Estonian development agenda – software development, programming, consultations, etc. – the percentage of people with doctorates has declined (Figure 1.4.9).

The expected success in the fields of the economy related to biotechnology has not been achieved, although the state has greatly pampered this field with so-called “supply-side” innovation-policy measures. Unlike the IT field, Estonian biotechnology education has followed a very academic orientation (training researchers). For various reasons, the cooperation between the universities and the business community has been extremely limited and the state does not see its role in strengthening this collaboration, because there is no common vision of the future (despite this being a high-priority area of activity) (Tomson 2013). In the case of biotechnology we apparently need somewhat more complex solutions for the development of the research system as well as for establishing a better link between the economy and research (various types of biotechnologies have different possibilities for contributing to the applied fields related to medicine, agriculture, etc.). Empirical analyses (e.g. Kiessling et al. 2009) show that the existence of knowledge at the specialist level (which has been the focus in building up this sector) is not sufficient and does not ensure productivity growth at the company level. In the biotechnology field, so far, a very investment-intensive direction of development has been chosen. It is very difficult, even

impossible, for a small country to finance such a course of development. Therefore it is necessary to find niche areas, where our small biotech enterprises can compete in the international market. In this case, they are also more attractive to large multinational companies as cooperation partners.

The field of materials technologies has not been explored very much in Estonia, but a study conducted by the Finns (Kauhanen et al. 2011) pointed out several niche areas of activity with good potential: various high-tech materials and their use in energy technologies, electronics, and areas that are related to the testing and measuring of these materials. It was found that research groups in these fields are highly internationalised, and there are few high-tech companies in this field. The greatest obstacle was seen to be the low knowledge-intensity of the traditional branches of the Estonian economy, which make it difficult to utilise the potential hidden in the materials technologies. The specialisation pattern of Estonian materials technologies is also rather similar to those of its neighbouring countries. The problem is that there are not enough specialists working in related companies in the relevant fields who could be partners for the research groups. Therefore, in this connection it is necessary to begin cooperation between the universities and the business community.

Summary

As far as the majority of the indicators that reflect the knowledge economy are concerned, one can state that shifts have occurred in the right direction; and compared to other countries, they have occurred quite rapidly. Nonetheless, we can summarise by saying that to date we are only approaching a knowledge economy and have not exited the investment-based development phase.

In fact, during the last few years the speed of development has slowed and even regression can be observed in many fields of activity. The negative impact of the economic crisis on the movement toward a knowledge society can be seen in the case of many companies. However, in the generalised statistics on R&D investments this has been masked by the abrupt increase in the R&D investments of individual large companies. A very significant problem for Estonia is the very narrow base for the R&D investments.

The research system does not yet contribute sufficiently to the development of the knowledge economy, given that the current financing model does not support this type of new economy either with adequate human resources or in facilitating the transfer of new knowledge, in this regard, the goals of SE-21 have not been realised.

Have we been able to utilise the advantages of a small country in the management of knowledge and the organisation of the corresponding learning processes? Below, we will try to summarise Estonia's developments to date, and its potential in the context of these advantages.

If it's true that small countries theoretically have some important advantages – such as the relative simplicity of overall economic management, fewer levels and institutions of government, less bureaucracy and therefore faster decision-making – then based on the developments in Estonia, we can say that this potential has not been actualised very well. A deficiency of necessary knowledge in the public sector is obvious; the processes for incorporating outside knowledge are organised ineptly. **Karo et al. (2015)** state: “The first steps for establishing such a development model should be the development of the technology-based competences in state governance.” Carrying out innovation policies that are based on key areas of activity (i.e. fields related to smart specialisations) presumes

constant communications between the state, the universities and the business community (**Karo et al. 2014**). In Estonia, this experience is still very weak, but as a small country, the potential exists to rapidly improve communications within the state through networks, logistics, etc. and also to make greater use of non-formal networks. This is important for finding quick solutions to problems and for operatively getting feedback. In a small country, it must be possible to relatively easily connect the researchers and engineers from the science and research sector with the other parts of the society, e.g. industry, education, ministries, etc.

For a small country, it is very important to create extensive foreign networks through international relations. In the research system, this internationalisation has functioned quite well. In this regard, Estonia should develop migration policies related to third countries that would assist in developing the economy's knowledge-intensity.

When exporting, a small country can react to changes in demand faster, and it can also dominate in niches that are not attractive to the multinational corporations or large countries. Estonia's location near the European markets also enables competitiveness to be maintained in the traditional branches of the economy by combining high delivery frequency, small shipment sizes and services that support knowledge-intensity sectors (e.g. logistics, etc.).

Also, by selecting the appropriate focus within the key technologies (e.g. e-solutions in ICT, cyber security, etc.), it is possible to compete on the global market by being a leader in technological niches and, as a state, using diversification strategies (in the aforementioned areas of activity, the potential for such niche selections have been realised in ICT, but not in bio-technologies and materials technologies).

In a small country, innovation may rely less on basic knowledge (or capital-intensive R&D) and therefore be less costly, if knowledge is acquired through foreign networks. The various EU grants (e.g. those directed at motivating cooperation) have been more beneficial for small countries and Estonia has made good use of these. Estonia also has a greater potential to be an experimental or test market in the field of social innovations. ●

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1.5

Culture and creativity as transformers of the economic model: perspectives for a creative economy in Estonia

► KÜLLIKI TAFEL-VIIA & SILJA LASSUR

1.5.1 Welfare and creativity

An increase in welfare levels is associated with changes in both the structure and the priorities of people's needs as well as with changes in the spheres of activity and motives of economic agencies. The growing leisure time on account of the continually decreasing time required for satisfying material needs in welfare societies has increased the demand for products and services that provide people with interesting and diverse lives, entertainment and self-realisation (Jensen 2000).

During the last few decades, several significant and interacting trends have occurred in the cultural and economic spheres. Creativity is no longer limited to the cultural field, but is seen as being significant to a much broader extent (Potts 2011). Examples include the role of design in industry; the prospects for art therapy in medicine; and the use of creative practices in other economic sectors. The decline in traditional industry and the rise of the service economy to a dominant position has significantly increased the need for a labour force with interdisciplinary and integrated skills (Kuosa, Westerlund 2012). This accelerates the transfer of creative practices from one sphere of activity to another. In many fields, it is typical for the end consumer to participate in the creation of the product, and in some cases, this may result in the merger of the producer and the consumer (the development of the "prosumer") (Toffler, Toffler 2006). Among the key factors of entrepreneurship, the importance of creativity has increased. A re-evaluation of the motives for starting businesses and of growth perspectives has begun (growth vs. lifestyle business) (Curran, Blackburn 1994), along with changes in (business) competences, including also social (Putnam 1993) and cultural capital (Bourdieu 1998).

These and several other socio-economic shifts have increased the importance of the spheres of activity based on culture and creativity, including their significance as economic

resources – in creating value and jobs through increasing the added value of other economic fields, via (location) branding, and attracting investments via improving the attractiveness of the environment.

In this sub-chapter we elucidate the economic model – the creative economy – that is based on creativity and culture.

The approaches to the creative economy encompass several scientific disciplines, and range from ones that are sector-centred (Howkins 2002) and those based on class (Florida 2002) to approaches based on the competitiveness of cities (Florida 2002; Landry, Bianchini 1995) and the treatments of creativity-based economies (Sacco 2011). Below, we try to explain the developmental perspectives of a creative economy by examining the various possibilities for interaction between the creative fields in the economy as a whole.

1.5.2 The interaction of the creative fields with the economy - various models

Below, we use the approach developed by Potts and Cunningham (2011), which is based on four models. These four models illustrate various evaluations of the economic importance of the creative fields. According to the authors, the impact can be negative, neutral, positive or cumulative.

Potts and Cunningham (2011) call the first model the **welfare model**. In this approach, it is assumed that the creative fields consume more economic value than they provide. The creative fields are dealt with as a sector that provides merit good and thereby increases welfare, but which is able to operate (economically) only with the support of resources transferred from the rest of the economy. In other words, cultural goods are seen as having a high cultural but low market value. In the case of the cultural market, it is assumed that the de-

mand is lower than the supply (Throsby 1994) and intervention by the public sector is seen as the solution.

As the second model, Potts and Cunningham identify an approach to the creative industries they term the **just another industry model**. Unlike the previous approach, the creative fields are not considered a priori to be incapable of coping alone, but their contribution is simply calculated in turnover, export figures and additional jobs, and they are not seen to be the carriers of any specific values for the rest of the economy. This model corresponds to the sector-based approach to the creative economy (Howkins 2002) and was actualised when it was realised that at least some creative fields are also economically significant agents, and the money earned in these fields or the accompanying employment can be significant for the local economy. At the same time, compared to the other sectors, the creative fields were not seen to have any special contributory capability related to innovation, growth of productivity or technological development. This approach assumes that the problems related to the balance of supply and demand can be resolved by market-based competition, and therefore, there is no reason to provide any special support to the development of the creative industries; and if this should be provided, it should only be through general economic policy levers.

The third model, **the growth model**, focuses on the positive relationship between the growth of the creative industries and the economy generally. In this model, the creative industries are seen as a source of economic growth – similar to manufacturing from the 1950s to the 1960s and the information and communications technology sector in the 1980s and 1990s. Its contribution to supporting economic growth can be expressed in both demand and supply, either as the increased demand for creative services based on economic growth, or the transfer of new ideas developed in the creative fields to other sectors of the economy. The creative industries are considered to be important primarily due to its ability to empower the other branches of the economy. The need and reasons for the intervention of the public sector are also based on this. Support measures specific to the creative-economy sector are necessary in order to support the development of other sectors, and not the development of the creative economy per se.

Potts and Cunningham call the fourth model **the creative economy model**. In this model, the creative economy is no longer approached as a separate sector of the economy but rather as an innovative element that pervades the entire economy. The emphasis is based on the capability of the creative economy to impact a generation of new ideas and the development of technological and organisational operating models, and to provoke change. According to this approach, the creative economy is a (new) fundamental element in the innovation system (Scott 2006) and plays a role in it that is comparable to science, education and technology (Potts, Cunningham 2011). The creative economy contributes as a creator and promoter of the conditions necessary for the development of economic growth. Importance is placed on culture as a public good due to its dynamic nature – as the creator, carrier and adopter of new knowledge. In accordance

with this, there is also a need for a shift in the reasoning behind the intervention of the public sector as compared to the previous models. A policy that promotes the creative economy should be directed at supporting economic growth primarily because of and through its role as an innovation generator.

The following examination of the situation and the potential of Estonia's creative economy is based on the four models discussed above.

1.5.3 Cultural consumption in Estonia

Assessing the importance of the creative economy sector through the consumption of and participation in culture corresponds primarily to Potts and Cunningham's first model. The cultural sector is important for its intrinsic value in social development. It is also true that the consumption of culture establishes the basis for the development of the creative economy as a branch of the economy, along with all the accompanying direct and indirect impacts.

It is generally recognised that greater cultural consumption accompanies the growth of economic welfare, since the percentage of household expenditures for necessities decreases and there are resources left for the consumption of culture, entertainment, etc. In Estonia, the interpretation of this connection is more complicated. Cultural consumption in Estonia is just as active as it is in many successful welfare states (for more, see chapter 4.3 Culture consumption as a benchmark of the viability of a cultural space). However, when viewed by areas of activity, the picture is different. When it comes to attending theatre and other performances, Estonia is at the forefront of the European countries. Museums are also visited actively. Our ranking is poorer when it comes to going to the cinema and visiting the library. In the case of the latter, the Finns could provide a role model. In Finland, visiting the library is treated as an important component of general cultural activity and on that basis receives significant support.

1.5.4 The composition and relative importance of the creative industries sector in the Estonian economy

The approach that has dominated Estonia's more than decade-long discourse about the creative economy corresponds to Potts and Cunningham's (2011) second model or the treatment of the creative economy as an ordinary economic sector that is comprised of sub-sectors, in which turnover, profits and employment are the indicators of interest. Based on the approach, adopted (and adapted) from Great Britain, the creative industries can be approached as an economic sector that is based on individual and collective creativity, skills and talent, and which is capable of creating welfare and jobs through the creation and utilisation of intellectual property (Eesti loomemajanduse olukorra uuring ja kaardistus 2013).

In Estonia the following 13 fields of activity are included

TABLE 1.5.1 The creative industries share of employment, GDP and exports in Estonia and selected European countries

	ESTONIA*	GREAT BRITAIN	FRANCE	GERMANY	ITALY	SPAIN
% of persons employed	4,3%	5,4%	3,7%	4,1%	3,6%	3,5%
% of GDP	2,9%	6,2%	4,9%	4,2%	3,8%	3,6%
% of total exports**	0,7%	1,8%	0,6%	0,5%	0,3%	0,4%

Source: Eesti loomemajanduse olukorra uuring ja kaardistus 2009; Tera Consultants (2010). *Building a Digital Economy: The Importance of Saving Jobs in the EU's Creative Industries*. <http://www.droittechnologie.org/upload/dossier/doc/219-1.pdf>; Eurostat News Release 55/2011, 14 April 2011. Culture in the EU27. Cultural statistics in the spotlight

COMMENT: *For Estonia, data recorded in 2009 was used; for the other countries 2008 data was used.
** The export data is for 2010.

in the creative economy: 1. architecture; 2. film and video; 3. broadcasting; 4. design; 5. the performing arts; 5. publishing (books, newspapers-magazines, catalogues, cards, etc.); 7. hand-crafts; 8. museum activities; 9. library activities; 10. art (both fine art and applied art); 11. entertainment IT; 12. music (creation, presentation, music-related publishing, production of recordings, organisation of music festivals, etc.); and 13. advertising.

Since 2003, when the first attempt was made to measure the volume of the creative economy in Estonia, its relative importance in the economy as a whole has remained the same, i.e. slightly less than 3% of the GDP (**Eesti loomemajanduse olukorra uuring ja kaardistus, 2013**). This is comparable to such sectors of the economy as financial services (3.4%; 2012) and is larger than the hotel and catering sector (1.7%; 2012) or mining sector (1.3%; 2012 Statistics Estonia data). The number of people working in the creative industries sector has increased somewhat (in 2003 it employed less than 20,000 people, by 2011 it was already over 29,000 people). The number of companies and organisations in the sector has increased somewhat more rapidly.

Taking into account the high level of cultural consumption in Estonia, especially in comparison to the other European countries, shouldn't we consider the present evaluation of the relative importance of our creative economy as being too low? When comparing Estonia to a series of background states (**Table 1.5.1**), it is not possible to draw a very unequivocal conclusion. In regard to the creative industries' share of the GDP, we rank slightly below the EU average, which according to European Commission data¹ is 3.3%, as well as below most of the background countries included in the table, but not in regard to the share of people employed in the creative economy. At this point, it should be taken into consideration that in Great Britain, unlike in Estonia, the entire IT sector is included in the creative industries sector and in several other countries tourism and catering in restaurants and cafés² is included as well. At the same time, when it comes to the share of cultural goods exports in comparison to total exports, in 2010 Estonia ranked second after Great Britain in Europe. At this point, it should be noted that the other countries included in **Table 1.5.1** are large countries and the development of their creative industries sector is supported by a considerably larger

domestic market.

We emphasise that the given data indicates only the direct economic impact of the creative economy and does not consider the spillover and positive (economic) effects on other sectors.

1.5.5 The creative economy as an empowering agent for other sectors

The creative industries sector's direct and indirect socio-economic impacts, which are included in Potts and Cunningham's third model, are revealed in many ways: by creating a market for other sectors, increasing the added value of their products and services, increasing the attractiveness of the public space and branding regions (**Tafel-Viia et al. 2011b**). The capability of the various sub-fields of the creative industries to support the developments in other sectors is quite varied (**Eesti loomemajanduse potentsiaal 2009b**). These include providing direct economic reinforcement to economic sectors that are not part of the creative economy and helping the design, architecture and the heritage fields come to the fore. If design provides added value to industrial and service companies, and architecture to the construction sector, then the heritage fields (handicrafts and museums) are seen as the fields of activity that provide the greatest reinforcement to the tourism sector. The capability of the creative fields to help make the living environment more attractive for the local people and to attract talented people, tourists and investors from elsewhere has significant potential to generate vitality especially for architecture, the heritage fields and performance arts. Various arts also play an important role in creating a diverse and high-quality space.

The direct economic impact on the other sectors has been assessed by **TNS Emor's (2013)** study on the use of design by Estonian businesses. The results show that during the last two

¹ See <http://ec.europa.eu/dgs/connect/en/content/creative-industries-promoting-innovation>.

² Essentially this means a convergence of the creative economy approach with the "experience economy" approach (**Pine, Gilmore 1999**).

years, 63% of the 400 companies queried have utilised some kind of design. At the same time, it became clear that the companies do not use all the potential of design, because only 15% of the companies have involved designers throughout the development process. Most often designers are involved in providing the final polish to something new that has been developed or are included in the marketing phase. At the same time, the reported benefits resulting from design included the greater satisfaction of the clients (43%) and the increased competitiveness of the companies (40%). For at least a quarter of the companies, the benefit was also expressed in increased turnover, profit and export (29%, 25% and 23% respectively).

The impact that visiting cultural events and cultural institutions has on other sectors can be measured by analysing the expenditures of the visitors. Along with the expenditures made at the cultural institutions or venues, or the revenues of the cultural institutions and/or creative businesses, there are more indirect expenditures related to cultural consumption, which may affect accommodation, transport and catering companies (like restaurants, pubs, cafes) (see Table 1.5.2). This is treated as the spillover effect of creative economy. The results of a module study of the population's cultural consumption show that the greatest benefit derived by the other sectors is from people visiting sports competitions and museums/cultural monuments. The transport companies benefit the most. Each visit to a cultural event generates an average of € 3.00 to € 6.00 of income for the other sectors. For example, 100 people going to the cinema results in about € 300 of income for the transport, catering and other sectors, and visits by the same number of people to a sports event generates almost € 600.

The study conducted by the Estonian Institute of Economic Research in 2012 to assess the spillover effect of sports

and cultural events showed that these events increased the turnover of local businesses in the area by 42%. The increased sales revenues were also expressed in increased profits. The study showed that every euro invested in the organisation of the event brought an average return of € 4.00 to the region.

In addition to the economic spillover effect of cultural events, cultural institutions also generate other types of indirect socio-economic impacts. For example, the proximity of a cultural institution or sports venue may impact real estate prices. Based on their own assessment, 78% of Estonia's population live close to a cultural institution or sports venue (10 minute walk in the city and 10 minute ride by car in the country). Although more than half of them do not know how to assess the impact of the institution or venue on their property values, 45% find that the price of their dwelling has increased. Only about 1% considered the proximity of a cultural institution or sports venue to have reduced the value of their real estate.

1.5.6 The role of creative companies in the reorganisation of the economy and business

This sub-chapter is based on Potts and Cunningham's fourth model, and deals with creative businesses as triggers for possible qualitative changes in other sectors. A series of special business practices are attributed to creative businesses and these are treated as vehicles for embodying businesses of the future (The Work Foundation 2007), by assuming that these properties will be transferred to other fields of activity. Some

TABLE 1.5.2 Average expenditures per capita when visiting cultural institutions, in €

	THEATRE, OPERA, BALLET OR DANCE PERFORMANCES	CONCERT	CINEMA	MUSEUM, ART EXHIBITION OR CULTURAL MONUMENT	SPORTS EVENT	OTHER CULTURAL EVENT
Expenditure inside the institution/event*	18.15	23.57	8.48	7.61	12.98	14.69
Expenditure outside the institution/event**	9.40	11.36	7.45	11.09	12.64	9.35
Expenditures made outside the institutions by all visitors (incl. the visitors not making expenditures)	4.39	4.74	2.98	4.67	5.99	5.08
The total average expenditures, of all visitors (incl. the visitors not making expenditures)	20.72	19.96	12.43	9.87	12.08	13.72

Source: Statistics Estonia.

COMMENT: * Expenditures inside the institutions are the average spending per capita made by the visitors making expenditures at the cultural institutions/venue. This includes expenditures for tickets, programmes, souvenirs, food-drink (in the institutions café or other eatery), cloakrooms, etc.

** Expenditures outside the institutions are the average expenditures per capita made by the visitors outside the cultural institutions/venue. This includes expenditures for transportation (incl. parking, tickets, etc), food-drink (incl. tobacco products), accommodations, and other incidentals (e.g. flowers, coat-checking, clothing, hairdressers, etc.).

TABLE 1.5.3 Comparison of creative businesses with other types of business practices

	CREATIVE ENTERPRISES	OTHER SMALL- AND MEDIUM-SIZED ENTERPRISES
RANGE OF OBJECTIVES	A more social value model is inherent, which means that (along with receiving economic benefit) the objectives include increasing cultural diversity, increasing the attractiveness of the space, etc. Significant motivators for operating are non-monetary factors: the importance of independence and self-realisation along with the goals of growth and earning a profit. Their greater environmental friendliness as compared to other companies also been observed.	The clear awareness of and/or emphasis on social values is more of an exception. If they are present, we are dealing with a special kind of enterprise such as a social enterprise, green enterprise or, in the case of larger and so-called “leader” companies, this occurs as a conscious image building element.
GROWTH STRATEGIES	Growth is sought through the increase of added value, increasing the quality of goods/services, internationalisation, jointing networks and alliances along with (instead of) through organisational expansion.	Most SMEs do not wish to expand organisationally; on the other hand due to the diversification of business practices the growth strategies of other SMEs have increasingly diversified.
VALUE OF PRODUCT/SERVICE	The product tends to have a symbolic value. The perception of symbolic value is subjective to a great degree, which is why creative enterprises trade in products with uncertain value. It is difficult to predict the product prices. These depend on how the symbolic value is developed, and also on the network through which the product is created and promoted, but also on feedback from the reference groups (clients, distributors, etc.).	Mostly the products have a utilitarian value. Because of this, the value (i.e. price) of the goods/services is easier to determine. Often the possible price range is determined by the competition that exists on the market and due to the greater standardisation of production, the structure of one’s own production costs is also clearer.
ORGANISATIONAL PRACTICES	The predominance of individual-centred structures and the multiplicity of project-based operations; also the importance of non-hierarchical and informal relations - networks and structures. The network-based organisational model also means a network-based enterprise model.	SMEs are often centred on one entrepreneur. Importance is placed on freedom and flexibility, but despite this, there is actually more division of power and definition of roles in the team in place. As the organisation grows the importance of structure and formality increases.
IMPORTANCE OF THE ENVIRONMENT	Great importance is placed on the operating environment and on the existence of “others who are similar”, which is also the reason for the frequent concentration in cultural quarters and creative clusters. There is a tendency to prefer living and working environments that allow one to enjoy a diverse cultural life, provide opportunities for participating in various activities, and have an open atmosphere (multicultural, tolerant, culturally diverse). The opposite connection is also important: the “presence” of creative entrepreneurs creates a creative milieu, which in turn attracts others, including knowledge-intensive fields of activity.	The importance of the location and environment depends on the field of business and clientele. The existence of a diverse environment is more important only for certain specific business groups, such as high-tech companies.

Source: compiled by the authors.

authors believe that this could be interpreted as the majority of the economy becoming a creative economy.

Since creative businesses are mostly small or medium-sized enterprises (SMEs), it makes sense to compare them with “ordinary” SMEs in order to ascertain their special properties. In the case of creative businesses it is relevant to speak about five great differences. These are the following: the importance of the company’s social objectives (along with economic objectives) (Curran, Blackburn 1994); the diversity of the growth strategies (Bilton 2006; Tafel-Viia et al. 2011a); the symbolic value of the product/service; network-based organisational practices (Neff, Stark 2003; Barabasi 2002); and the importance of the environment (Florida 2002; McGranahan, Wojan 2007; Wedemeier 2010). See Table 1.5.3.

New commercial ventures can be classified as opportunity- or necessity-based businesses³. In business as a whole, during the last ten years, the number of opportunity-based companies in Estonia has been lower than the EU average and the number of necessity-based companies has been higher than the EU average. The results of a study on creative businesses (see Tafel-Viia et al. 2011a; 2012) show that creative enterprises are mostly opportunity-based companies; of the 51 creative entrepreneurs interviewed in the course of the study, 39 (or more than $\frac{3}{4}$) considered themselves to be opportunity-based entrepreneurs. And none of the interviewed creative entrepreneurs had only been motivated by needs.

The differences in the **motivational patterns** are even more apparent when comparing the individual indicators of the motivational factors for starting the business. As we can see in Table 1.5.4, a very important motive for creative entrepreneurs is self-realisation and the opportunity to work in a manner and rhythm that suits them. If self-realisation and independence are actually very important motives for most small business owners⁴, then the opportunity to choose their manner and rhythm of work is especially characteristic of creative entrepreneurs. Compared to other business owners, the wish to contribute to society is also more important. Because of this, we can speak of a value model that is more social than average. Income is also important for creative entrepreneurs, but the emphasis is not so much on establishing the level of income as the objective as it is on the wish to achieve harmony between one’s income and efforts exerted to achieve it.

A hotly debated question is whether growth should be set as a goal for creative businesses. Actually, the question concerning the rapidity of desired growth is quite complicated in any field for the small business owner.

Of the respondents in the 2009 Eurobarometer study of SMEs in all the EU states, 74% recommended (in answer to a hypothetical question concerning how they would advise a friend) slow growth (or none at all) compared to 17% who recommended that the company should be grown quickly. By the way, in this study, Estonia was positioned among the group of countries with a higher than average growth orientation: almost a third (29%) of the responding SMEs recommended the company’s rapid growth. In the case of creative enterprises, determining the growth orientation is more complicated. An analysis of the growth prospects of Estonian creative

enterprises (see Tafel-Viia et al. 2011a; 2012) showed that 24% of the creative entrepreneurs unequivocally considered themselves to be growth companies, while an additional 22% of the respondents thought that, although they are lifestyle companies by nature, (i.e. growth is not the primary goal) there is a certain aspiration for growth. The attitude of creative entrepreneurs toward the growth of their business is indicated more precisely by their attitudes to individual growth indicators (see Figure 1.5.1), which is used to differentiate between growth and lifestyle businesses (Getz, Petersen 2005).

As seen in Figure 1.5.1, among Estonian creative entrepreneurs a positive attitude toward most of the growth factors predominates, although this attitude is not very straightforward or unequivocal. Of the respondents, 22% totally agree that a “company should (constantly) grow”, but if we include those in the “rather agree” category, we get a respectable 60% who favour growth. The respondents agree that a company should be profitable, but they are not totally convinced that a company should be managed purely on a business basis. The strategy for creating a company primarily in order to sell it later at a profit is clearly not the style of a creative entrepreneur.

The analysis of the growth strategies of creative enterprises shows that the concept of growing a company is multifaceted and questions the need to strictly differentiate between growth and lifestyle businesses. The traits of a growth enterprise and a lifestyle enterprise often coexist. One can hypothesise that in the future, this will be increasingly true in other areas of activity besides just creative enterprises.

The average Estonian SME considers its strengths to be good customer relations, flexibility in reacting to clients’ needs and the high quality of their goods/services. However, price advantage as compared to one’s competitors also occupies quite an important position (Kaarna et al. 2012). The top three competitive advantages of Estonia’s creative businesses were cited as being the following: cooperation and the combination of competencies; quality; and uniqueness. The most frequently cited by Estonian SMEs was the existence of a permanent clientele and flexible reactions to the clients, but lower prices were also mentioned by individual creative entrepreneurs. The **value of the products** of creative enterprises is more subjective when compared to other SMEs, since there is less price-based competition among creative enterprises and more competition based on uniqueness and originality.

In addition, creative enterprises typically **place great importance on a creative and diverse environment and being located near “others of their kind”**. The spatial concentration of creative enterprises attracts high-tech companies and other

³ An opportunity-based entrepreneur establishes a business in order to exploit a discovered business opportunity; a necessity-based entrepreneur has been “thrust” into business since there were no other opportunities or there was the threat of losing one’s job or income in the near future (Jürgenson, 2010).

⁴ Flash Eurobarometer 354. ENTREPRENEURSHIP IN THE EU AND BEYOND; Flash EB Series #283. Entrepreneurship; Flash EB Series #192. Entrepreneurship Survey of the EU (25 Member States), United States, Iceland and Norway; FLASH EUROBAROMETER 160. Entrepreneurship; FLASH EB N°146 «Entrepreneurship».

TABLE 1.5.4 Motivational factors for starting businesses among Estonia’s creative entrepreneurs

STATEMENT IN THE STUDY	RESPONDENTS	%
Avoid becoming unemployed/being unemployed	6	12
Achieve the necessary level of income	3	6
Earn income that is equivalent to my efforts	10	20
Contribute to society	10	20
Self-realisation	33	65
Work in a manner and rhythm suitable for me	31	61
Be independent in my actions	17	33

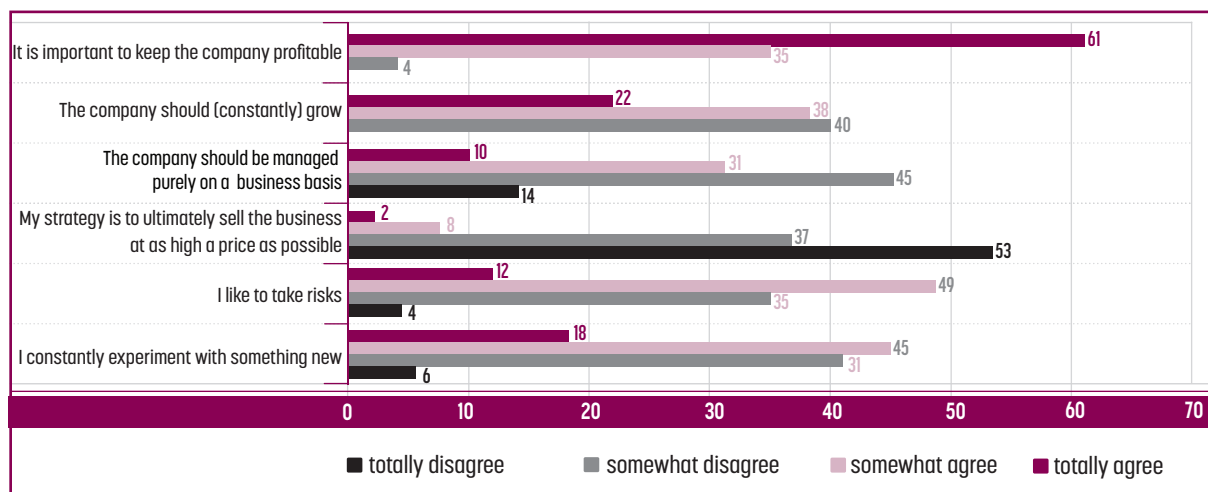
Source: Tafel-Viia, K., Viia, A., Terk, E., Ibrus, I. & Lassur, G. (2011a). Väike- ja mikroloomeettevõtete arengutsüklitel. Tallinn: Tallinna Ülikooli Eesti Tuleviku-uuringute Instituut. www.tlu.ee/UserFiles/Eesti%20Tuleviku-uuringute%20Instituut/loomemajandus/loomeettevotluse%20uuring_loppraport_TLY%20ETI_2011.pdf; Tafel-Viia, K., Lassur, S., Ibrus, I., Viia, A. & Terk, E. (2012). Audiovisuaalvaldkonna klasterdumise perspektiivid. Tallinn: Tallinna Ülikooli Eesti Tuleviku-uuringute Instituut. www.tlu.ee/UserFiles/Eesti%20Tuleviku-uuringute%20Instituut/loomemajandus/AV%20uuring_raport.pdf.

representatives of the new economy, which indicates the capability of creative enterprises to increase the competitiveness of cities/regions. The empirical studies conducted to support this hypothesis have been verified by studies on U.S. cities (Florida 2002). The results of a recent comparative study on the spatial location of the creative industries in the European countries show a significantly higher spatial concentration of creative enterprises as compared to the companies in other sectors (Boix et al. 2013). The studies related to Estonia’s creative businesses show that they are concentrated in Tallinn – almost 2/3 of the companies are concentrated in Tallinn and Harju County –, with the overwhelming concentration in the Tallinn city centre area (Silm et al., 2006; Eesti loomemajanduse kaardistus 2009). Examples like the impact of the estab-

lishment of the Guggenheim Museum on the development of Bilbao (for more information see Plaza, Haarich 2013) notwithstanding, in the European context, there is less evidence of a connection between the convergence of the creative class and economic competitiveness than in the U.S. (Cooke 2007; Martin-Brelot et al. 2010; Andersen et al. 2014). Providing the answer to the question of how this connection will reveal itself in the Estonian context may not depend only on Tallinn and Tartu, but also, for example, on Viljandi, where the “pull potential” of the creative fields as well as the spillover effects are noticeable in regard to the local ambitions to develop a cluster based on cultural heritage and traditional technologies.

Based on the appearance of some of the traits of creative

FIGURE 1.5.1 The attitude of Estonian creative entrepreneurs toward entrepreneurship and company development (% of respondents; N=50)



Source: Tafel-Viia, K., Viia, A., Terk, E., Ibrus, I. & Lassur, G. (2011a). Väike- ja mikroloomeettevõtete arengutsüklitel. Tallinn: Tallinna Ülikooli Eesti Tuleviku-uuringute Instituut. www.tlu.ee/UserFiles/Eesti%20Tuleviku-uuringute%20Instituut/loomemajandus/loomeettevotluse%20uuring_loppraport_TLY%20ETI_2011.pdf; Tafel-Viia, K., Lassur, S., Ibrus, I., Viia, A. & Terk, E. (2012). Audiovisuaalvaldkonna klasterdumise perspektiivid. Tallinn: Tallinna Ülikooli Eesti Tuleviku-uuringute Instituut. www.tlu.ee/UserFiles/Eesti%20Tuleviku-uuringute%20Instituut/loomemajandus/AV%20uuring_raport.pdf.

enterprise in other SMEs, one can hypothesise that the creative economy could possibly cause a shift in the existing economic model. This is especially true if we consider the fact that various creative fields play different roles in the innovation process at various stages – in the idea creation, dissemination and retention phases (Potts 2009). In light of the aforementioned studies, the innovative impact of the operating pattern of creative enterprises on other sectors may be found, firstly, through products and services that aspire to uniqueness, which can help a business to succeed in the increasingly intense competition. Secondly, it could provide the skills to create pictorial and artistically meaningful messages in an increasingly visual world. And last but not least, to develop an attractive environment that is adaptable to change, where it is pleasant to live and interesting to work.

1.5.7 Necessary shifts

An analysis of what has occurred in last period of the ten-year process related to the focused development of Estonia's creative economy – i.e. since 2009 – reveals several positive shifts, at both the policymaking level and in the context of the economic strengthening of the sector (Tafel-Viia jt 2014). However, the relative importance of the creative economy as it relates to the GDP has still not increased. The number of companies operating in the creative fields has increased but it is not clear how much this reflects an increase in business activity, and how much it reflects the splintering of creative enterprises. What is positive is that the creative industries sector is more internationalised and also internationally better known. This is indicated by the international recognition garnered by many festivals (such as the Tallinn Black Nights Film Festival, Tallinn Music Week) as well as the international success stories of creative businesses. During the last period an important role has been played by the significantly strengthened network of institutions that support creative economy policies. Creative incubators and development centres (Tallinn Creative Incubator, Tartu Centre for Creative Industries, etc.) have been created and at the national level, several measures to support the development of the creative economy have been developed. The level of activity of the representatives themselves related to their operations and convergence has also increased. This is demonstrated by the creation of several sector-based creative economy development centres and the burgeoning of new (community) initiatives in various places in Estonia. A significant shift can also be noticed in the approach to the creative industries. This has shifted from a sector-based approach to an approach that focuses on the broader impacts of the creative economy. Along with the focus on the development of creative enterprise, which dominates the development of the creative economy, greater importance has started to be placed on the increased potential of the creative economy to raise added value in other sectors. This is also indicated by the focus of the

support measures provided by the EU structural funds in the next period, in which one of the main focuses is on the development of prioritised cooperation between the creative economy and the other sectors. On the one hand, the development of the creative industries sector in Estonia has been inhibited by the general economic structure, and on the other hand, by the approaches to the creative industries that have been adopted.

An economy focused on subcontracting does not provide good preconditions for the emergence and utilisation of the potential of the creative economy. If a large share of production and service companies were focused on the end consumer this would provide more reasons and opportunities to involve the creative economy fields (e.g. design) in the development of products and services, since it would be necessary to think in an integrated way and to focus on the user/end consumer. In other words, if the focus were on the categories in which the direct and indirect spillover effects of products and services are considered, the reinforcement could be provided by the creative industries.

The approach to the creative economy that has been predominant in Estonia has been too traditional - based as it is on the view that it is a sector like any other sector, in a system where only companies that grow organisationally deserve support – and provides little opportunity to treat the creative economy as the generator of a shift. There are few possibilities to increase the potential on a sector basis. Estonia's small domestic market does not provide the opportunity to markedly increase the volume of the creative industries sector. Considering only the traditional growth indicators when assessing the potential of the creative industries sector, by assessing only the direct share of the areas of activity concentrated in this sector in the economy as a whole (as turnover, added value, employment, etc.), sets unrealistic goals and shows an incomplete picture, while also giving false indicators concerning the trajectory of development.

According to Potts and Cunningham (2011), the special nature of the creative industries should be emphasised, i.e. the ability to empower the development of the other sectors. By approaching the creative economy as the one that can provide input for and increase the capability of other fields of activity, the potential, including the economic potential, of the creative economy becomes much larger. Studies have shown a significant spillover effect in the demand and supply of other sectors, e.g. the expenditures made on other things in connection with cultural consumption/participation; the contribution of creative enterprises to increasing added value in other sectors; the ability of creative enterprises to attract sectors with high added value, etc.

⁸ Concentrated in Tallinn and its neighbouring regions are mainly creative industries of commercial nature. 87% of film and video companies, 81% of music companies, 80% of advertising agencies and 77% of architect's offices are located in Harju County, including majority of them in Tallinn. Only cultural heritage organisations and their staff are distributed more evenly across Estonia (Estonian institute of Economic Research 2009).

⁹ Considering the rapid development of North-Tallinn, its share could be expected to have increased significantly by now.

In comparison to the current situation, the realisation of the fourth model described above would assume a significant shift, not only in the approach to the creative economy, but in the broader understanding related to development and innovation. The special character of creative enterprises appears in their range of business objectives, which are significantly more social in nature; in the greater wish of the entrepreneurs for independence; the integration of the traits of lifestyle and growth enterprises; the orientation on the more subjective value of products; and the reinforcement effect resulting from

the territorial concentration of the “creative class”. Insofar as creative enterprises can be considered to be entrepreneurial pioneers of a kind, this gives us reason to assume that changes will also occur in the operational practices of the other economic sectors. The question is how much support can be found in the form of the corresponding economic policy measures? This will decide, maybe not whether these trends will start up or not, but at least how rapidly these changes will occur

Summary

In summary: two preconditions are necessary for the development of a creative economy in Estonia. Firstly, a shift must be initiated in the direction of a broader approach to the creative economy. A stronger connection must be created between the creative economy and the other sectors, and various types of spillover effects must be considered and assessed. If the creative industries sector is treated as an ordinary economic sector, the development of the reinforcement effects related to other sectors will be inhibited. These effects can only develop when there is an opportunity to develop specific measures that are focused on supporting the development of other sectors through the creative industries sector. Secondly, in order to realise the potential of the creative

economy in Estonia, the general structure of the economy needs to be changed. A shift has to occur from subcontracting in export production to serving the end consumer. The creative industries sector will gain from this, and the sector can also significantly assist in making this shift by strengthening cooperation with other fields of activity in order to support them in the development of their own products/services. Considering the general transformation underway in prevailing economic structures and models, the increasing importance being placed on creativity, and the individualisation of consumption and behavioural models, it is difficult to overlook the need to initiate such a shift in Estonia's economic model. ●

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1.6

The Future of Estonia's Development Model: What will carry us forward?

► ERKKI KARO¹, RAINER KATTEL & VEIKO LEMBER

Introduction

To date, there have been different assessments of the success of Estonia's development model. We are integrated with the Scandinavian and the global innovation and production networks, but movement upward in the international value chains has been slower than expected. Therefore, alongside the international success of individual companies and sectors, a broader debate has emerged about the timeliness and suitability of our economic development and welfare-state models. In addition to the statement made by the President, which has already become a classic – “That which has brought us this far will not take us any further.” – The Employers' Manifesto (**Tööandjate Manifest 2014**) also states that the greatest short-term challenges in Estonia's development are related to the fact that:

as a society, we have come so far that we no longer want to do cheap work, but we don't know how to do more expensive work. Breaking out of the situation known as the middle-income trap is the greatest challenge for Estonia's new development stage.

The recent economic crisis clearly highlighted these contradictions. At the same time, the crisis has also changed Europe's understanding of economic and regional policies, and today Estonia has started to translate these understandings into its policies, for instance, through the application of the principle of smart specialisation in the implementation of the new EU cohesion policy funds (**see sub-chapter 5.9 in this report**). However, our assessment is that these changes are more cosmetic in nature and do not constitute a structural rethinking of Estonia's and Europe's development models.

The concept of the middle-income trap stresses that very few states are able to grow and develop for a long period (more than a generation) without changing their development mod-

els. Rethinking development models is necessary in order to adapt to the new political and economic normalities that emerge with economic development (**see Kharas, Kholi 2011**).

The state's ability to rethink its development model and its capacity for change are among the most important sources of competitiveness – not only for overcoming the middle-income trap, but also in order to adapt to constant techno-economic developments (**Perez 2002**). However these are often ignored in debates related to economic policy. Today's popular solutions tend to be relatively static since they are based primarily on analyses of the state's economic structures and of the potential for their emulation (**see Lin, Chang 2009**). In order to analyse and understand specific development models, it is necessary to focus not only on which technologies, markets, policy instruments etc. are preferred choices in the various models, but also on how these choices have been made by specific states, based on relations between the state and business communities as well as the internal organisation of public sector institutions (**see also Karo, Kattel 2014**).

Below, we will try to analyse the possibilities for changing and refining the Estonian development model in our “new political and economic normality”. We will compare the Estonian development model and those of the other Central and East-

¹ Contact: erkki.karo@ttu.ee. The research paper that is the basis of this article was financed by grants IUT19-13, ETAG13160, ETF9404 from the Estonian Research Council and the Research and Innovation Policy Monitoring Programme (TIPS) (Study 5.3 TAI Poliitika kujundamise ja juhtimise süsteemi analüüs). TIPS is a programme financed by the European Social Fund from 2011 to 2015, and is being carried out by the University of Tartu in cooperation with the Tallinn University of Technology (see also www.tips.ut.ee). The positions presented in the article are the personal positions of the article's authors and do not represent the official position of the organisations that financed the research.

ern European (CEE) economies, and analyse the implications of the altered post-2008 economic environment, and the constantly developing/increasing EU coordination of economic policies. We will also search for possible alternatives among the functioning development models of the world, which Estonia could discuss in the course of rethinking its development model. We argue that in the current situation – where reliance on only a few macroeconomic indicators has become too general a guide for understanding the developmental problems of the economic sectors, and where the domination of the global value chains makes it increasingly difficult to work out effective and all-encompassing policy measures locally – the key short-term task for Estonia is to develop experimental state capacities to continually and constantly rethink and redesign its development model. The article ends with the argument that initiating these changes assumes that the new experiments will be linked to some accepted symbols, values or new development narratives, which can mobilise concerned parties in society for change. Of course, this also presumes an economic policy bureaucracy that is ready for change as well as well-functioning and operative relations between the bureaucracy and the business community.

1.6.1 From Baltic neo-liberalism to European Union neo-liberalism?

The central focus of the catching-up models of all the CEE states has been on political and economic integration with Europe and the West, which should provide both political stability and the capability to initiate qualitative changes in the economic structure and thereby also increase people's welfare. This focus has also brought about the "Europeanisation" of the development and economic policies of the CEE states. Through both compulsory and voluntary policy transfer and learning, the CEE countries have increasingly relied on the economic policy rationales typical of the EU. However, the various CEE states have also preserved some of their inherent traits. Researchers of varieties of capitalism have tried to categorise the CEE states and the variations in their development models based on both political and economic logic.

Bohle and Greskovits (2012) have focused primarily on the political logic of the development models and have differentiated three groups of CEE countries: the neoliberal Baltic states, the embedded neoliberal Visegrad Group of states (Poland, Czech Republic, Hungary, Slovakia) and the neo-corporatist Slovenia. Compared to the other models, the neoliberal model is characterised by a smaller and more formal inclusion of interest groups in policymaking (a simple and more polarised democracy), a tendency for horizontal policies (e.g. a focus on creating a uniform environment to attract foreign investments vs. the use of targeted and selective tax

breaks and other support measures, etc.) and a low willingness to compensate the inequalities that accompany economic development (supporting the "losers" through welfare state policies, etc.)

In their comparative analyses of the CEE development models, **Myant and Drahekoupil (2012; 2015)** have focused on economic logic (and indirectly on the impact of policy logic discussed above). They show (see also **Table 1.6.1**) that the development model of the neoliberal Baltic states is based primarily on financialised economic growth, and integration with the global production and innovation networks has occurred primarily through subcontracting, using cheaper and poorly-skilled labour (except for individual high-tech enclaves established by foreign investors that lack a strong connection – read: transfer of knowledge and skills – with the local economy). In other words, the growth of the economies and welfare of the Baltic states, and their integration with the Western economic space, has not been driven primarily by the development of our knowledge and skills and their better harmonization with the West. Rather, the short-term oriented speculative investments from the West (into real estate and consumption and also exploiting the steadily-decreasing cheap-labour advantage) have been the main drivers of this development. This has in turn culminated in very abrupt cycles in economic development that – due to the lack of policies to balance these cycles – destroy slowly-emerging and developing domestic value chains, capabilities and learning networks.

On the other hand, in the Visegrad states and Slovenia, integration, economic development and welfare growth has been predominantly based on a more directed (and selective) foreign investment policy (i.e. less financialisation, excluding Hungary) and the export of more complex products (e.g. the pharmaceutical industry). This, together with the differences in the political systems, has produced less abrupt economic cycles and more socially-balanced and stable economic development.

On the other hand, EU accession and the 2008 economic crisis have greatly converged all the CEE models – with respect to both political and economic logic, the development models of the Visegrad states and Slovenia have or are in the process of neo-liberalising (see **Stanojevic 2014**).

We can especially see the convergence of the CEE states toward a relatively similar model of capitalism when we compare these countries to the other peripheral economies in Southern Europe and both these groups to the Northern European states. While during the last decade, Northern Europe has been able to export more than they import, both the CEE and Southern European countries are in the opposite situation. **Figures 1.6.1** and **1.6.2** show how labour productivity and the structure of the economy have developed in these groups of states. Regarding the latter, we use the number of "learning organisations" among all the enterprises as an indicator. We define learning organisations as organisations in which the workers have greater freedom to resolve problems, the work assignments are diverse, monotony is limited, and the workers

² In this article, we include the states that joined the EU with Estonia: i.e. Latvia, Lithuania, Poland, the Czech Republic, Hungary, Slovakia and Slovenia.

TABLE 1.6.1 The development models of the CEE states up to the mid-2000s

	NEOLIBERAL BALTIC STATES	EMBEDDED NEOLIBERAL VISEGRAD STATES	NEO-CORPORATIST SLOVENIA
LOGIC OF THE DEVELOPMENT MODEL	Non-intrusive state, where the economic dynamism and skills necessary for development come through foreign investments	Non-intrusive state, where the economic dynamism and skills necessary for development come through foreign investments	A strongly coordinated state, which has tried to foster the continuous development of historical skills/specialisations
CENTRAL POLICYMAKING LOGIC	Attracting foreign investments and developing knowledge and skills through policies that create framework conditions (i.e. innovation policy that is based on the horizontal measures and primarily international knowledge transfer)	Attracting foreign investments and developing knowledge and skills through policies that create framework conditions (i.e. innovation policy that is based on the horizontal measures and primarily international knowledge transfer)	A selective and controlled approach to foreign investments (and the highest ratio of private sector investments into applied research in the CEE states)
CENTRAL LOGIC AND CAPABILITIES OF POLICY IMPLEMENTATION	A bureaucracy with a horizontal/generalist approach, which is focused on the design and implementation of general framework conditions of the economy	A bureaucracy with a horizontal/generalist approach, which is focused on the design and implementation of general framework conditions of the economy	A sector-based bureaucracy of specialists, which is focused primarily on the needs-based development of specific sectors
ECONOMIC IMPACT OF THE DEVELOPMENT MODEL	Financialised growth model; integration with global production and innovation networks through low-skills subcontracting work; fragmented economy and strong impact on the economic cycles generated by the external environment	Financialised growth model; integration with global production and innovation networks through low-skills subcontracting work; fragmented economy and strong impact on the economic cycles generated by the external	Production-based growth model; integration with global production and innovation networks through the export of complex products; the impacts of the external environment are smaller and more balanced

Source: Compiled by the authors.

have a high level of autonomy³. We call them learning organisations since they have a great ability to adapt which supports the growth of productivity.

Figures 1.6.1 and 1.6.2 reflect the situation in 2005 and 2010 respectively. However, we see quite a similar picture in both years. In the CEE states, the percentage of learning organisations in business is relatively high, which differs considerably from the situation in the Southern European periphery; however the latter states are markedly more productive. The principal factor explaining this situation is the strong presence of Northern European companies in the CEE states. As we argued above, the productive structures in the CEE states are generally parts of the Northern European value chains, and this explains the transfer of the organisational and management practices from these companies.

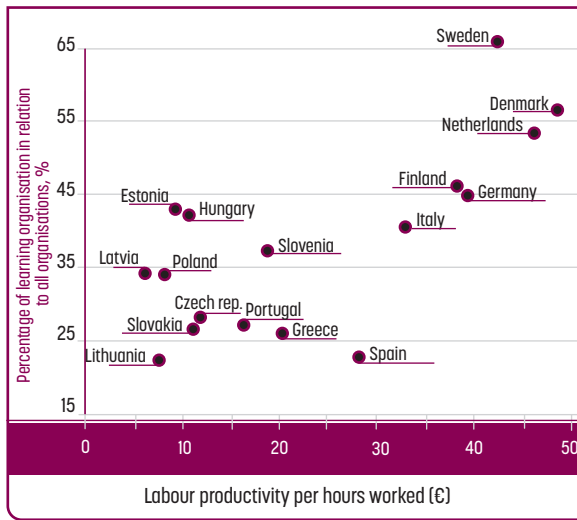
On the other hand, in the pan-European context, these charts can be interpreted as an illustration of the (partial) failure (to date) of the integration agenda. Southern Europe, which joined the Union in the 1980s, has not been able to make noteworthy progress in catching up to the Northern Eu-

ropean countries – nor have the remarkably rapid changes in the economic structures of the CEE states resulted in the expected growth in productivity.

If we often call ourselves a CEE success story (and acknowledge the foreign experts that agree with us), then the researchers of economic development from the other (CEE) states see our development model as a rather unique exception, being the result of our specific political and economic history, the special features of our democracy, etc. Researchers who focus on the economic structure and its dynamics see behind Estonia's and the other Baltic state's economic growth (that took place before the last economic crisis) and as a more important characteristic the partial failure of the development model. This assessment is to a significant degree based on the

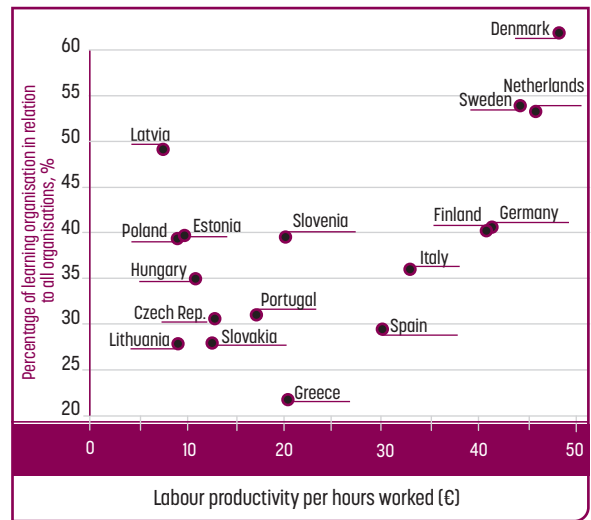
³ This taxonomy of organisations has been developed by Lundvall et al. (see also Holm et al. 2010). They use the European Labour Force Surveys to create their taxonomy.

FIGURE 1.6.1 Learning organisations and productivity in selected European Union states, 2005.



Sources: Compiled by the authors based on the learning organisations data from Holm et al., (2010) and the Eurostat database.

FIGURE 1.6.2 Learning organisations and productivity in selected European Union states, 2010



Sources: Compiled by the authors based on the learning organisations data from Holm et al. (2010) and the Eurostat database.

relative failure of the welfare model – i.e. the welfare model has not made sufficient investments in the development of dynamic capabilities or in their preservation in the rapidly changing economic environment that is typical of small countries (also see sub-chapter 1.2).

1.6.2 The future of the CEE development models in the post-2008 European Union ⁴

Upon joining the EU, the convergence of the CEE development models was revealed primarily through individual public policy domains. Under the Single Market conditions (the free movement of people and goods, state aid rules, etc.), Slovenia and the Visegrad states have moved from their sector-based industrial policy models toward more horizontal innovation policies; the selective foreign investments and financial policies have been replaced with common sets of regulations, etc. In the Baltic states, accession to the EU was accompanied by the consolidation of the existing tradition of non-intrusive and non-selective policymaking (see Karo, Looga 2014).

After the 2008 economic crisis period, both the EU political agreements and policy implementation processes have been equipped with new coordination levers which have also caused the development models of the CEE states to converge even further with the neo-liberal model of capitalism. The reason for this is not so much the success of the Baltic states and the spread of their model (see Sommers, Woolfson 2014). Rather, the EU itself has, through its Lisbon Agenda and the

rhetoric of competitiveness, the Europe 2020 strategy, and solutions to the 2008 economic crisis, shifted from a model of a social market economy toward a more neoliberal alternative. Only time will tell whether this trend will continue or not during the tenure of the current European Commission.

In the new pan-European political and economic normality created by the 2008 economic crisis period, two important trends will determine the future of the development models of the CEE states.

Firstly ⁴, the EU's post-2011 economic policy coordination framework (the European Semester, the strengthened Stability and Growth Pact) represents a shift toward a federalist organisation of fiscal policy. This means that, in addition to the federalisation and convergence of monetary and financial policies (which was essentially realised in most of the CEE states by the mid-2000s), the federalisation of fiscal policies has also begun. In this process, the emphasis is on austerity and stronger controls/coordination of the fulfilment of rules related to balanced budgets (or structural deficits). In this context, it is significantly easier to follow the neoliberal and non-intrusive development models, because the available policy toolbox is too limited for following development models based on policies that require more complex and greater domestic and inter-sector coordination. With their domestic political choices, the CEE states themselves have also “facilitated” the “erosion” of the coordination-based (in the domestic sense) economic development models by increasingly

⁴ Based partially on Karo et al. (2014).

financing strategic investments (especially for balancing the impact of the cuts that took place during the economic crisis) with EU cohesion policy funds (see Myant et al. 2013; Kattel, Raudla 2013).

Secondly, after the strengthening of the post-2011 economic policy coordination, one must also consider the appearance of so-called quasi-federal tendencies (see Bickerton et al. 2014; Bruszt, McDermott 2011) when it comes to policies that support economic development. Namely, the 2008 economic crisis and the development of the new EU economic policy coordination systems coincided with the formulation of the EU's Europe 2020 Strategy and the adoption of the cohesion and regional policies for the 2014-2020 period, which are based, to a great extent, on the logic of knowledge- and innovation-based growth. Several of these innovation-based growth elements have become principal parts of the EU's economic policy coordination, especially when it comes to the cohesion and regional policies that are extremely important for the CEE states.

Thus, for example, "smart specialisation" has become a new means of coordination in economic policy, whereby the CEE states are conditioned (under ex-ante conditionality) to take into account the EU's prescriptions and recommendations⁵ when applying the cohesion funds for economic development. In the same way, Estonia's research and innovation policies are influenced by the EU's definition of the cross-border socio-economic challenges (grand challenges) in the Europe 2020 Strategy and by the subsequent focus of the EU's research and development funds on these challenges (see Karo et al. 2014; Karo, Kattel 2015).

Essentially, under the influence of these EU developments, a new cross-CEE development model is emerging, which is based on the elements of the neoliberal development model and on the adoption of its political choices (austerity, budgetary balance, etc.) and economic logic (uniform rules and ever-broadening common market and policy coordination). However, since this model ignores the significant differences in the economic structures in the centre vs. the periphery of Europe (see Reinert, Kattel 2014)⁶ and the differences in the capacities of the existing development models for adapting to these principles, it may be feared that the actual impact of the model could be the opposite of what is expected. The states' capacities to develop context-based policies may actually decrease and thereby the probability for successful pan-European economic policy coordination may also decrease.

Here the most significant paradox of this development model in the context of the CEE states is revealed. The EU policy instruments could work as important tools for rethinking the development models, but these presume open and inclusive policymaking routines (that include the business and scientific communities and other interest groups) that have never been considered important in the neoliberal development models with horizontal policies, and therefore are not very well-developed. Essentially, the EU's post-2011 developments have institutionalized a development model in the Baltic countries that is not very good at rethinking itself, and forced

it on the other CEE states as well. Therefore, many "new" and "different" ideas for development may be trapped by old or non-existent policymaking routines and customs. The serious problems encountered in the coordination of the smart specialisation process as the principal focus of the new economic and innovation policy in most of the CEE states are evidence of the seriousness of this challenge (see Karo, Kattel 2015).

The Estonian research and innovation policy bureaucracy is working hard today to find the best possible solutions to this challenge (see sub-chapter 5.9 in this report). In order to find functioning solutions, it makes sense to look also outside of Europe to find alternatives to the experiences of the EU states.

1.6.3 Working alternatives to the European development models?

In his analysis of the "catching-up" countries, Kunal Sen (2013) found that, after World War II, there have been 13 countries in the world that have been able to continually achieve high economic growth (average income growth of at least 7% during at least 25 years). Of these countries, Hong Kong, South Korea, Singapore, Taiwan and Malta have attained income levels comparable to the developed industrial economies, i.e. they have successfully escaped the "middle-income trap"⁶. Essentially the East-Asian countries are the only examples in recent history of alternative development models that have worked, as well as of the ability of states/societies to rethink their development model, i.e. to move from a successfully implemented developmental state model toward an innovation-based/entrepreneurial state model.

Figure 1.6.3 illustrates the progress in the CEE states, East Asia, the Nordic countries and Latin America related to the development of an innovation-based economy during the last 20 years. As indicators of innovation-based development we have taken, firstly, the added value per capita in manufacturing, which roughly shows the competitive capacity of the export sector (the higher the added value, the more complicated the products); secondly, the fees that the companies and states pay for and earn from the use of intellectual property (indicates the growth of knowledge intensity). These two indicators form a kind of development ladder – theoretically, the greater the added value, the greater should also be the knowledge intensity.

⁵ See e.g. EU recommendation to Estonia to develop a stronger smart specialisation strategy (Council Recommendation 2014).

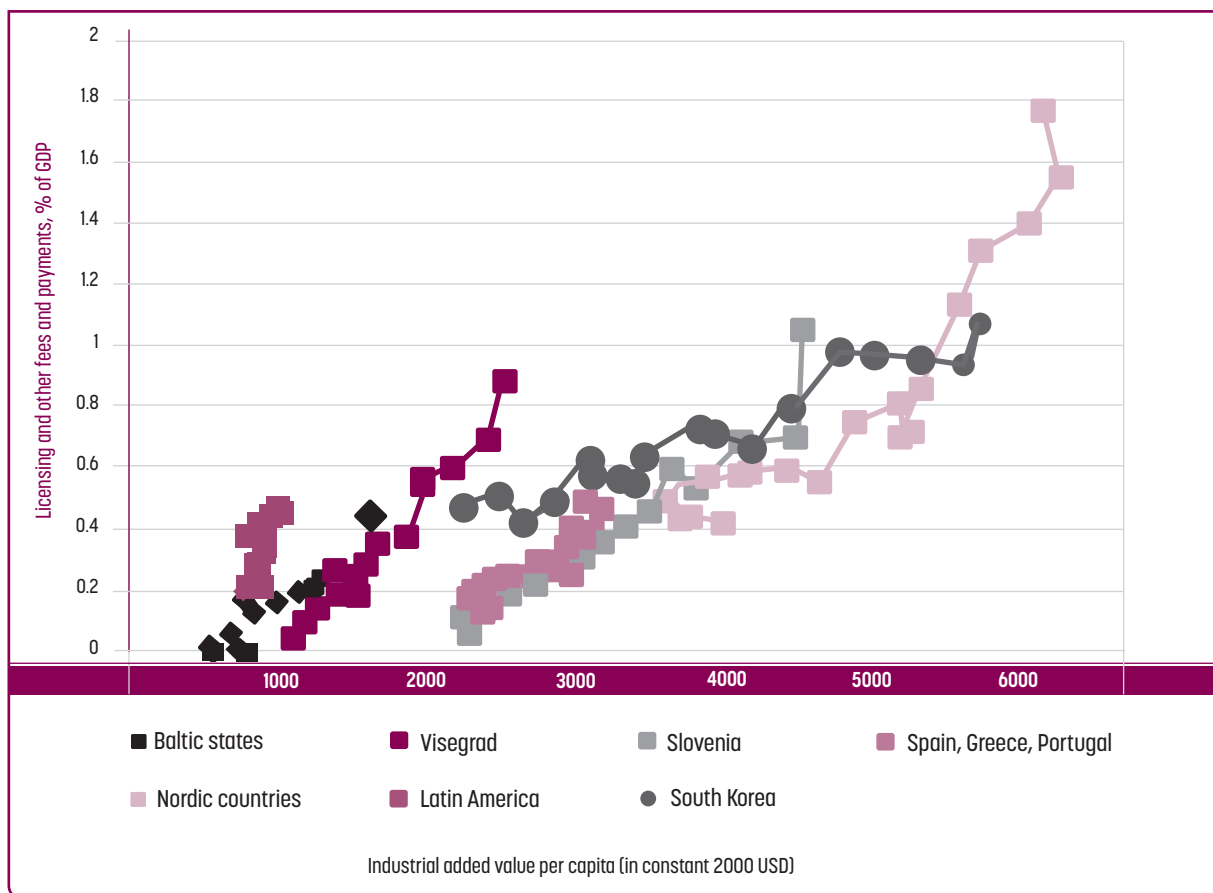
⁶ Other countries on the list include Botswana, Brazil, China, Indonesia, Malaysia, Oman and Thailand. Of these countries, Brazil and Malaysia are considered in debates as being in the middle-income-trap.

We can see that the Latin American countries clearly differ from all the others. We see only a minimal growth of added value, and knowledge intensity has also not increased to a noteworthy extent. The data from the Baltic and Visegrad states confirm the above-discussed developments (Figures 1.6.1 and 1.6.2 show that knowledge-intensity has clearly increased as has added value). Yet the growth rate of these countries is considerably lower than in the Nordic countries or South Korea where the growth of added value has been very rapid and this has been accompanied by a constant increase in knowledge intensity. The countries in the Southern European periphery are standing still when it comes to the growth of added value and knowledge intensity. Thus we can say that the Baltic and Visegrad economies have not (yet) been able to climb up the development ladder and the gap with East Asia and the Nordic countries is actually growing. The countries of Southern Europe and Latin America are in turn starting to lag behind the CEE states, especially when it comes to the knowledge intensity (as mentioned above, this is explained by the integration of CEE businesses with the Northern European and German production networks).

1.6.4 The developmental state and innovation-based state models of East Asia as role models for Estonia?

There is no common agreement among economists and social scientists about the content and homogeneity of the East Asian developmental state or to what extent state policies have even been effective or significant in explaining the developments in the region. However, the majority of the scholars agree that, in the economic development of East Asia, the state's attempts to direct and influence it have been apparent (a good summary of the debate is provided by Haggard 2004). The shift that occurred in the 1990s and 2000s toward an innovation-based development model has reduced this centrality of the state, but many traits of the "old" model can still be found today (see Karo, Kattel 2014; Wong 2011; Yeung 2013). Many significant elements of the political and economic logic of both East-Asian development models differ from the neoliberal Baltic and emerging EU models, as well as from the

FIGURE 1.6.3 Knowledge intensity and industrial added value in selected countries, 1990-2008



Source: Authors calculations based on the World Bank WDI online database.

Latin America's import substitution industrialisation model at the other extreme of the spectrum.

Firstly, based on geopolitical realities, "national security" has been at the centre of economic development models (this focus has also been typical of the Western industrial countries, e.g. see Weiss, 2014). Since the 1990s, national security has practically played no role at all in CEE economic policies and development models. In the Latin American models, national security as part of economic policies was operationalized through the desire to reduce economic dependence on Western hegemony, which required that foreign currency-based imports be replaced with the development of domestic industrial capacities and the protection of the domestic market.

Secondly, the relatively small size of the countries has meant that the focus of the development models has been on ensuring national security through an export-based economy (to which Singapore and Hong Kong have added trade and financial intermediation). In other words, export has not been an objective in and of itself, but a means of increasing security in two ways: firstly, through increasing independence from one's neighbours and geographical location, and secondly, by creating a dependence on the part of the developed countries by developing industrial and technological capabilities (e.g. the establishment of global standards in various ICT fields). In the policymaking sense, this has meant, for example, (from time to time) selective and focused foreign investments policies, and subordination of fiscal and tax policies to serve the goals of industrial and technological policies, etc. Initially, Chalmers Johnson (1982) interpreted the logic of this development model as a plan-rational approach that contrasted with the neoliberal market-ideology and the communist plan-ideology approaches. The last two "ideological" views and the lack of a rational/pragmatic middle-ground perspective has basically characterised Western economic thinking of the Cold War era and after. Therefore, in various competitiveness rankings, the neoliberal Baltic states have almost always been at the same level as, or significantly higher than, the Visegrad states and Slovenia whose development models have tried to follow something similar to plan-rational approaches (although Figures 1.6.1–1.6.3 show that the differences are not very big or that the opposite is true).

Thirdly, based on the above logic, developmental state model emphasized industrial policy goals over socio-political issues. Initially, economic development (and security) was supposed to be firmly established, followed only then by the welfare state (essentially as with the neo-liberal models, the compensation of the "losers" in this economic development model was postponed). In the innovation-based development model (and under more democratic regimes), instead of this institutional organisation/compromise, technonationalism has emerged as an alternative driving force of development. The latter accepts taking national risks to experiment with technologies and enter new technological markets (in order to maintain a nation's export capabilities and security which is created concurrently). It also values and gives logical content and rationale to STEM (science, technology, engineering,

mathematics) studies and emphasises cooperation and coordination between the state and the business community in the development of skills and knowledge, etc. In other words, we can speak of the emergence of an "empowering" welfare-state model as the precondition/supporter of the development model for an innovation-based state (also see sub-chapter 1.2). Simply put, the East-Asian development models' ability to change is based on two complementary institutional traits that have linked the state and the business community into a very dynamic coordination and cooperation environment (see Evans 1998).

Firstly, a very good and capable sector- and technology-based bureaucracy (along with other policymaking capacities) which has been able to develop and implement very detailed sector-based policies and to communicate with the business community not so much in terms of the development of general framework conditions and the business environment, but on the basis of sector- and technology-based challenges. The development of such a bureaucracy has been a relatively experimental activity. It has been based on different models from the "high salary strategy" in Singapore to models based on the prestige of the public sector (for the aforementioned cultural and political reasons) and the creation of autonomous development agencies (in the case of the latter agencies, their location outside daily political scrutiny has allowed them to break and renew the existing policymaking routines). Especially in the development models based on technonationalism (primarily in Taiwan), the employment of people with a technological or engineering education and experience in politics and public service has also been an important factor. Especially in the innovation-based countries, this is an important source for understanding the constant technological changes and breakthroughs and for operatively rethinking the development model.

Secondly, the models of the developmental and innovation-based state have been based on very **strong cooperation with the business community**, who are important sources of feedback for policies (what works and what does not; especially compared to the use of more general macroeconomic indicators as feedback mechanisms in Estonia), while at the same time, being also an important partner (as an innovator and exporter) in fulfilling the objectives related to national security. This also means that the state ensures strong entrepreneurial, innovation and export capabilities in strategic fields of activity by supporting existing companies (using policy tools from financial instruments to national applied research systems), by developing businesses itself (if there are no local companies), or by importing foreign competences (when local skills are lacking). Therefore, the detailed model (as a whole or by sector) of the developmental state and the innovation-based state in different East-Asian countries has adapted to the "market" situation, and has been either more state-centred (Taiwan) or supportive of business capabilities and their development (South Korea). The state's economic policy has kept pace and adjusted with the (export) capabilities of businesses and the development levels of the key technologies exported.

In summary, as a region, East Asia is the only one that has been able to more or less successfully escape the middle-income trap (although their social inequality problems are still largely unsolved) based on a functioning but pragmatic state that has the political legitimacy to develop/support new industries, markets and sectors, and where there is functional cooperation and coordination between the state, research sector and enterprises. In both political and institutional solutions, these countries have managed to pragmatically combine approaches in a way that has not been possible in Western cultures because of ideological barriers. It is also true that after the Asian crisis in the 1990s, the East-Asian countries have (influenced also by the World Bank, the IMF, etc.) started to increasingly copy Western and European-style governance models, which however limits their dynamism and ability to change, because instead of being open to risks and experimentation, policy rationales related to the minimal state ideals and cost-efficiency have increasingly become pre-dominant (e.g. see Ginsburg 2001; Hall 2003; Cheung 2005).

1.6.5 From e-Estonia to technology-Estonia?

To generalise, it can be said that the main lesson for Estonia to learn from the experience of the East-Asian states is that these countries have been able to continue their success by constantly experimenting and changing their economic policies. However, this capacity is based in turn on the existence of a clear idea or narrative, which allows the concerned parties of the society to mobilise for change and which is supported by an economic policy bureaucracy that is amenable to change and by functioning and operative relations between bureaucracy and the business community.

Despite the understanding that is emerging domestically about the shortcomings of Estonia's current development model, the above discussion points to fact that developments in the EU's economic and fiscal governance may somewhat hinder and constrain our ability to find good and suitable solutions. Therefore, in order to rethink the development model, an alternative common cultural symbol or a set of values is needed, which could help the politicians, scientists, bureaucrats and citizens (as voters and consumers) to mobilise around a common vision. Based on existing experience and in the context of the current political and economic situation in Estonia, we can choose between two contradictory "narratives".

One possibility would be to link innovation and economic policies with "national security" issues through cyber, energy, biological and other forms of security. In principle this would mean rationalizing development policies through clearly perceivable missions around which the state could concentrate various measures (from subsidies and tax benefits to the

rethinking of the governance of state-owned enterprises). At the same time, due to the particularities of the defence and security policies, we would be dealing with a very state-centred and not very transparent model, which in Estonia would be based on both domestic and foreign political confrontation. This also assumes extremely strong state capacities, which given the neoliberal background of the Baltic states have not developed. And in the new EU normality, there would not be much room for these to develop. Essentially, this approach could only be a specific part of a broader development model.

The expansion of our already-existing technonationalism – e-Estonia – into a technology-Estonia narrative similar to that of East Asia would probably create more openness to change and a greater dynamism. Countries whose economic development concentrates purely on IT-based developments find it increasingly complicated to steer their economic developments in the desired directions (see Zysman, Breznitz 2012). The principal logic of the technology-Estonia model would be to support economic development (and also the national security element, discussed above) through the conscious valorisation that is based on technological developments of all possible "resources" – from natural resources to knowledge, production and consumption, and also activities related to waste management, treatment of diseases, adjustments to the aging of the population, etc. These activities could focus both on solving local problems and "making Estonia larger" through systematically increasing and broadening export capabilities.

The first steps in shaping this development model should be the development of technology-based competences in governance (from the ability to "think like an engineer" to the comprehension of the particularities of different technologies, e.g. for supporting the development of both mature and emerging technologies) and providing the local technology-based businesses with a strong voice in the social debates and thereby finding a new normality in the relations and cooperation between the state and the business community. This would mean analysing the developments in different fields through understanding both technological and the related social changes. How does one technological solution or another come to be used in a specific field? What can be done in this field to accelerate the dissemination of technology? And what challenges should we resolve with technology in the specific field of activity in the first place?

In other words, our economic policy should essentially become focused on specific value chains. We should know how to measure and assess the dynamics of the value chains in different sectors (e.g. will the life-cycle of a newly-developed technology be longer than a few years?), evaluate their economic impact (added value) and contribution to social dynamism (employment, wages) and substantive development. For example, a much more constructive framework for today's increasingly heated debates on the issues related to oil shale energy could probably be created through the rational analysis of the value chains in the oil shale sector and the potential technological and developmental opportunities

found in it, which would hopefully lead to policies and solutions that would better support Estonia's economic development and our welfare.

Essentially this means that the smart specialisation and challenge-based innovation policy approaches prescribed by the EU – which today are niche policies within the broader economic policy – should be adapted to the realities of local policymaking. These approaches could become the central axis of economic policy by subordinating under it a pragmatic approach (within the EU regulations) to all supportive policies, from taxation to immigration. Within this framework, the policy debates related to the reduction of labour taxes and taxing business profits could rid themselves of the ideological

burden of seemingly favouring the rich over the poor or vice versa and find clearer guidelines and logic, in which “playing” with the tax rates of a specific company, sector or value chain can become a smart policy approach.

At the political level this assumes that technological developments and the indicators that analyse these developments will be highlighted and emphasised, which in turn means that Estonia must be ready to explain its success story to itself outside of the usual macro indicators (the national budget balance, size of the national debt, GDP dynamics). ●

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SUMMARY

► ERIK TERK

The growth of welfare during the last decade was significantly hindered by the recent economic crisis. By now, the impact of the crisis has receded and one could expect the emergence of a new and significantly different situation. Yet the analysis shows that many of the old problems and disproportions have turned out to be surprisingly persistent and are manifesting themselves in quite similar ways. In addition, several obstacles and problems, which were highlighted in the SE-21 document ten years ago, are still topical today. This situation indicates a need for renewing policies and implementing new approaches.

It is necessary to modernise the policies for stimulating economic development as well as social policies, and to connect these two spheres of activity so they do not obstruct each other but provide positive reinforcement.

In an attempt to determine the necessary future directions for the social policies necessary for increasing Estonia's welfare, the authors of this chapter stress the need to strengthen the aspects of welfare policy that are related to the investment in and empowerment of human and social capital, by the state as well as by businesses and the people themselves. This focus of attention can help to avoid the so-called "welfare state trap", which, especially under the conditions of an ageing population, can result in ever increasing sums being allocated for various types of compensatory payments, which in the end inhibit the ability for further economic development. Ideally, the empowering welfare-policy model being suggested here would provide more adequate input for further successful development of the economy. Fortunately, the recent economic crisis did not have such strongly negative consequences that the

sums needed for overcoming them would leave no resources for the new empowerment-oriented policies. However, since many social policies have been left "adrift", and the focus is on cutting or expanding existing instruments rather than addressing new risks, then the reorientation should be embarked upon quickly. One obstacle is the outdated idea that social policies are by nature only cost policies and not resources for creating development resources.

In the three sub-chapters (1.4-1.6) dealing with economic development models, the authors recommend focusing on a development strategy which would not view simplifying and cheapening of the business environment as a key to success, but rather the improvement of the quality of social and human capital, creating prerequisites for innovation and creativity and promoting meaningful cooperation by combining the efforts of both the private and public sectors.

Both the social policy and economic policy viewpoints reach quite similar understandings regarding Estonia's future development needs. We must move from universalistic, simplistic and uniform policies, which are intended mostly for reacting to changes in the environment, to more focused, proactive and experimenting policies. This is true for both social policies, where supporting and empowering social groups with different needs presumes the existence of different tools, but also for the policies implemented to promote economic development where the developmental needs of the different economic sectors also strongly differ. However, the realisation of these concepts requires a major shift in the general ideology and practices of current policy-making. ■



2

SOCIAL COHESION

ESTONIAN HUMAN DEVELOPMENT REPORT 2014/2015

INTRODUCTION

► ELLU SAAR

This chapter is dedicated to one of Estonia's four development goals, as formulated in the strategy "Sustainable Estonia 21". In the view of this strategy, the achievement of the other development goals is possible only when the benefits derived from these goals are enjoyed by a large majority of the population. To at least some Estonians, this term probably brings to mind the main character of the political satire TV series *The Statesmen - the Minister of Social Cohesion* - who stated in an "interview" to *Eesti Ekspress* that if he didn't attend to the issues of social cohesion, there would be no social cohesion in Estonia.

In reality, social cohesion and inclusion are central tenets of European Union politics and major goals of its social policy. All European Union member states aspire to achieve greater social cohesion. The Council of Europe defines social cohesion as "the capacity of a society to ensure the welfare of all its members, minimising disparities and avoiding polarisation. A cohesive society is a mutually supportive community of free individuals pursuing these common goals by democratic means" (Council of Europe 2004).

Social cohesion can be defined as a characteristic of a society that is expressed in the relations between its members and in the interconnectedness of these relations (shared values

and interpretations, common identity, sense of communal belonging and trust) (OECD 2012).

Sustainable Estonia 21 brings out three sub-goals in the category of social cohesion:

1. Social inclusion;
2. Regional balance;
3. Strong civil society.

The main threats to the cohesion of Estonian society are identified as the high level of economic inequality; the continuing trend of growing regional imbalance and the "dying out" of peripheral areas; the entrance of many marginalised population groups into a stage where "return" to active life is no longer viable; the emerging trend of "brain-drain"; and the third sector's lack of capability in representing societal interests as well as in generating jobs and offering services.

The chapter is divided into two large blocks. The first block is dedicated to education, since the synthesis-scenario "Estonia as a Knowledge Society" that is offered in the "Sustainable Estonia 21" strategy sees the transformation of education into lifelong learning as an important prerequisite for activating this model. In the first section we examine the role

of social background in the shaping of students' educational performance. The second section covers the problems arising from school choices, and the related issue of the increasing inequalities between schools. The third section is dedicated to the problems that are inherent in transitioning the Russian-language secondary schools to Estonian-based instruction, and to the effects this transition has had on social cohesion. The fourth section looks at the participation of different social groups in lifelong learning and the influence that the demand side (i.e. the labour market) has had on this participation.

Migration is an oft-recurring subject of conversation in Estonian society: there are worries that people are leaving villages for cities and Estonia for abroad. The second block of

the chapter is dedicated to this very subject – migration. The first section deals with work-related commuting within Estonia: the central cities and their influence areas are introduced, and an overview is given on the socio-demographic characteristics of commuters. The second section looks at emigration from Estonia: its extent and causes, and describes the profiles of emigrants and the impact of emigration on Estonia's development. The third section gives an overview of the emigrants' considerations for leaving Estonia and how the emigrants themselves think about their connection to Estonia. The last section of the chapter focuses on Estonian residents' employment abroad, with descriptions of their socio-demographic profiles, destination states and the peculiarities of working abroad. ●

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EDUCATION

2.1

The Role of Social Status in Shaping Student Performance

► KRISTINA LINDEMANN

Introduction

In the developed countries, the point of view has been widely accepted that equality in education tends to promote a higher level of knowledge for all students. International studies on education have consistently shown that the students' level of knowledge can be very good even in countries where the relationship between social background and school performance is weak (The Organisation for Economic Co-operation and Development [OECD] 2013)

The Programme for International Student Assessment (PISA 2012) survey showed that, in Estonia, social background affects the students' educational performance less than in most other countries (OECD 2013). The OECD uses a special ESCS Index¹ to analyse social status, which summarises the cultural capital and material wellbeing of students' homes and their parents' educational and occupational status. However, how does the background status of Estonian students compare to students in our neighbouring countries?

Earlier analyses of Estonia have demonstrated that the cultural capital of the home plays a great role in shaping student performance, while material wellbeing is less important (Lindemann 2013). The objective of this article is to more thoroughly examine the mutual connections between various facets of social status along with their impact on student performance, by turning special attention to the cultural capital of the home. In addition, a relationship between social background and schools is analysed. Are students with higher social and cultural status more likely to attend schools that select their students? How does this affect student performance? The analysis is based on the PISA 2012 survey organised by the OECD, which measured the performance of 15-year-olds in mathematics, science and reading.

2.1.1 The students' cultural capital and social background

At the individual level, the acquired educational level is shaped by student performance in school as well as by educational choices. In addition to the school, student performance depends on the students' early socialisation, their home environment as well as parental support (Boudon 1974). In this connection, many studies have confirmed the importance of cultural capital (e.g. Jæger 2011). The concept of cultural capital, which is widely employed in sociological studies, is based on Pierre Bourdieu's theory of cultural reproduction (e.g. Bourdieu 1977). Very generally, this theory assumes that individuals and families possess cultural capital that is passed on to the next generation and which significantly contributes to a child's success in the educational system. Cultural capital supplies an individual with the knowledge, practical skills and familiarity with the rules of the game that are necessary for coping in the educational system, and which are recognised by both teachers and schoolmates (ibid.).

In quantitative social surveys, the cultural capital can only be measured by simplified indicators (e.g. participation in cultural events). The most frequently used indicator is the number of books in the home. The PISA 2012 data shows that half of the 15-year-old students from Estonia have fewer than 100 books at home. A quarter of the students have fewer than

¹ ESCS (index of economic, social and cultural status) was created in order to describe the students' home situation under a single variable applicable to all participant countries. It should be noted that within the PISA survey, students report themselves on parental occupation and education and family background. No questions are asked about their parents' income; therefore, the index includes measures that are only indirectly related to family wealth (e.g. number of mobile phones in the family).

26 books at home. Compared to the neighbouring countries, this indicator of cultural capital in Estonian homes is relatively high. From **Figure 2.1.1**, we can see that the number of books in Estonian students' homes is similar to the number in Finnish homes. At the same time, there are somewhat more homes with large numbers of books in Estonia than in Latvia and Russia.

Often, the number of books is the only indicator of cultural capital that is measured in social surveys. However, in the PISA survey, the students were also asked whether they had literary classics, books of poetry or works of art at home. Based on these questions, the OECD compiled an index of cultural possessions. Generally, very small differences exist between Estonia and its neighbouring countries in the index of cultural possessions. As expected, the number of books was strongly connected to the index of cultural possessions in all four countries. Therefore, we can conclude that the indicators for the cultural status of Estonian homes do not greatly differ from the homes in our neighbouring countries.

Cultural capital is associated with both the education level and the occupation of the parents. The number of books is greater in families where at least one parent has acquired a higher academic education (37% with more than 200 books and 13% with less than 26 books). On the other hand, fewer than 20% of the homes where the parents have only a secondary education had more than 200 books, and almost a third were homes with less than 26 books. Similar trends appear in Finland, Latvia and Russia, although there were slightly fewer homes with many books among parents with higher academic education (approximately 30%). However, in Estonia, the cultural capital of the homes of the parents with only a secondary education is greater than in Russia, where almost half of the children with parents that have only a secondary education have fewer than 25 books at home. It is important to note that that only a few percent of the students in Estonia and

our neighbouring countries had two parents with only a basic education.

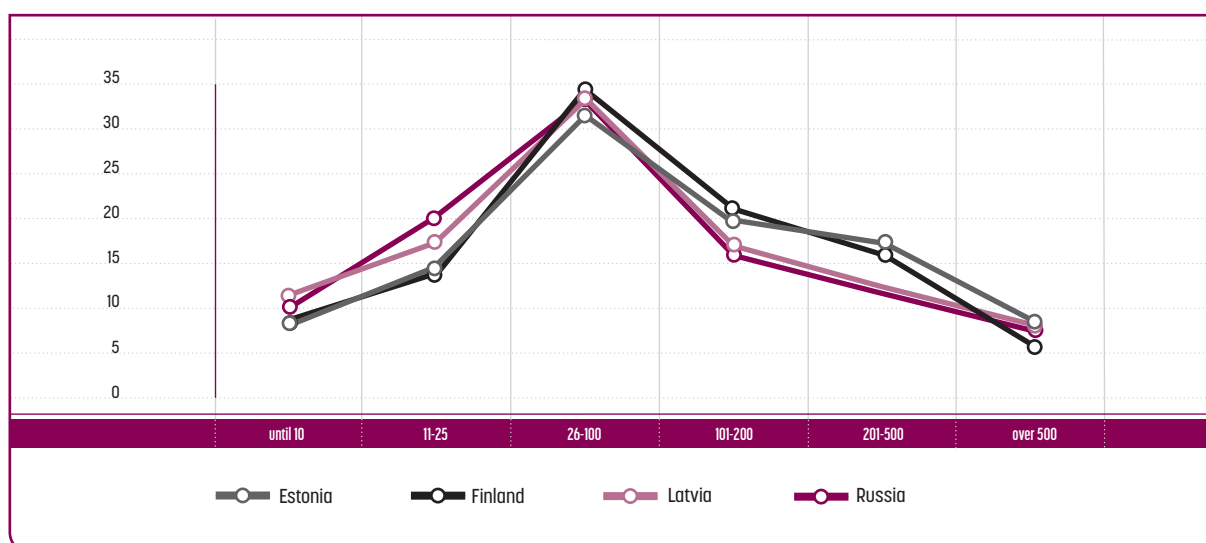
The parents' occupational status and the cultural capital of the home are closely related. It is clear from **Figure 2.1.2** that the homes of Estonian students with at least one parent working as a professional have the most books. On the other hand, the cultural capital of the homes of managers' children varies significantly. Although a third of these homes have more than 200 books, a fifth have fewer than 26 books. The cultural capital indicators of both blue-collar parents and those working as service providers and clerks are the lowest – almost a third had up to 25 books. However, in Estonia, the cultural capital indicators for the homes of children whose parents work in blue-collar jobs is higher than in Latvia and Russia, where almost half of the homes of blue-collar workers have fewer than 26 books. Compared to Finland, there are no significant differences.

It is important to note that, in Estonia, the cultural capital indicators of families in which both parents are unemployed, or the single parent is unemployed, are not significantly lower than in the homes where both parents are employed. Unlike in Estonia, great differences occur in Russia, where 42% of the homes of unemployed parents have fewer than 26 books.

The family's wealth depends on the parental occupational and employment status. Since students may not know exactly what their parents earn, then an index is used in the PISA survey that indicates the number of items in the home that imply wealth, e.g. televisions, cars and mobile phones. According to the PISA 2012 survey, the association between material wellbeing and the number of books tends to be weak.

In summary, it can be said that, although higher occupational and educational levels of parents in Estonia are related to a greater number of books in the home, the differences in cultural capital between various social groups is not as great

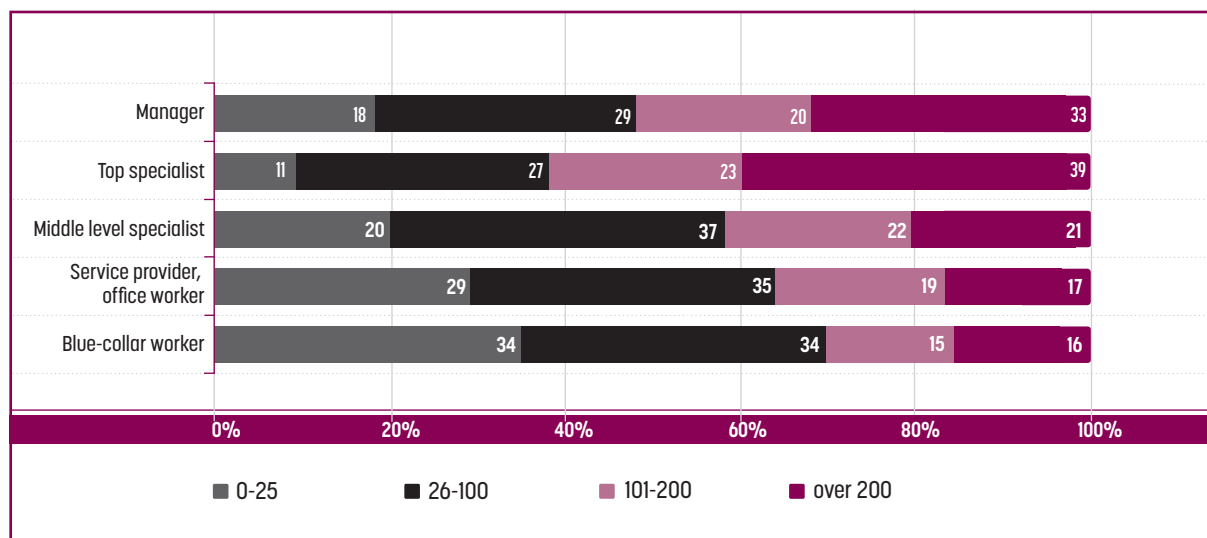
FIGURE 2.1.1 Number of books in students' homes, %



Source: OECD 2013.

as in Russia and Latvia. However, the important question is whether differences in cultural capital and social background affect the level of knowledge acquired at school.

FIGURE 2.1.2 Number of books in the home according to the parent's occupational level, %



Source: Author's calculation based on the PISA 2012 database.

2.1.2 Student performance and social background

Although in Estonia the impact of social background on student performance is smaller than in many other countries, clear differences still exist between social groups. In the following analysis, the connection between social background and performance in mathematics is examined, since this was the focus of the PISA 2012 survey.

To what extent do the social-background indicators explain the differences in student performance? **Table 2.1.1** provides an overview of the number of books in the home, the parents' occupation, their educational and occupational status, and wealth, in explaining the variance in mathematics scores². It turns out that the number of books in the home plays a significant role in shaping the results in Estonia and the neighbouring countries. Therefore, it can be concluded that the cultural capital of the home significantly impacts the acquisition of knowledge in school.

In addition to the cultural capital, the parents' occupations also affect the mathematics performance of Estonian students, although its effect is somewhat smaller. The educational level and employment status of the parents have a weaker impact, and wealth is not correlated with mathematics performance. The Finnish and Estonian indicators are similar. In Latvia, on the other hand, the impact of the parents' occupation is similar in size to the impact of the number of books in the home, and the role of the parents' education is also somewhat larger than in Estonia.

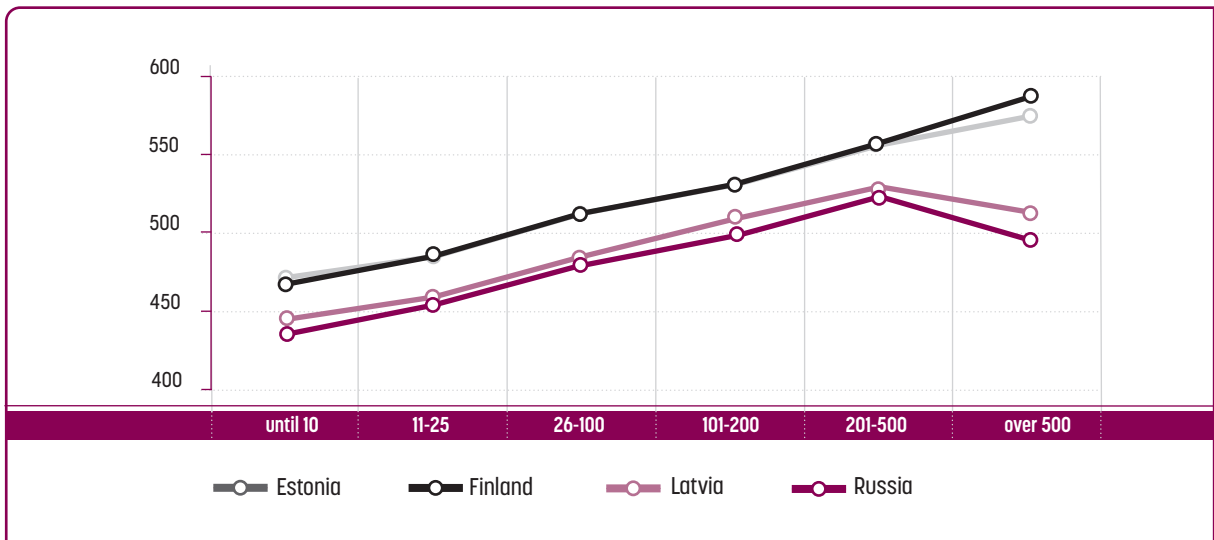
A greater number of books in the home is related to better mathematics performance (**Figure 2.1.3**). In Estonia, the students whose homes had up to 10 books received scores that

were about 92 points lower than their peers whose homes had between 201 and 500 books. This difference is equal to the knowledge acquired during more than two academic years. The difference between these two groups is not any smaller in Finland (98 points), Latvia (86 points) or Russia (96 points). The best mathematics performance was achieved by the children of professionals and the weakest by children of blue-collar workers (unskilled workers are included among blue-collar workers). In Estonia, the difference between these two groups is 57 points, which is equivalent to approximately one and a half academic years. This difference is smaller than in many other countries (**OECD 2013**). A comparison with the neighbouring countries reveals that the difference is 53 points in Finland, 70 points in Latvia and 64 points in Russia.

However, to what extent is the relationship between student performance and the parents' occupation mediated by a difference in cultural capital? **Figure 2.1.4** shows that in Estonia, the students from homes with many books achieved relatively good scores even when their parents worked in blue-collar jobs. The difference compared with the children of professionals with similar cultural capital was 33 points, or slightly less than one academic year. The trends in Finland are similar to those in Estonia. On the other hand, the children of blue-collar workers that came from homes with large numbers of books in Russia and Latvia achieved significantly lower scores in mathematics than the children of professionals with similar cultural capital (the difference was 68 and 81 points).

² In addition to the models presented in **Table 2.1.1**, a regression model was also computed with all the indicators of social background. The result revealed that the effect of the number of books and parental occupational status on mathematics performance could not be explained by the other indicators of social background.

FIGURE 2.1.3 The association between the number of books and average mathematics performance



Source: OECD 2013.

On the other hand, it turns out that when there are few books in the home, the high occupational level of the parents does not significantly improve student performance. In Estonia, the children of professionals whose homes had few books achieved results that were 26 points higher than the children of blue-collar workers. Additional analysis (regression model) showed that the influence of the number of books and the parents' occupational level is not explained by other indicators related to social background. Therefore, the high cultural capital of the home improves students' performance even when their parents' occupational status is low. However, the children of professionals and managers who come from homes with many books achieve the best results.

ground study at different types of schools. A certain difference in the socio-economic makeup of schools is natural, because the social status of parents differs geographically, but the selection of students by the schools can deepen the segregation.

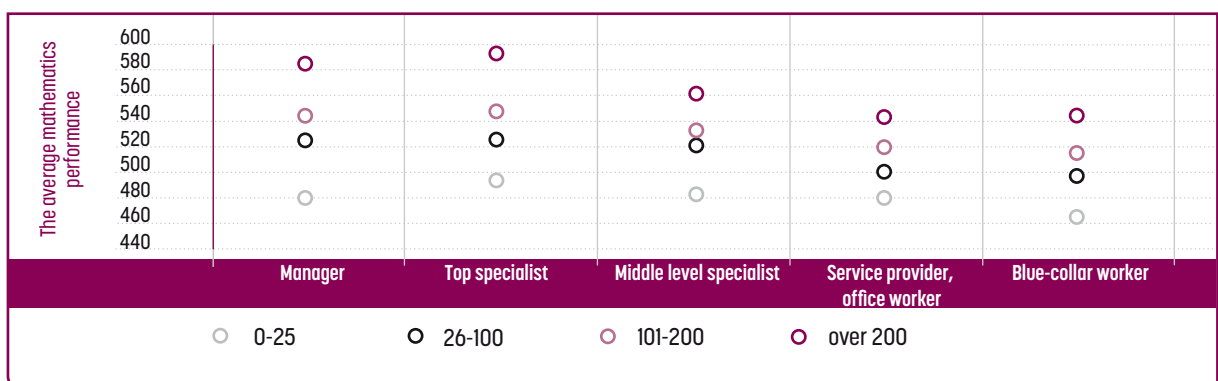
The PISA survey asked school directors whether their schools selected students based on academic results or entrance exams³. They were also asked how important residence in the school district was when selecting the students. In the following analysis, the schools that made their decisions to admit students based solely on the student's grades or entrance exam results, and the student's place of residence was never, or only sometimes, taken into consideration, were

2.1.3 Selective-admission schools and social background

The impact of social background on student performance may increase if the children with higher and lower social back-

³ The questionnaire does not specify whether the school should answer based on whether they select students for first grade or upper secondary school. Close to 37% of Estonian students attend schools where students are always selected. At the same time, many of these schools noted that selection is always based on residence in the corresponding district. In order to determine the most selective schools, only the schools that did not have a clear role as a district school were defined as selective schools (i.e. where the student's residence was only considered sometimes or never).

FIGURE 2.1.4 The average mathematics performance of Estonian students based on the parents' occupational status and number of books in the home



Source: Author's calculation based on the PISA 2012 database.

TABLE 2.1.1 The relationship between mathematics performance and the parents' background: the coefficient of determination in linear regression models that included only one independent variable per model

	Number of books in the home	Parental occupation	Parental education	Wealth	Parental employment status
ESTONIA	0,14	0,07	0,03	0,00	0,02
FINLAND	0,13	0,06	0,04	0,00	0,03
LATVIA	0,11	0,12	0,06	0,03	0,01
RUSSIA	0,09	0,08	0,07	0,01	0,02

Source: Author's calculation based on the PISA 2012 database.

COMMENT: Separate regression models were calculated to find the determination coefficient for every single independent variable (coefficient can be interpreted as a percentage of variance explained by independent variable in mathematics performance). Since the indicators for social background are correlated, the descriptive power of the various models cannot be summed up to find the entire impact of the social background.

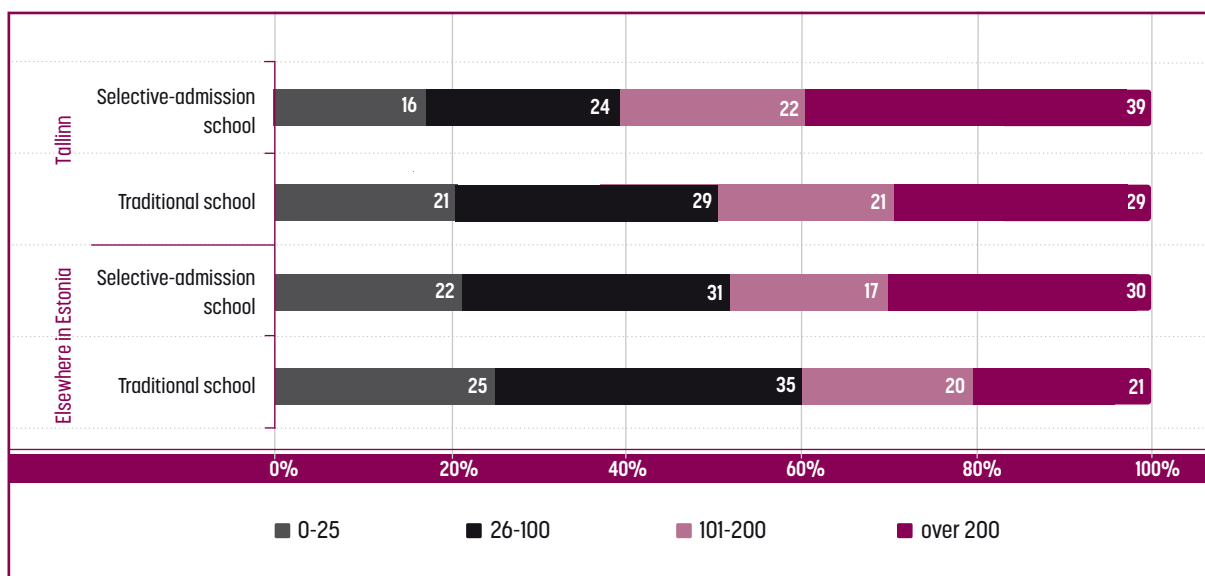
defined as schools that choose or select their students. In 2012, 20% of Estonian students attended such selective-admission schools. In these schools, the average mathematics score was 538 points, which is 22 points higher than the average for non-selective schools. The percentage of students attending selective-admission schools is highest in Tallinn. The differences in student performance are also the greatest in Tallinn, where the average score for students at selective-admission schools was 555 points versus 525 points for those at non-selective schools.

The social and cultural status of students at selective-admission schools is higher than at non-selective schools. The level of the cultural capital of the home is highest at the Tallinn schools that select their students (Figure 2.1.5). Close to 39% of the students attending selective-admission schools

in Tallinn come from homes with many books. However, young people that come from homes with fewer than 26 books also study at these schools (16%).

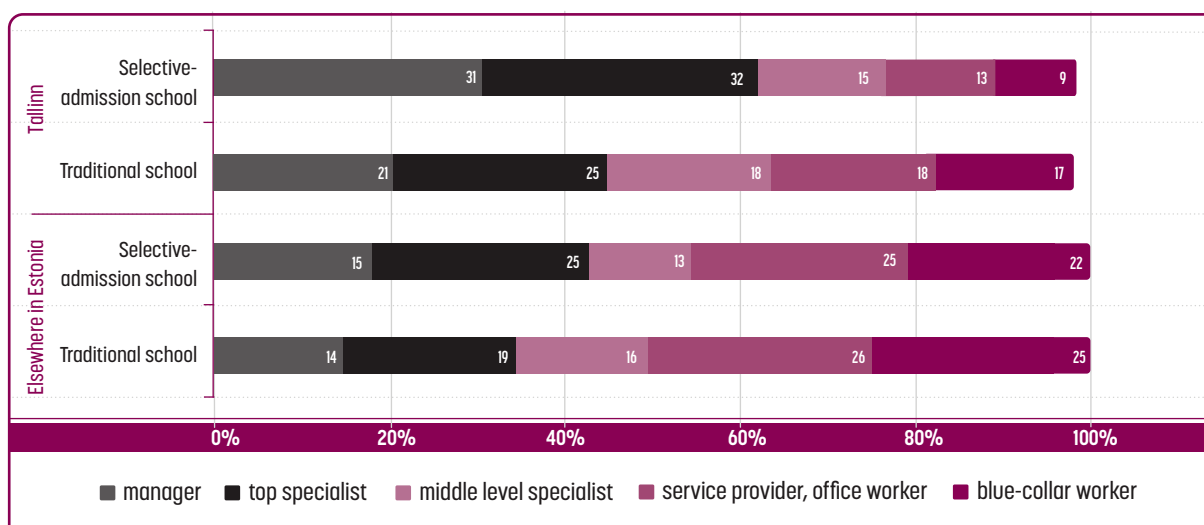
In Tallinn, the occupational and educational level of the parents of the children attending selective-admission schools is higher than in non-selective schools (Figure 2.1.6). Eighty percent of the parents of selective-admission school students have a higher education, while the parents of 65% of the students in traditional schools have acquired the same level of education. The children of managers and professionals are also more likely to attend selective-admission schools. In these schools, the parents of only a third of the students do not work in higher positions. On the other hand, less than half of the parents of the students attending Tallinn's non-selective schools are managers or professionals. Only moderate

FIGURE 2.1.5 The number of books by the selectivity and location of the school, %



Source: Author's calculation based on the PISA 2012 database.

FIGURE 2.1.6 Highest occupational position of the parents by the selectivity and location of the school



Source: Author's calculation based on the PISA 2012 database.

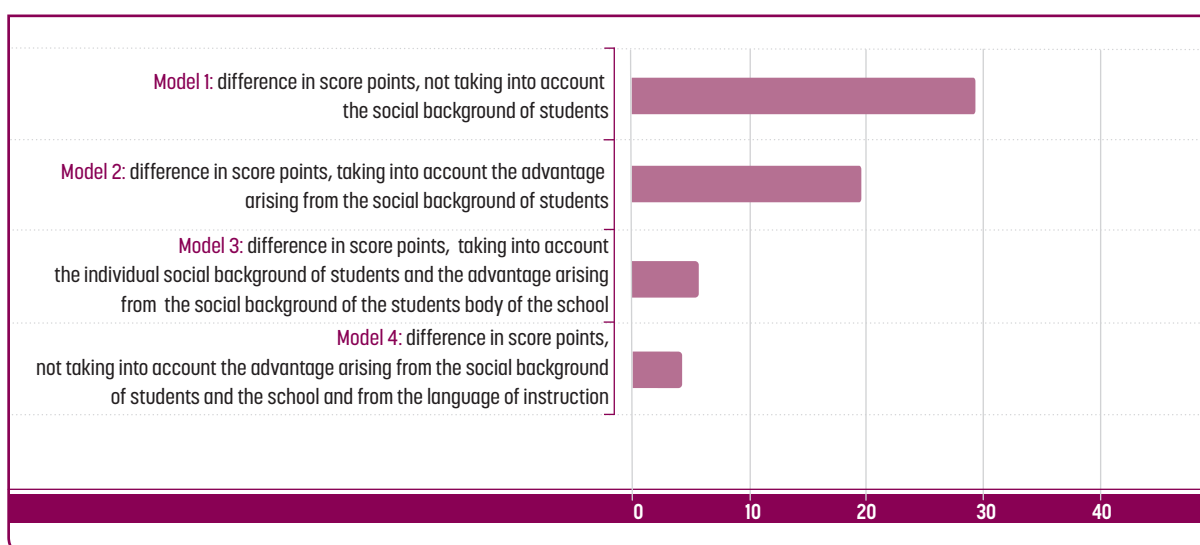
differences in the cultural background of the students in selective-admission and traditional schools appear in the other regions of Estonia, but not in the occupational and educational levels of the parents.

To what extent are the good academic outcomes of the schools that select their students based on the higher social background of the students? It is not possible to provide an unequivocal answer to this question, but the analysis related to the mathematics performance in Tallinn's schools presented in Table 2.1.2 indicates the significance of social background. It turns out that the good mathematics performance in selective-admission schools can be partly explained by the students' social background (comparison of Model 1 and

Model 2). If the students' social background were similar, the advantage of the selective schools over the ordinary schools would be approximately 20 points.

The social background of one's schoolmates may also play an important role in shaping the learning environment. It can be assumed that the students shape the learning environment based on the advantages and disadvantages they bring from home (Sampson et al. 2002). Therefore, the socio-economic background of all the students attending the school is included in the analysis. It turns out the socio-economic composition of the student body has a significant impact on student performance, and this explains the advantage that selective-admission schools have. In other words, if the

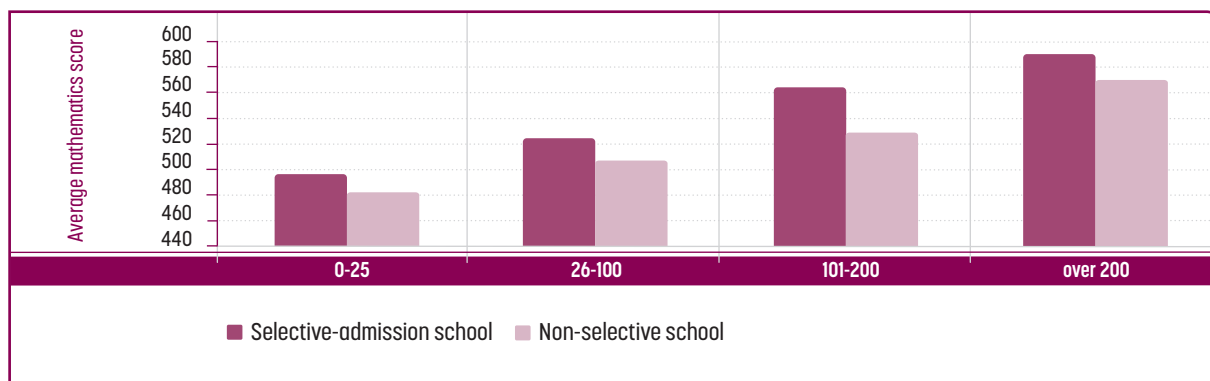
TABLE 2.1.2 The effect of student-level and school-level characteristics on mathematics performance in Tallinn, coefficients from two-level linear regression models



Source: Author's calculation based on the PISA 2012 database.

COMMENTS: In all the models, the gender is controlled. The average social status of the students in the school was calculated based on the OECD ESCS Index. In Model 1, the difference between the schools is significant at the $p < 0.01$ level; in Model 2 at $p < 0.1$; in Models 3 and 4, there is no statistically-significant difference.

FIGURE 2.17 Average mathematics scores by the number of books in the students' homes in selective-admission and non-selective schools



Source: Author's calculation based on the PISA 2012 database.

socio-economic composition of the selective-admission and non-selective schools were similar, then presumably the difference in performance would be minimal. Among the selective-admission schools in Tallinn are Russian-language as well as Estonian-language schools. The analysis shows that although the results in the schools with Russian-language instruction are weaker, the success of the selective-admission schools is not related to the language of instruction.

Is a school that selects students able to level the performance differences between the students that might result from social background? The analysis of Tallinn schools shows that social background affects student performance in both selective-admission and non-selective schools. The students from homes with many books achieve better results regardless of the schools' selectivity (Figure 2.17). In other words, the students with high cultural capital also achieve good results in non-selective schools. And the educational outcomes of the students from homes with limited cultural capital are lower even if they attend schools that select their students. To sum up, selective-admission schools have a better overall student performance. However, these schools are not more successful than non-selective schools at equalising or compensating the differences that result from social status.

In conclusion

A strong and uniform basic school system is considered to be one of the strengths of Estonian education. Although social background plays a smaller role in shaping student perform-

ance in Estonia, clear differences between social groups do nevertheless exist here. In this connection, the cultural capital of a student's home has a positive impact on student performance and this holds even if the student's parents work in blue-collar or service jobs. Therefore, more attention should be paid in schools to levelling the differences that result from unequal cultural backgrounds.

The greatest accumulation of cultural capital and parental resources can be observed in Tallinn's selective-admission schools, where the high performance is to a great extent explained by the students' beneficial home environment. It is important to note that the accumulation of resources in these schools does not increase or decrease the success in levelling the differences that result from the students' social background – the students with lower social background are likely to have a lower level of academic performance than the other students in both the selective-admission and non-selective schools.

High academic performance is one of the preconditions for a successful educational pathway, but the educational choices that young people make after completing basic and secondary school are also important. Studies that analyse long-term trends show that social background in Estonia has had a consistently strong impact on the choice of the track of secondary education and on the decision to continue with higher education (Saar, Aimre 2014). However, the question of to what degree educational choices depend on student performance and to what degree on social background is still unsolved in Estonia. ●

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EDUCATION



The Hidden Side of the Education Market - Varieties of school choice policies in Europe and the marketisation of the school-system in Tallinn

► KAIRE PÕDER, TRIIN LAURI

Introduction

The role of parents, and their opportunity to choose schools for their children, has grown considerably in the last decades, even in countries where the principle of comprehensive schooling has been a source of pride for decades (for example in Finland and other Nordic countries). This means that the system of designating schools on the principle of catchment area or zoning is increasingly being replaced by parental ability to choose the school. The rationale for this is based on a pursuit of equality in education through giving greater opportunity for all children to enrol in private schools, and decreasing residential choice-based segregation; on a desire to increase effectiveness by letting people “vote with their feet”, with the aim of increasing the quality of education for the child; as well as on increasing parental participation and meeting the demands and expectations of families.

In addition to this, the comparative framework of the Organisation for Economic Co-operation and Development (OECD) has been adopted as a policy diffusion of education politics into Estonia as well as elsewhere. The OECD’s policy advice includes a comparative agenda, i.e. the preparation of

league tables (based on the results of the Programme for International Student Assessment [PISA] tests), that rank and evaluate schools by test results and comparative quantifiable data. The disclosure of league tables gives the parents information about the vertical diversity of schools, meaning that education becomes a positional good, i.e. it is presumed that being in the “right school” assures the child a superior position in society, including a privileged position in the labour market. It is also clearly presumed that the table ranking reflects the quality of education. This competitive agenda in education, based on measurement and competition, has an impact on the meaning of education as well as on the role different parties play in it.

The theoretical and empirical knowledge explaining the “production” of educational outcomes is contradictory. However, there is unanimous consensus that family (background characteristics of the parents), teachers, the classroom (peers and size of the class), and curriculum play an important role in educational outcomes. Often, these inputs are either endogenous or confounded by some unobserved factors. This can mean

that, for example, the effect of a teacher is very different on two classes where one class consists of pupils of a similar background and sufficient parental involvement, and the other of pupils coming from very different homes and many of them not receiving any support from their families. The same applies to peer effects – better-motivated peers tend to pull along those whose motivation is weaker. There is increasing agreement that these indicators, which coproduce educational outcomes, are significantly influenced by how schools and children are matched. This explains why school-choice policies and their influence on the contents and outcomes of education get more and more attention in academic literature. Our study relies on similar premises: the allocation of seats has a significant impact, as does the "pairing" of schools and children, on educational outcomes for the children, as it enhances (or hinders) results that correspond to the mental capabilities of the individual, and is thus an important educational-legal issue. While equality of educational opportunity in contemporary education means that school choice policies (and legal regulations) do not increase family background effects, the latter means that the impact of parents' social, cultural and income status (SES) has as minimal effect on educational outcomes of the students.

The impact of parents on the educational results will certainly not vanish entirely, however the premises of a comprehensive education agenda are driven by equity concerns – meaning that class, school, and peer effects must be independent from the SES characteristics of parents. Therefore contemporary education policy faces the challenge of how to allocate seats to students by simultaneously taking into account parental preferences and equal educational opportunities – in other words, how to make a minimal trade-off between market-driven efficiency in education (an outcome-driven agenda) and equality of opportunity (an equality-driven agenda).

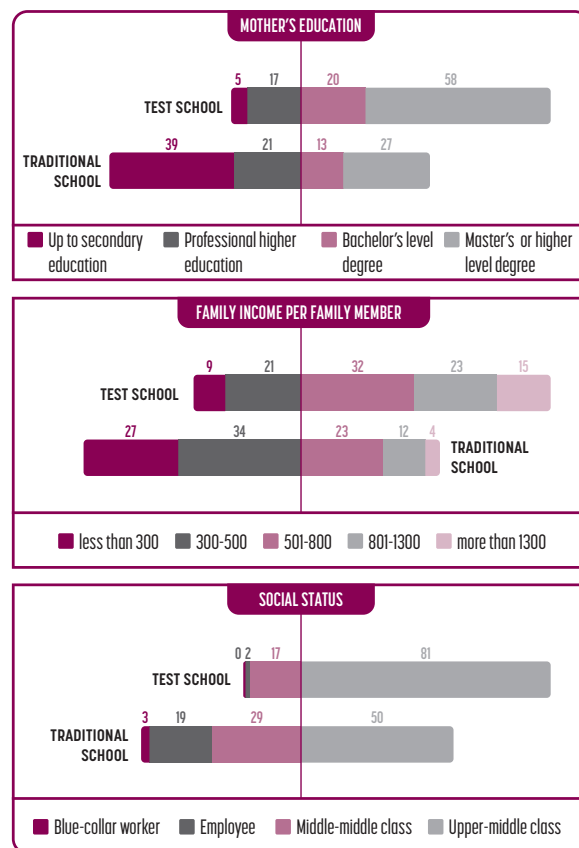
Our aim is to study the impact of school choice on the basis of a survey conducted in Tallinn among parents in 2012. The results of the analysis are contextualised, highlighting the political practices used in some choice policies such as those in Sweden or the Netherlands, and putting the essence of the local school-choice policy and its results into the broader context of developments in choice policy. The goal of our study is to examine a practice that has been spreading in Estonia generally, as well as in Tallinn more specifically: the use of aptitude or admission tests in primary school. In Tallinn, these tests are school-specific (school-tests) and require children to demonstrate their reading, arithmetical and other non-social skills. We are interested in the effect of these school tests, or in other words, determining whether these tests cause inequality between schools on the basis of the social background of children. We look at the connection between being admitted to the selective schools (henceforth "exam schools"), and parental SES or background characteristics in general, and compare the possible changes in these connections in the context of different school choice regulations in Tallinn. We will demonstrate how background effects have been moderated by different choice policies (how students and schools are matched) in different periods. In the second part of the article,

we put the local experience into the global context of school choice and consider the possibilities of designing a choice policy that would alleviate inequality.

2.2.1 The education market in Estonia: school choice in Tallinn

Estonia has been doing well in the field of education, compared to Eastern European as well as many Western European countries. For example, according to the PISA tests in 2009, as well as 2012, the average academic outcomes of Estonian schools were relatively superior while within and between-school segregation was comparatively low (Pöder et al. 2014). At the same time, it is hard to explain Estonia's success, or tie it into its educational policies. It is rather the other way around – if we look at the current choice practices then these contradict the many principles that are considered important in European choice practices. For instance, selective admission to elementary school is discouraged or prohibited and so are voluntary donations within a public school system (universal vouchers), which means that private and public schools are fi-

FIGURE 2.2.1 Family profiles of pupils of test and traditional schools



¹ The data were collected in cooperation with the Tallinn City Education Department through an Internet survey funded by the Estonian Science Foundation (Grant ETF-8997).

nanced equally and no fees are collected from parents, and that there are no additional subjects and/or lessons in schools that practice only selective admission. There are also problems concerning teachers: teachers' pay is low; there is a shortage of those who want to become teachers; and both the pupils and teachers in Estonian schools show up in international studies as being unhappy at school (OECD 2013). Pöder and Lauri (2014) speculate that the comprehensive school system that has been inherited from the socialist era has so far permitted a levelling-out of the segregation caused by the policy failure that enhanced the differences between "good" and "not-so-good" schools, through the creation of school league tables.

Traditionally, Estonian children have gone to the local school in their catchment area. The school system is rather uniform – there is no significant diversity in the curriculum (the national study program), teachers' training, and teaching practices (although there are some Waldorf schools) while the share of private schools is minimal. At the same time, in urban and also many suburban areas, the tendency to choose a school is growing, especially in the primary and higher-secondary-levels of education. Although there are constant reforms in the educational system – school autonomy, curriculum reforms - designing a conscious approach to choice practices has not been their focus. We would rather say that allowing parents to choose schools for the siblings has been a hidden agenda – a random and slow development that has gradually grown from the specialised classes inherited from the Soviet-era "elite" schools of the late sixties.

We focus on the 2011 change in the implementation of school choice, which gave each parent the right to choose any school for their children (catchment area and central assignment were abolished). Although distinguishing between inter- and intra-district schools' goes back decades in Tallinn, and was practiced already in the socialist era, the competition has become more intense in the last decade. Schools with selective admission have been given the right to carry out school tests. The aptitude tests as well as the admission principles are school-specific. Although the changes in 2010 in the Basic Schools and Upper-Secondary Schools Act emphasised the in-

roduction of the principles of neighbourhood schools and siblings being admitted to the same school, the interpretation of the act has varied greatly. In Tallinn, a quasi-experiment was conducted in 2011 with families free to choose any school they preferred. Our interest is in studying family background effects in the experimental year and in the preceding years of semi-central assignment. The latter means that there were intra- and inter-district schools simultaneously, with the latter using applied aptitude tests.

We are interested in how the change in school-choice regulation influenced the social stratification between exam and traditional schools taking into account the background characteristics of parents.

Besides that, we were also interested in the behaviour of parents with respect to pre-educating children for school. School-specific tests have brought along pre-elementary school preparation in Tallinn. These prep-schools are paid programs organised by exam schools for preparing children for the aptitude tests. According to our survey, approximately half of the children who started school in the years 2008–2011 in Tallinn had participated in the aptitude tests of exam schools, and one third had participated in the prep-schools of such schools.

Describing our data for the two groups – regular and exam schools (Figure 2.2.1) - we can conclude that the family profiles (income, education levels of mother and father, and social status) of exam school students are different. The background characteristics of pupils of exam schools are all located in the upper half of the values across all indicators shown on Figure 2.2.1.

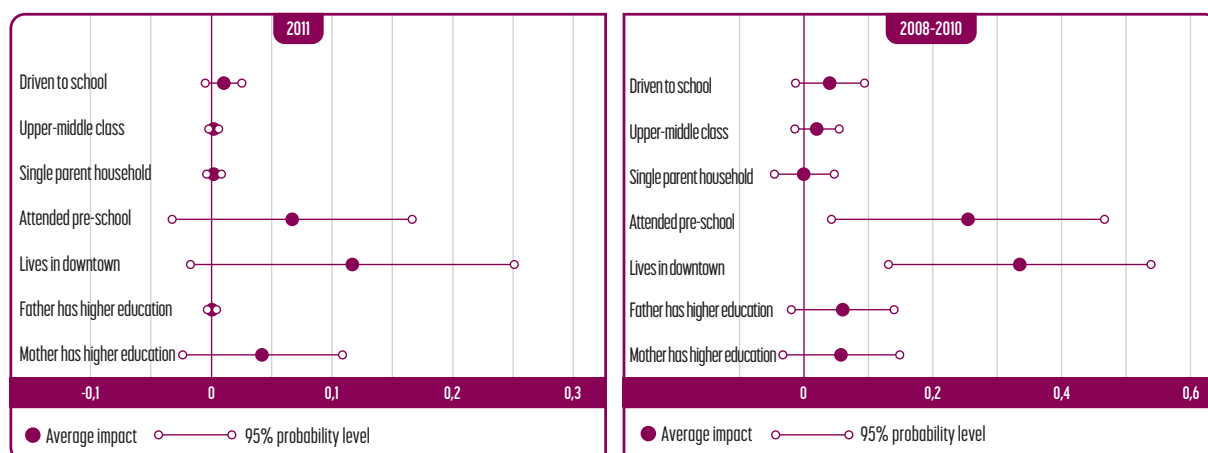
Table 2.2.1 shows a comparison based on the background characteristics of pupils of exam schools and regular schools. For all parameters, the differences among the groups is statistically significant, i.e. the pupils of test schools are driven to school more often in a car; getting to school takes longer for them (i.e. they don't necessarily go to a school near their home); they usually live in the centre of town; almost three quarters of them have participated in prep-schools; they have parents with a higher educational level etc.

TABLE 2.2.1 Profiles of pupils of exam and regular schools related to the background characteristics and behavioural differences of parents

	Mother has higher education	Father has higher education	Child attended a pre-school of a selective-admission school	Walks to school	Lives in down-town	Lives in Tallinn	Single parent house-hold	Average time to get to school	Driven to school if necessary
Child attends a selective-admission school (n=305)	88%	73%	67%	29%	41%	93%	10%	19 min	64%
Child attends a regular school (n=504)	50%	41%	10%	52%	4%	90%	15%	15 min	43%

COMMENTS: All differences across groups are statistically significant on a level of .05

FIGURE 2.2.2 The influence of parents' background characteristics and educational strategies on the probability of being admitted to an exam school



Next, we will look at the probability of being admitted to an exam school in the choice-experiment year (2011) and in the period preceding it (2008–2010), when the system of semi-central assignment to schools was in force (see Figure 2.2.2). The main conclusion is that the school-choice arrangement that forced families to choose a school rather decreased the effect of the parents' background characteristics on being admitted to exam schools. The analysis showed the positive and statistically-significant effect of a mother with a Bachelor's degree compared to a mother with basic education. We can also presume that the indirect influence of income and parents' education works through prep-schooling – middle-class parents have stronger motivation and more means for ensuring success. At the same time, we are unable to specify whether aptitude/exam-based school admission makes a certain type of parent (those whose near-by school is an exam-school) prep-school their children, or is prep-schooling really the door for the middle class into the selective schools.

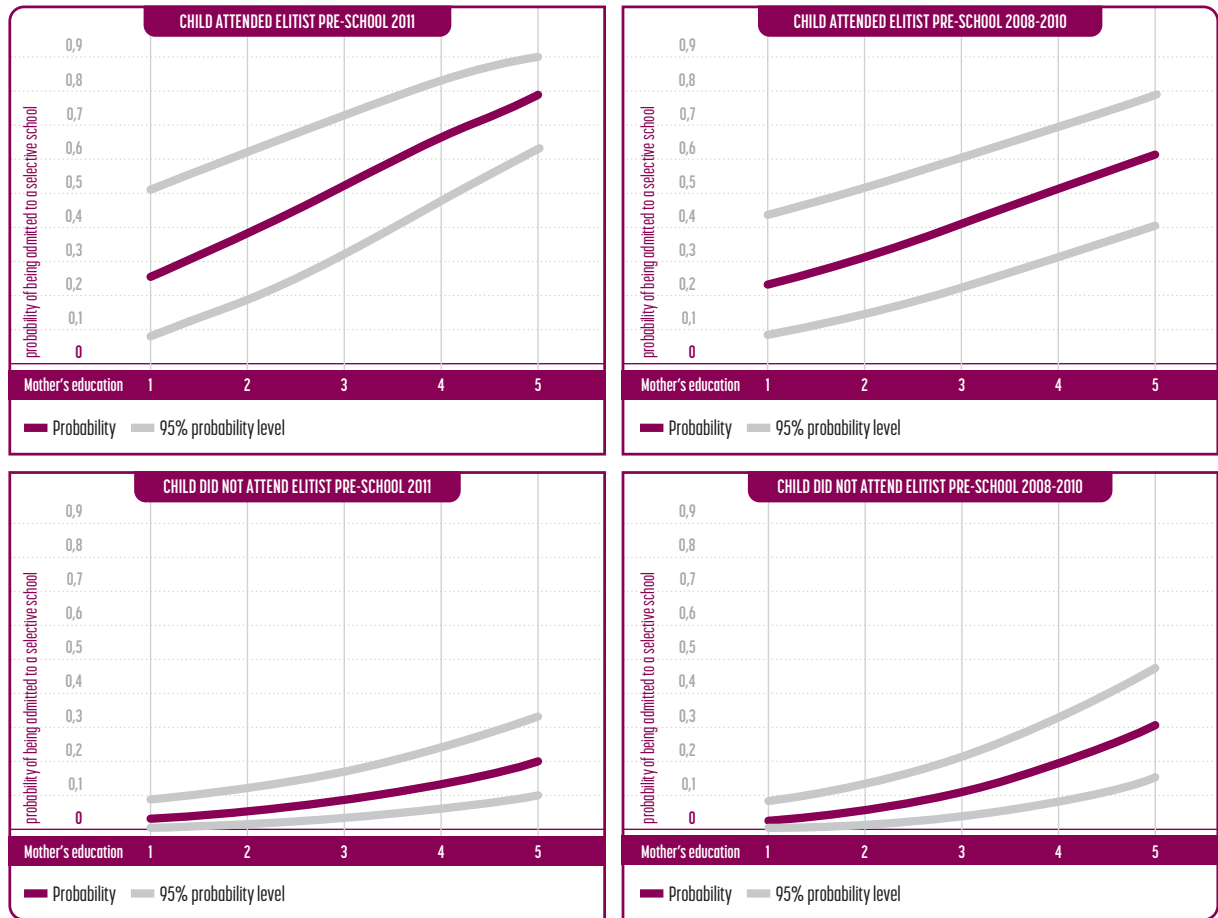
In Figure 2.2.3, we evaluate the effect of the mother's education on the probability of being admitted to the exam school in the case of a specific family profile. The profile is: middle-class family not living in the centre of town. We are interested in the size of the effect of the mother's education on the probability of attending an elite preschool (upper figures) as well as not attending (lower figures); in the semi-central appointment period of 2009–2010 (right panel) and the decentralised choice year 2011 (left panel). The result shows that now the effect of the mother's education is statistically significant. Comparing the right and the left panels, we see that the influence of the mother's education is greater throughout almost the entire left panel, i.e. in 2011, the mother's education plays an especially significant role if it is on the Bachelor's level, but not higher. At the same time, the influence of the mother's education in the case of children who are not prep-schooled does not differ significantly across the different periods, and is noticeable only in the case of a Bachelor's or a Master's degree.

NOTES: The right panel shows data for the years 2008–2010, the left panel shows data for 2011, the year of the experiment. Effect sizes reflect the probability of being admitted to an exam school (from zero to one).

We take a closer look at the effect of income, with the following base family profile: upper-middle class; mother has higher education; child has not attended a prep-school. Besides the effect of the period, we are also interested in the effect of income on the factor of living in the centre of town. It can be observed that the effect of income decreased in the experimental market-year. At the same time, somewhat surprisingly, the effect of living in the centre has remained very important – at all income levels, a child who lives in the centre is very likely to be admitted to an exam school.

We can conclude from this that on average, unregulated school choice (year 2011) is more favourable to semi-centralised admission based on its effect on educational equity (since choice diminished segregation in schools on the basis of the background characteristics of parents), than the nontransparent semi-central mechanism of 2008–2010, which was a combination of market principles (oversubscribed exam schools); catchment area-based admission and a few other regulations depending on the school-level regulations; and a multiplicity of rules that were manipulable and nontransparent for the parents. At the same time, surprisingly, the role of the mother in a child's admission to the exam schools grew in the year of the experiment in only some profiles - a mother with a Bachelor's degree and the "right" preparation strategy (prep-school) guaranteed success to a middle-class child. Thus the market does not necessarily decrease (nor increase) segregation in the case of all family profiles. Rather, the admission results of 2011 seem to indicate a perpetuation of the middle class in terms of parents with a higher education in the exam schools.

FIGURE 2.2.3 The probability of being admitted to an exam school based on mother's educational level (The upper figures show a child who has attended a prep-school, the lower show a child who has not)



Panel A: 2011

Panel B: 2008 - 2010

2.2.2 The developments of school choice policies in Sweden, Finland and the Netherlands

Although moving towards greater freedom of choice is a prevalent trend and our empirical analysis demonstrates that, from the point of view of perpetuating inequality, school choice is preferable to a random and/or hidden semi-choice. However the issue of social mobility and unequal access still remain relevant. Are there alternatives to residential assignment and free choice of schools? We are first and foremost interested in the experiences of Sweden and Finland and the lessons Estonia could possibly learn from them. Sweden is interesting, as it is one of the boldest reformers towards choice and diversification in Europe. The inclusion of Finland in the list of reforming countries may seem surprising at first, as there has been no reform towards choice in either of the countries. In the case of Finland, we can only talk about "hidden" choice practices through the "emphasised classes" phenomenon. In Finland as well as in Sweden, the assignment to

NOTES: The example shows a middle-class child who does not live in the centre of town (where there are 2 children in the family; 2 parents; average income 500 - 800 Euros per family member; a parent who reads cultural magazines; and goes to a cultural event with a child at least once a year). Education level categories: 1. Basic education 2. Secondary education 3. Applied higher education 4. Bachelor's degree 5. Master's degree or higher.

schools on the basis of either the catchment area or proximity to home was prevalent before the reforms of the 90s.

A significant turn toward a choice-based educational system was taken by the Social Democratic government of Sweden in 1988. In a couple of years, the right of school management was delegated to local authorities, the plan of universal school vouchers was introduced, and private schools were thus included among the possible choices. The universal school vouchers reform (prohibiting financing of private schools from tuition fees or other non-state-budget funds) brought along a huge wave in the creation of new private schools, their proportion having grown from 1% to 12% at the

present time (Böhlmark, Lindahl 2012). Whereas the first schools were mostly founded on the initiative of education enthusiasts, offering an opportunity for alternative pedagogies and working as non-profit organisations, later ones were rather the initiative of school managers, teachers and school corporations, and functioned as businesses (ibid.). Thus it is characteristic of the Swedish choice-reform agenda that parental freedom to choose is emphasised together with promoting a diverse educational system, and creating the prerequisites needed for its development. These moves were expected to increase competition between public and private schools and to increase the economic as well as pedagogical efficiency of the schools (Bunar 2010). Another aim was to get rid of the bureaucracy of the existing system and thus comply better with the desires and expectations of parents (Lundahl 2002; Arnesen, Lundahl 2006).

In Finland, also, reforms directed at decentralisation and autonomy have brought along greater selection and choice for parents in the last decades (Kalalahti et al. 2014). This has taken place, as in Estonia, within the public school system, where the reforms have abolished the former concept of school catchment areas, and the assignment of children to schools according to the proximity of their home to the school. As a concomitant of decentralisation, a phenomenon called "emphasised classes" has appeared, in which schools try to distinguish themselves from the others, not unlike the specialty-focused schools of our former Soviet system. This kind of distinguishing focus can start at various levels (from the first grade onwards) and admission to these schools is often based on tests. Research (Kalalahti et al. 2014; West, Ylönen 2010) shows that admission to these schools is based mostly of the ambition of the urban middle class, e.g. in Helsinki almost half of the 12–13-year-olds want to go to an emphasised class. (Seppänen 2003). This phenomenon has certain traits of choice policy – differentiating schools horizontally through the autonomy of schools and teachers. At the same time, increasing parental choice, one of the basic arguments for choice policy, has never been encouraged in Finland. External standardised exams and school rankings based on them are prohibited in Finland and, instead of these, internal sampling-based evaluations of schools are used. The main motivator behind the aspirations toward autonomy and diversity in the early 90s was not so much a belief in competition but rather in pedagogical freedom and the development of teachers (Sahlberg 2007).

We are primarily interested in the impact of choice policy on educational inequality, the possible side-effects stemming from it, and the prerequisites of success for such reforms.

The issues around Sweden's school choice have been studied quite thoroughly and there are those (e.g. Bunar 2010) who think that today there is sufficient empirical evidence to say that choice has brought about increased social and cultural segregation as well as the disappearance of cooperation between schools. The number of children with subpar results has increased, and there are problems of dropouts (ibid.). There are also those (Böhlmark, Lindahl 2012; 2007; Sandström, Bergström 2005; Lindbom 2010; Ahlin 2003; Böhlmark et al. 2006), who say that linking these problems with school choice

is arbitrary and that there is significant proof that introducing choice and competition has improved academic results in Sweden. Advocates of choice say that the positive impact is revealed not only in the improved results of private schools, but also in better results in regions where new schools have been established, i.e. the schools have had to make themselves attractive to parents (Lindbom 2010).

Finland is one of the top countries in the world in terms of basic education, at least according to international comparative surveys like PISA and TIMSS. These surveys say that Finland is doing fine, in terms of high average academic scores as well as in terms of the weak link between a pupil's background and academic results. It has been said half-jokingly that Finland has become a poster-state of the OECD, although it has not followed the policy recommendations of the OECD (Varjo et al. 2013). At the same time, we cannot say that reforms have not touched the educational environment of Finland. It has been claimed (e.g. Rinne et al. 2004) that the idea of competition caused by global trends in education is mostly the rhetoric of the economic and political elite of Finland, and that the majority of parents, in reality, tend to support the idea of educational equality, but there are still empirical studies that reflect the risk of inequality due to selectiveness in the Finnish educational environment. For example, Kalalahti et al. (2014), Seppänen (2003) and West and Ylönen (2010) show that a significant number of middle-class parents have accepted the opportunities of school choice. As the emphasised classes have a right to hold admission tests, and although regulations say that children living in the neighbourhood should be preferred, the reality of "cream skimming" has not been avoided.

2.2.3 Conclusions and policy recommendations

The main criticism of school choice policy, especially within public schools, is related to the risk of inequality that it entails. Some authors (Woessmann et al. 2009; Le Grand 2007; Betts, Loveless 2005; Hirsch 2002) say it is possible to have a school choice policy that fosters equal opportunity without giving up efficiency (outcome orientation). According to these authors, at least three important criteria have to be met for such a policy to work successfully: (1) horizontal diversity (2) minimal "cream skimming" and (3) support of parents to make informed choice (parental empowerment). We are interested in examining how the school-choice policies and practices in European choice cases meet these criteria and how Estonia's corresponding policy looks in this light.

First, the principles of competition and selection work only in the case of diverse school, curriculum and pedagogical practices, meaning that the competition should be real (Le Grand 2007). The educational policy of the OECD emphasises that money should follow the child – demand and number of admitted students increases school revenues, regardless of the school's ownership. Most European countries have followed these prescriptions, and private schools dependent on public funding are a prime example of this kind of educational

practice. The choice practices of Sweden and the Netherlands correspond to what has been recommended – regardless of the ownership of the school, a placement in the school is funded by a universal school voucher to which a balancing equality fund is added (favouring and supporting the admission of children from disadvantaged family backgrounds). In Sweden, asking for additional financial support (top-off voucher) is against the law (Böhlmark, Lindahl 2012). Unfortunately, the recommendations have also been interpreted differently, including in Estonia. In addition to the school's ability to secure official "per capita" funding from the state, the parents are "willing" to contribute to the education of their children in the form of donations or tuition fees. School choice literature (Musset 2012) often warns against such top-off funding systems. Equity granting choice policy must include equal funding or positive discrimination of schools which accept disadvantaged background children.

Another criterion is the need to limit the opportunities of education-providers to choose their students, to avoid "cream skimming". Controlled (central) choice has been suggested instead of autonomy of schools to design admission criteria (Cobb, Glass 2009). This would entail centrally-designed admission principles and partial quotas for neighbourhood children and/or disadvantaged families (low socio-economic background, single-parent homes, home language different from school language, etc). Also, as mentioned, schools can be helped by funding means – e.g. a larger "per capita" support for schools that have admitted students of low socio-economic background. In Sweden, central mechanisms are applied to the allocation of school placements. The case of Tallinn, where the selective-admission policies of exam schools are allowed within the public system and where schools have autonomy in carrying out aptitude tests, is unique in the Nordic context.

A third important criterion is empowerment of parents in making informed choices (Le Grand 2007). This means consulting in school choice issues as well as establishing support services (school buses, after-school activities, extra-curricular classes). While there is no doubt that in a diversified school system this kind of "cold information" is important, on the other hand this information can also simply end up as a league-table ranking of schools. The latter, however, tends to increase the segregating influence of school choice, as it drives schools to a results-orientation and parents to prefer schools that have a high ranking. In Estonia, for instance, exam schools are triumphing at the top of such tables. Parents are ready to make extra efforts geared to getting their children into exam schools, and prep-schooling has become a norm in certain parent groups, or even a duty, to ensure admission to a selective school.

In conclusion

To summarise, school choice has become a natural part of educational practices. There are countries where school choice is a centuries-old tradition (The Netherlands) as well as those where this has been a clear direction and preference of the educational establishment in only the last decades (Sweden). School choice has entered Finland and Estonia in a more hidden way, brought along by flexibilities in the regulations and by permitting the comparison of schools, as well as through pressure on parents to contribute to the education of their children. Additionally, as demonstrated by the experience of Tallinn, nontransparent semi-central assignment with some uncontrolled choice elements can intensify SES-based segregation between schools. To wrap up, both choice opponents and proponents have found empirical evidence to support their arguments. One of the stronger arguments against choice is to negatively characterise it as the productisation of education (see e.g. Ball 1998). A situation where schools have to compete for students forces the schools to behave like businesses, with emphasis being laid on the competencies of management and marketing. This has caused fear among teachers that the latter will start to undermine pedagogical excellence and expertise. While competition is not supportive, it is also not good for inter-school cooperation and partnership, which could otherwise be an excellent means for sharing good practices and supporting professional growth. A strong focus on efficiency, along with centralised performance indicators and external control mechanisms, may bring along a risk of uniformity, as the pressures of measuring and efficiency force an acceptance of a narrower, instrumental paradigm of education which does not favour horizontal diversity. At the same time, favouring choice without horizontal diversity remains empty. The literature referenced above, as well as the survey results from Tallinn, give reason to believe that the arrangement of school choice in Estonia has room for improvement in order to avoid "cream skimming", growth of inequality and focusing on results, which engender uniformity. In a uniform system, however, choice has no other content than focusing on results. ●

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EDUCATION

2.3

Estonia's Educational System as an Inclusive Context from the Viewpoint of Russian-speaking Youth

► JELENA HELEMÄE

2.3.1 An inclusive educational system as a prerequisite for a cohesive society

Ethnic diversity presents two important challenges to the cohesion of a society. If ethnic diversity finds expression in inequality, then the sense of justice and inclusion on the part of individuals as well as groups will be undermined. If basic values are congruent only to a limited extent, this will also impact the prevalent relationships in a society, decreasing the capacity to cooperate in the pursuit of common goals (see e.g. Reitz, Banerjee 2007). Both challenges are important and their resolution depends on various circumstances, including the efficiency of the educational system. The crucial tasks of an educational system are to impart knowledge and form values. In the course of fulfilling these objectives the education system also becomes both the guarantor of equality of opportunity (in societies where people's success is determined by their own contributions to the success of society) and also the creator of inequality (better education creates the preconditions for more effectively contributing to common goals, and as a result attaining a more favourable position in society and vice-versa). Should the outcomes of the educational system turn out to be ethnically biased in terms of either academic success (creating inequality) or the socialisation of active and critically-thinking citizens, this may have a strong negative effect on the cohesion of the society.

European research on second-generation immigrants (hereafter referred to as foreign-background youth) tend to take as a premise that the young people born in the country are radically different from their parents, as they have no migration experience. These youths are members of the society they live in from birth. Thus the necessity of finding a place

in society comes from their age (just like that of all their peers born in their country) rather than from the (foreign) origin of their parents.

Comparative studies have shown that Europe's educational systems differ greatly in their ways of supporting the integration of young people into society. There are differences in the educational institutional arrangements, teaching practices and the ways and levels of expected parental involvement. Crul et al. (2012) found that from the point of view of the educational attainment of foreign-background youths, an **inclusive context of educational integration** is the most favourable. In such a context, the success of young people (including their access to academic education) depends first and foremost on their abilities; the amount of parental resources is not a significant success factor. In such educational systems, school starts early (e.g. in kindergarten), and the choice between a general or a vocational education is taken relatively late in the process. This gives young people sufficient skills and knowledge (as well as time) for making independent educational choices. Borgna and Contini (2014) however have concluded that the educational achievement of foreign-background youths is largely dependent on the extent to which they are marginalised in the low-quality segments of education. It is in marginalising societies that a late start to schooling and an early channelling into educational tracks become problems. Marginalisation may be caused by segregation of schools, a high level of stratification (structural differentiation) or a low level of standardisation (common sets of requirements) in the educational system.

Estonia's educational system has features of both inclusive

and exclusive contexts. Educational equality (including that between ethnic groups) is fostered by the widespread participation of children in pre-school as well as a late (after basic education) division of the system into the academic versus vocational tracks. Factors hindering inclusion stem from the bottlenecks in the educational system (e.g. high competition in higher education) that make educational opportunities dependent on the financial resources of parents (Saar, Aimre 2014).

A significant challenge to the inclusiveness and cohesion of the society is the Soviet-era division of Estonia's educational system into different streams on the basis of the main language of instruction. Selection of students by schools (just like the selection of schools by parents and pupils) happens mostly within these language-of-instruction streams. Movements between them are quite unlikely. Studying in a non-mother tongue stream becomes possible mostly when the parents have sent the child into it early on. Given differences between language streams, after the attainment of basic education, students rarely have a realistic option to change direction. Thus, choice of language stream is dependent entirely on the parents and is in actuality at odds with the basic principles of inclusivity in the educational system. Indeed, studies have shown that the educational success of both Russian and Estonian youth is largely in the hands of their parents. In transitions from basic education to general secondary education, as well as from general secondary education to higher education, the occupational status and educational level of parents are important in the case of Estonians, and only the educational level of parents in the case of non-Estonians (Lindemann, Saar 2011). Partly, this difference between ethnic groups in terms of the impact of the parental resources on the educational success of their children can be explained by historical factors: the re-independence of the Republic of Estonia meant a lowering of the status of the present-day non-Estonian parents. This was not so much a question of individual failure, but rather a downward mobility of a whole group (defined by ethnic origin, work in manufacturing, etc.).

The Estonian educational system is rather highly standardised. However, the educational opportunities have been and are determined by language and depend also on, among other things, the level of stratification of the educational system, e.g. the proportions of actual school placements available for young people at different levels and in different types of educational institutions within each language-based stream of instruction (see Helemäe et al. 2000).

It has been found that in Estonia's educational system, the educational paths of young people are differentiated by ethnic background. After completion of basic school, which is the first important turning point in a person's educational path, non-Estonians are more likely than Estonians to continue on into a vocational school. Largely as a result of this, non-Estonians are less likely to attain higher education than their Estonian peers (see Lindemann, Saar 2012). This scenario differs from the inclusive-education model, where attainment of higher education is relatively likely also through a vocational school (not just through the general secondary school as in

Estonia). The influence of the local language environment also plays an important part (e.g. the contrasting linguistic environments of Tallinn, East-Viru county, and the rest of Estonia) and so do local educational opportunities and practices (see Hallik 2010).

Compared to Western Europe, the apparent inability of mothers and fathers to navigate the local educational system is a smaller risk factor for minority youths in Estonia when making education-related choices. The educational system of the newly independent Republic of Estonia is constantly being reformed, so native-Estonian parents may also not know all of its details. As there is a stream of education based on Russian-language instruction, the lack of proficiency in Estonian should not be an obstacle for non-Estonian parents in finding necessary information and in communication with school staff. It is true, however, that language-based segmentation of the educational system makes the acquisition of Estonian in a Russian school more dependent on the parents' resources, choices (whether to pick a Russian or an Estonian school) and support to children (regardless of which school the children are learning Estonian in). Research has shown that parents with higher education can guarantee a better knowledge of Estonian and a higher level of education for their children, even if they do not speak Estonian themselves (Lindemann, Saar 2012). Russian-speaking parents worry more about the progress of their children than Estonian parents and they are more likely to hire private tutors, etc. (see e.g. Sakk 2013).

2.3.2 Transition to Estonian-language instruction

The education policy of re-independent Estonia has been geared to a wider use of Estonian as the language of instruction in the Russian stream of education. Designing an inclusive environment should have meant starting the language-of-instruction reform on the foundational level of the system, i.e. from the kindergarten level, so that children (and their parents) would have had time to get accustomed to the system and be ready to make competent educational choices. This is the practice, for example, in the educational systems of the Nordic countries, recognised for their inclusive approaches (see e.g. Siiner, Vihalemm 2013). However, the transition to instruction in Estonian was introduced very late in the education process, at the level of higher education. The transition of Russian-language secondary schools to Estonian curricula was carried out significantly later, in the years 2007–2012. By that time, in higher education 88% of students were studying in Estonian. The mutual social integration of the language-based instruction streams into a unified educational system promoting common democratic values, however, was neglected.

The model for the transition to Estonian-based instruction, introduced in 2007, has been followed by all Russian-language schools (Metslang et al. 2013) and in 2014, it was

concluded that the transition of Russian-language secondary schools to Estonian-based instruction had been completed (Raport, 2014). The process was studied during the transition period (e.g. the University of Tartu research project *The Russian Child in Estonian General Education Schools, 2008–2011*; and the survey *Estonian-language instruction in Russian-language Secondary Schools: Awareness and Attitude of Non-Estonians, conducted by TNS EMOR in 2008 and in 2011*) as well as just after the transition period (e.g. the survey *Bilingual Education in Russian-language Schools by the Institute of Estonian Language and Culture of Tallinn University 2012–2013*; Raport 2014). Thus, we have moved from expressing expectations and defining the factors hindering change to interpreting the first experiences and evaluating the effectiveness of steps taken. The efficiency evaluations have mostly been focused on the acquisition of Estonian. Considerably less attention seems to be devoted to the declared purposes of the reform: "The aim of the transition to Estonian-language instruction in schools with Russian-language instruction is to guarantee equal opportunities for obtaining vocational or higher education for the pupils whose mother tongue is not Estonian, which will in turn increase the loyalty of the non-Estonian speaking population and the cohesion of the society." (*Development Plan for the General Educational System 2007–2013*; p 11).

The materials of the focus group discussions held in 2013 within the framework of the project Study of Social Groups in the Field of Integration (supported by the Integration and Migration Foundation – Our People) present an opportunity to understand the wider implications of the impacts of the reform. Group interviews with Russian-speaking secondary-school students were conducted in three cities representing the three language environments of Estonia: multicultural (Tallinn), Estonian (Tartu) and Russian (Narva). Group interviews with vocational school students were held in Tallinn and Jõhvi.

2.3.3 The Experience of Participation in the Reform and the Inequality of Educational Opportunities

It has been concluded from the data of the *Integration Monitoring Surveys (2008; 2011)* that unlike Estonians, Russian-speaking respondents are quite critical about the state of ethnic equality in educational opportunities (see e.g. Kallas et al. 2012). The perception of inequality in the education system on the part of most Russian-speaking respondents was especially prevalent with regard to the higher education level. Significantly, personal success had no impact on the assessments: the educational opportunities of different ethnic groups were seen as unequal by successful as well as less successful Russian-speaking respondents (Saar 2008).

The secondary-school students who participated in the Study of Social Groups in the Sphere of Integration were also quite pessimistic about the equality of opportunities for eth-

nic groups. In contrast to the officially declared purposes of the reform, they experienced the transition to Estonian-based instruction as an increasing inequality of opportunity and a decrease in their competitiveness. Inequality of opportunity in turn seems to be an important consideration for Russian-speaking youth when planning their future and connecting it to Estonia.

A characteristic train of thought used by the youths to express their opinions about the transition to instruction in Estonian was identified by the study. It is illustrated by the extract from the discussion among secondary-school students presented in Box 2.3.1. This logic is in line with the findings of the 2013 study reported by Metslang et al.

BOX 2.3.1

"... at first it was hard, but if you have no choice but to study in Estonian, you will. And I consider it a good thing for myself that subjects are taught to me in Estonian. It may be that my command (my understanding) of the subjects is affected, but my Estonian is much better now. But what if this was the main idea all along? My parents thought about it... That maybe this was done so that Russian pupils would not learn these subjects, but rather learn Estonian. So they would be less competitive compared to the Estonians. Yes, our Estonian is better, but test our knowledge of geography or history on the level of "excellence" - we're not able to answer, as these subjects are taught to us on a much more basic level..."

1. Estonian-based instruction helps to acquire Estonian. To what extent young people see this as a positive thing depends largely on their plans for the future, i.e. on whether they plan to obtain an education in Estonia and/or whether they plan to live in Estonia in the future.
2. Young people think that acquisition of the subjects themselves will probably be affected negatively, as the materials will be presented to them in a simplified and limited form because of their insufficient command of Estonian. In a competitive world, this automatically means a significant disadvantage. This was seen as one of the most negative consequences of the reform. A feeling of uncertainty about their own linguistic abilities as well as about the quality of their subject-matter knowledge dominated.

3. In a parallel language-stream of the same educational system, Estonians (so-called “competitors”) are acquiring knowledge “to a full extent” and in their mother tongue. There was a unanimous belief that secondary-school education acquired in one’s mother tongue is clearly of a higher quality than one acquired in a foreign language. Hence the conclusion about the ethnic inequality of educational opportunities. Thus, the participants feel that they belong to a marginalised segment of the educational system.
4. The youths stressed the fact that this situation, perceived as unfavourable and unequal, is not a result of their own choices – the obligation of learning in a language different from their mother tongue was imposed on them by the authorities in spite of the loud protests and the opinions of the students themselves. Youths expressed their opinion about the reform in its early stages in different ways - some more actively, some less. The perception of how much their opinion was taken into account, however, was similar overall (“Who listened to what we said?”). Related to this, pessimistic comments were given in the discussions about how impossible it is to make one’s opinions heard.
5. A perception of lack of choice: you have to obey the authorities if you want to acquire an upper-secondary education.
6. Loyalty was perceived as a loss of “voice” and related to a low level of trust towards the authorities in general.
7. Compared with evaluations of the situation and identification of its causes, there was a more pronounced difference of views in how to cope with the situation, i.e. “What can we do?”

2.3.4 The key question: To stay or not to stay in Estonia

For students of Russian-language schools their strategies for the future, as well as their motivation to learn Estonian, largely depend on the answer to their key question “Should I stay in Estonia?”. [Metslang et al. \(2013\)](#) have also reached the conclusion that the main motivator for young people to study Estonian is seeing their future as tied to Estonia. The motivation is low for those who wish to leave Estonia after finishing secondary school. It is the lowest for those who wish to go to study abroad and don’t want to return to Estonia.

Perception of the inequality of opportunities (“... it seems to me that Estonian-speakers have more to gain, from a future perspective, if they remain here, while Russian youth does not have those same opportunities as Estonian citizens have”) is not the only reason for leaving Estonia. Studying and working abroad is seen as a way out of a frustrating situation for Russian-speaking youth, where there is a “constant struggle between the two languages and society is being permanently divided into Estonian-speakers and Russian-speakers”). It is

also seen from the interviews that the answer to their question “Should I stay in Estonia?” is largely determined by a perception of being denied agency, i.e. a feeling of “we cannot change anything here”.

At the same time, the rather wide-spread disposition to leave Estonia is somewhat rhetorical by nature. There were also youths who distinguished between the dominant attitude versus real opportunities and rational choices. These young people are more realistic and considerably more uncertain about their competitiveness abroad - the prospects of success over there may turn out to be a myth. An affirmative answer to this troublesome question for young people might not be brought about, in the end, by positive arguments in favour of Estonia. Staying in Estonia was also presented as a forced choice, occasioned largely by the lower level of knowledge in important subjects caused by the transition to studying in Estonian, also by a poor proficiency in English (“We study it as a third language, while Estonians, because they are instructed in their mother tongue, can learn English more thoroughly - as a second language”).

The answer to “Should I stay in Estonia?” is also related to the resources of the parents, their possibilities for supporting their children in Estonia or abroad, as well as the ambitions they have created in their children. The research of the sociologists at the University of Tartu also shows that children of parents with a higher education are the most critical towards the educational reforms ([Kello et al. 2011](#))

2.3.5 Connection with Estonia

The sense of belonging (perceiving Estonia as home) varies by region (i.e. depending on the ethnic structure of the environment - on whether the focus group interview was conducted in the multiethnic environment of Tallinn, in predominantly Russian-speaking Narva or in Tartu, where Estonians dominate). In all three environments, there were young people in the group interviews who saw Estonia (as a whole) as their home. However, the way that the self-perception of young people connected to their ethnic-cultural background varied by region. There were youths whose sense of home(land) turned out to be localised by their ethnic-cultural self-perception (e.g. in Tallinn: “In Estonia, I feel at home in the Russian-speaking environment”). In East-Virumaa also the regional identity was used as a specification of the country-level identity (it is this part of Estonia that is seen as home). There were also youths who saw the state and the ethnic-cultural self-perception as relatively independent sources for identity (“Russia as a country ... I do not see as home or a second homeland at all. But Russian culture ... I accept as my own”).

There were youths among the participants for whom the concept of “Homeland” was very narrowly defined: for some, it meant specifically home, for some mostly or even only the family. Views also differed on whether Estonian citizenship connects a person with Estonia. On the one hand, youths agreed that citizenship contributes to the sense of belonging.

The arguments for this, however were very instrumental (a discussion on where it is easier to travel carrying which passport). On the other hand however, the idea was expressed that even Estonian citizenship will not guarantee the development of a feeling of belonging to the Estonian state for Russian-speaking youths, because there is ethnic-linguistic divisions in the society. Knowledge of Estonian and the attitude towards learning it are also not unambiguously related to seeing Estonia as one's homeland. For example, there were youths with different levels of knowledge of Estonian among the secondary-school students of Tallinn who considered Estonia their homeland. And vice versa - plans for leaving Estonia are not necessarily directly related to a missing feeling of home(land) or absence of values shared with Estonians. The reasons are often much more rational (and often related to the opportunities limited because of ethnic background).

2.3.6 Becoming a citizen

The process of educational reform turned out to be an experience that to a great extent influenced the (under)development of meaningful citizenship identification and attitudes towards active citizenship among non-Estonian youth. There is a perception that the viewpoint of Russian-speaking youth is not heard on a political level. Political activity and expressing one's views are seen as futile. The patterns of social participation and contacts with Estonians are more varied. There are those among secondary-school students that participate quite actively in society, in activities such as Scouting, voluntary youth organisations, etc. These students also tend to have some command of Estonian (on a level of basic communication). They communicate with Estonian peers (especially in Tallinn and Tartu). On a communicative level, such young people do not perceive exclusion (see Box 2.3.2).

BOX 2.3.2

"There is no problem in communication between Estonians and Russians. The problem is between the Russian population and the Government, as there is strong oppression against us. Like the fact that upper-secondary school is now Estonianised."

On the other hand, there are also those with a pessimistic view of their own situation, saying that they feel physically and mentally constrained and cannot realise their potential in society. There is an opinion that the inclusion of Russian-speaking students in municipal or state level activities has not been very successful, whereas the need to participate in activities is there. Less active persons cite the language barrier as an important reason why Russian and Estonian youths don't have sufficient contact in common events. Some secondary school pupils are shy (feel uncomfortable and even afraid) to converse with their Estonian peers, partly also because of the attitude in society that you can only use the official state language if you can do it correctly and with almost no accent (see also Siiner, Vihalemm 2013). The ethnic barriers hindering cooperation cannot be overcome simply by learning Estonian. This is also attested to by the fact that the lack of Estonian friends was also mentioned in the Tartu conversation group.

The process of educational reform actually set limitations on social cohesion and cooperation towards common goals (i.e. in becoming a citizen) also because its focus was on language, on Estonianising the Russian-speaking secondary school, whereas the social integration of language-based streams of the educational system was neglected. It became apparent from the group interviews that Russian-speaking youths feel a need for constant language practice, and they would like it to take place through communication with their Estonian peers – on individual as well as collective levels (support of contacts by the state and NGOs, i.e. organising joint activities, work projects, festivals, etc.). The most natural way of practicing speech skills, however, would be to study together with students who speak Estonian as their mother tongue. The idea expressed in the group interviews that this young generation of Russians and Estonians has more in common than older generation Russians and Estonians speaks of potential for overcoming the ethnic barriers.

2.3.7 Another lost generation? Or, what can we learn to help the transition of vocational schools into Estonian-language instruction?

In the conclusions to "Integration Monitoring 2011", the authors refer to two generations of non-Estonians whose expectations and ambitions have not been met by the integration policy so far. One of these is forming from the youths who have graduated from school in the Republic of Estonia, have acquired the language as well as the citizenship, but meet the "glass ceiling" phenomenon and an "excluding and untrusting attitude in the labour market, in public institutions, in political parlance and in Estonian media" (Eesti ühiskonna integratsiooni monitoring 2011: 254). Their parents, who started adult life in the 1980s, are also seen by the authors as a disappointed generation of non-Estonians, whose opportunities have been significantly curbed by the Aliens Act, as well as language and citizenship policies, and whose limited

success was in contrast to the so-called "winner generation" of their Estonian peers. The latest studies indicate that the youths presently learning in Russian-speaking secondary schools, personally experiencing the problems caused by the lack of a social contract and the contradictory effects of the transition to Estonian as the language of instruction, are also unlikely to break out of this vicious cycle of disappointment. They do not think it is possible in Estonia. The contrast between the officially declared aim of transition to instruction in Estonian (equalising opportunities) on the one hand and personal experience – the uncertainty about one's own competitiveness as an outcome of participation in the reform on the other – makes these youths feel unequal as well as mistrustful toward the implementers of the reforms. According to Integration Monitoring Surveys, these youths are characterised by their mistrust towards the state of Estonia and its institutions. After all, the youths feel what **Siiner and Vihalemm (2013)** called the punishment for work left undone by the Estonian state on the pre-school and basic-school level.

At the same time, the atmosphere of all the discussions pointed to a wish by the Russian youth to be accepted as an integral part of Estonian society, whose voice is heard and taken into account. The "Study of Social Groups in the Sphere of Integration" indicated clearly that the potential of this generation to contribute to joint effort towards the improvement of Estonian society is underused. Society has not been able to meet the challenge presented by its ethnic diversity. There is quite a high risk that these youths will turn out to be a "lost" generation either in the direct sense of the word – through emigrating from Estonia –, or indirectly, through giving up active participation in cooperative efforts for the development of Estonia. The possible loss to Estonian society is further increased by the fact that in the last decade, the likelihood of leaving Estonia has grown among Russians with higher education (**Anniste et al. 2012**).

This makes it even more important to learn from the lessons of the reform when implementing the transition to instruction in Estonian in secondary vocational education. The most fundamental danger to the cohesion of society would probably be the creation of yet another disappointed generation – this time, those youngsters who obtain their secondary education in the 2020s and for whom Estonian is not their mother-tongue. The most essential precondition for precluding this risk is the achievement of a social contract regarding the purpose and management of the transition to Estonian language-based instruction. When preparing measures for this transition in vocational schools, it must be taken into account that already now there are signs of polarisation of non-Estonian youths on the basis of knowledge of Estonian. As a teacher of Estonian in the group interview conducted within the "Equal Treatment" project of MISA remarked, "the gap between weak and strong students is deepening". The selectivity of the educational system contributes to that situation. After basic school, those that are stronger, better-equipped with parental resources, more confident and also more fluent in Estonian will go to general secondary school (Gymnasium). The youths with weaker marks, who are less proficient in Estonian,

whose parents had no chances to support the studies of their children and whose educational success depended on the effectiveness (and inclusiveness) of the educational system will continue in vocational secondary schools. Because in the latter schools students should acquire a vocation, in addition to the academic subjects, the level of Estonian taught in a vocational school tends to be lower than that of a general secondary school. The students graduating from a vocational school will be considerably less proficient in the state language compared to students from general secondary schools. This in turn will further diminish the prospects for continuing their education, because in the Estonian educational system, the transition to instruction in Estonian was implemented top-down (from higher levels of education to the lower ones). Thus the gap between the weak and strong non-Estonian students in Estonian-language studies tends to coincide with the gap in studies of other subjects, and also with the unequal opportunities of parents to support the studies of their children. The deepening of these trends might bring along a polarisation of non-Estonian youth. In other words, it is much harder for those youths who have gone to a vocational school to adapt to the "language-transitional" environment.

It could also be seen in the interviews of the "Study of Social Groups in the Sphere of Integration" that the transition of Russian secondary schools to Estonian-language instruction has caused significant uncertainty among the students of vocational schools. In fact, some of the students went to the vocational school precisely because he or she was afraid that he/she would not be able to study in Estonian (in Gymnasium). Therefore, a non-critical analysis of the transition experience in secondary schools or leaving this experience unattended may result in an increase in the already high dropout rate of vocational school students. This would mean deepening of social inequality.

An important prerequisite for the success of educational reforms and also social cohesion in a wider sense, is, without doubt, the teaching of the Estonian language at the pre-school level, as well as increasing the efficiency of learning Estonian in basic school, as stipulated in the Lifelong Learning Strategy. The actual situation of the schools, including the socio-economic and cultural background of the students, should also be considered, as this is a significant factor influencing educational achievement (see K. Lindemann's section in the current report; see also **Klaas-Lang et al. 2014** on Estonian language in basic schools). The process of learning a language should also be intertwined with acquiring other knowledge and skills needed for being a part of the society (**Siiner, Vihalemm 2013**). An especially important prerequisite, however, is tighter cooperation and integration of the two language-based streams of the educational system, as this not only improves fluency in Estonian, but also fosters communication and joint activities. The ability to cooperate across ethnic groups is an important factor in the "super-diverse" (a term coined by **Steven Vertovec 2008**) world, where the largest cities no longer have a dominant ethnic group, where all groups need to mutually integrate and everyone must take into consideration and adapt to everyone else. (**see Crul et al. 2014**). ●

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EDUCATION

2.4

Participation in Adult Education: Cumulateness and the Importance of Demand

► ELLU SAAR

Introduction

The idea of lifelong learning, raised by UNESCO in the early 1970s, has today gained the attention of academic and political circles as well as international organisations. The idea that studying is a duty and privilege of young people only does not comply with the demands of today's fast-changing world. The European Union has taken an active role in developing adult education, and increased participation in lifelong learning has become an important priority. The sustainable development strategy "Sustainable Estonia 21" also stresses the importance of lifelong learning in increasing cohesion in society. At the same time, several studies have shown that among the participants in lifelong learning, there is a disproportionately high number of those who already have a high level of education and whose skills are also better than average (OECD 2003). Therefore it is important to understand why some groups are participating in lifelong learning more actively than others, and what can be done to equalise the opportunities for different social groups.

Adult education, as well as lifelong learning in a broader sense, is related to various processes and institutions in society. They are influenced by the educational system, the labour market and its structure, social and educational policies and the agendas of various interest groups. Therefore, adult education should be seen in a wider context, if we are to understand its impact on participation in lifelong learning. This section will compare Estonia in terms of the average indicators of OECD countries, as well as Finland.

The PIAAC (*Programme for the International Assessment of Adult*

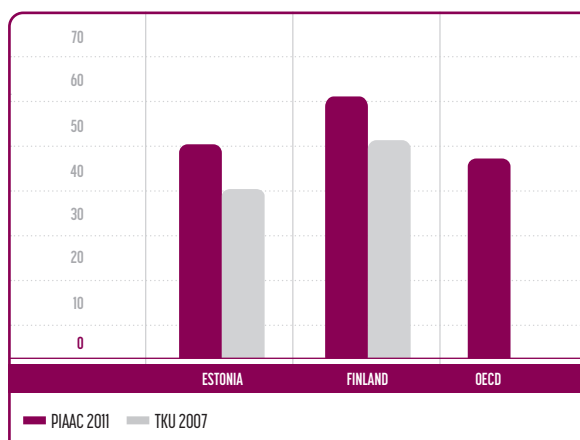
Competencies) measured, in addition to education level, three kinds of skills (literacy, numeracy and problem-solving in a technology-rich environment), and the use of various skills at work. This will also give us a chance to analyse to what degree participation in lifelong learning is influenced by so-called "supply-side" characteristics, i.e. the skills and educational level of workers, and how important are the characteristics of the so-called "demand-side" (mainly the skills-intensity of the work).

In European educational terminology, learning is often divided into formal, non-formal and informal learning. In this section, we focus on an analysis of participation in non-formal learning. Non-formal learning is voluntary, objective-oriented learning with a specific teaching agency; it is characterised by flexibility and a student-centred approach.

2.4.1 Differences between groups in participation in non-formal learning

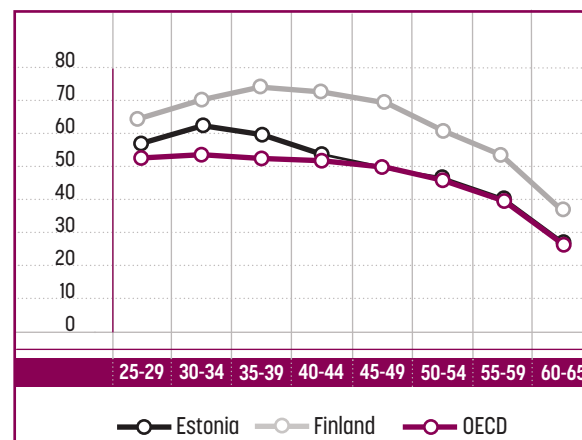
Approximately half of the adults in Estonia have participated in non-formal learning (see Figure 2.4.1). Compared to the data from the 2007 Adult Education Survey, the number of participants in Estonia has risen by about 10 percentage points. It is noteworthy that those who have already participated in one training have a higher likelihood of participating in further trainings as well. Thus, the same people tend to

FIGURE 2.4.1 Participation in non-formal learning in 2007 and 2011, 25-65-year-olds¹, by %



Source: PIAAC 2012.

FIGURE 2.4.2 Participation in non-formal learning across age groups, by %



Source: PIAAC 2012.

¹ For the Adult Education Survey 2007, the age group is 25-64.

receive training which indicates that the so-called Matthew effect (the effect of cumulative advantage) is working. Consequently, the aim should be to bring individuals to trainings that have not participated before.

As the percentage of people who feel that they need training in order to cope with their present work tasks is significantly higher in Estonia than the average in the OECD countries that participated in the PIAAC, there is a discrepancy between training needs and actual participation in training. Of those who think that they need training to be able to perform their current work tasks better, 68% have participated in training in the last year. Thus, almost a third of those who consider training necessary have not participated in training during the year prior to answering the questionnaire.

There is a trend observed in Estonia that the social-demographic groups who would need training most in order to catch up with the others in their skills, are the ones that participate least in training. Participation in non-formal learning is significantly influenced in Estonia by age, native language (Russian-speakers participate significantly less), education level, employment status, occupational group (the difference between the participation levels of "blue-collars" and "white-collars" is significantly larger than in Finland for example), sector of the economy (people working in education, research and health sectors tend to participate more) and to some extent also by the size of the company.

Whereas in Finland, the most active participants tend to be in their thirties or forties and the decrease starts in the 50-54 age group (this is also the pattern of the OECD average), in Estonia the decrease starts a bit earlier, already at the age of 45-49 (see Figure 2.4.2). There are large differences in the participation levels in non-formal learning of the age group

40-49 between Estonia and Finland. Comparison of data from these two countries shows that in Estonia, the participation of 40-49-year-olds is much more influenced by education level than in Finland: while in Finland those with higher education are 1.8 times more likely to participate in non-formal learning than those with low education level, the difference between these two educational groups is 2.5-fold in Estonia. Thus it is the people with low education level that are left out, and their participation should be encouraged. As it is the people with low education level in Estonia who see training as pointless, perhaps more thought should be given to the contents and objectives of lifelong learning, to make learning more attractive for this group. Comparison of the members of this age group who have not participated in non-formal learning in Estonia and Finland also shows that the cost of trainings is a much more significant factor behind non-participation for Estonians.

There are significant differences in participation in non-formal learning on the basis of the language spoken at home: the percentage of participation is much higher among Estonian-speakers compared to Russian-speakers. Comparing the skills-intensity of the jobs of Estonian-speakers and Russian-speakers, what stands out is that a half of the Estonian-speakers and 32% of Russian-speakers work in skills-intensive occupational positions. In fact, the Russian-speakers work more often in blue-collar positions of medium skills-intensity than Estonian-speakers do (37% and 25% respectively). Further analysis shows that the skills-intensity of the work position is a significant factor influencing participation in non-formal learning, and that Russian-speakers have cited cost of training as a reason for not participating significantly more often. Meanwhile, there are no differences between the

two ethnic groups in perception of the importance of training.

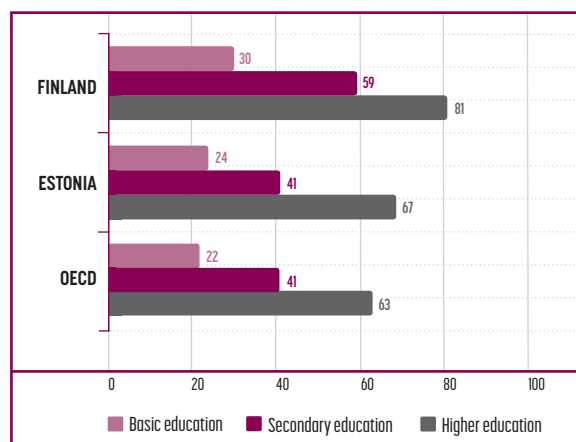
Regionally, people of Northern Estonia tend to participate more in non-formal learning (more than half of the 25–65-year-old adults participate). The degree of participation in non-formal learning is slightly lower in Southern and Central Estonia, and participation is lowest in North-Eastern Estonia. Again, this difference is probably partly due to the structure of available employment: while skills-intensive work positions tend to dominate in Northern Estonia, blue-collar jobs of medium skills-intensity are more common in North-Eastern and Central Estonia for example. The percentage of low-skills-intensity work positions also tends to be slightly higher in these regions than elsewhere.

The higher the acquired education level, the higher the participation in learning (see Figure 2.4.3). The differences between education levels are similar between Estonia and Finland, and on the same level as the OECD average². However, what stands out is that in Estonia, people with secondary education participate in non-formal learning much less than in Finland, for example. At the same time, there are no differences in Estonia in the participation level of those that have obtained a general secondary education and those that have a vocational secondary education: the proportion of each in jobs of varying skill-intensity is quite similar.

In OECD countries, the employed are more active participants in learning, followed by the unemployed and the inactive (see Figure 2.4.4). In the case of the employed, differences are not very large between countries. Finland can be brought out as an exception, as the participation level is higher there than in other countries. In the case of the unemployed, participation in non-formal learning is higher in Finland than in Estonia or the OECD average: while about one-third of the unemployed participate in non-formal learning in Estonia and the OECD countries in general, it is 46% in Finland. Comparison of the data of the 2007 Adult Education Survey and PIAAC shows that the participation of the unemployed in non-formal learning in Estonia has risen significantly in the last four years, but we still haven't reached the corresponding numbers of Finland. Compared to Finland, a significantly larger number of unemployed people have cited the cost of training as a reason for not participating (in Estonia it is 31%, while only 14% in Finland). This may be related to the social welfare system and the mitigation of various social risks. Among the inactive, the percentage of participation in non-formal learning is the highest in Finland (about one-fifth participate), which is higher than the OECD average. In Estonia, the inactive participate much less. Earlier results have also demonstrated that in Estonia, the differences between the participation levels of different groups in non-formal learning are relatively large (see also Roosmaa, Saar 2010). For the inactive, cost of training is a significant reason for not participating, especially compared to Finland.

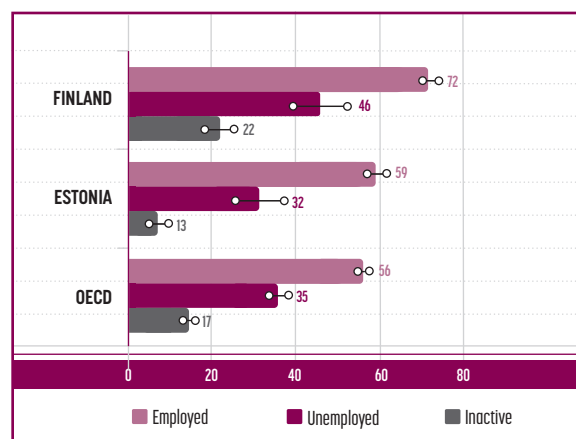
The PIAAC study measured several skills: literacy, numeracy and problem-solving in a technology-rich environment. Literacy was defined in the PIAAC study as the ability to understand, evaluate, use and engage with written texts to par-

FIGURE 2.4.3 Participation in non-formal learning across levels of education, age group 25-65, by %



Source: PIAAC 2012.

FIGURE 2.4.4 Participation in non-formal learning according to employment status, age group 25-65, by %



Source: PIAAC 2012.

ticipate in society, to achieve one's goals, and to develop one's knowledge and potential. Numeracy was defined as the ability to access, use, interpret and communicate mathematical information and ideas in order to engage in and manage the mathematical demands of a range of situations in adult life. Problem solving in technology-rich environments was defined as the ability to use digital technology, communication tools and networks to acquire and evaluate information, communicate with others and perform practical tasks (Halapuu, Valk 2013). PIAAC also looked at how much these different skills are used in the workplace.

² The comparison takes as its base the relative difference in the participation percentages of adults with basic and higher education.

In the case of literacy³ and problem-solving in technology-rich environments, it can be said that as a rule, the higher the skills, the higher the participation level in learning. The main difference between Estonia and Finland is that in Estonia, adults with medium level skills participate in non-formal learning less than the corresponding group in Finland. There are no differences between the participation levels of groups of high- or low-skill levels. The skill of problem-solving in technology-rich environments differentiates participation in non-formal learning much less than literacy, both in Estonia and the OECD countries. In Estonia, the only ones who stand out are those who cannot solve problems on a computer, and the adults with the lowest problem-solving skills, who are less likely to participate in non-formal learning.

2.4.2 The impact of workplace and position

In the OECD countries, on average, professionals are most likely to participate in non-formal learning, followed by managers and associate professionals. Participation in learning is a bit less frequent among clerks⁴, with that of service and sales employees, skilled workers and operators being even less. The participation level is lowest among agricultural and unskilled workers (see Table 2.4.1). In general, the pattern is the same in Estonia, although the differences between the groups are not so distinct here. In Estonia, there is a relatively large difference between the participation levels of white-collar and blue-collar occupations. When comparing Estonia with Finland, the significant difference in participation levels of blue-collar workers stands out. Compared to Finland, a much larger number of Estonian blue-collar workers cited the cost of training as a reason for not participating, and the number of those whose training was paid for by the employer is significantly lower. At the same time, however, more than a third of the blue-collar workers of Estonia would need additional training to perform their work tasks better (in Finland, the percentage is half of that). Thus the blue-collar workers of Estonia feel a need for training, but they don't take part in trainings because of the costs and probably also a lower level of financial support by the employers.

Participation is higher among those who work in the public sector. The differences between the participation levels of different sectors, are the highest in Estonia. One of the reasons for this is probably the fact that in the case of certain groups (e.g. teachers and officials), participation is state-supported (see also Saar et al. 2013). As in the private sector, financial support for training activities is somewhat lower in Estonia than, for example, in Finland; this can be one of the reasons for the big difference between sectors.

People working in the fields of education and research, health, business, and other service areas are most likely to participate, while those working in agriculture and industry are the least likely. Comparing Estonia and Finland, remarkable differences can be noticed between participation levels in non-

formal education by people working in the manufacturing and business services. In the case of the people working in the manufacturing, one of the reasons probably is that the level of skills required by these jobs is much higher in Finland than it is in Estonia. On the other hand, availability of training is also a reason: in Estonia, significantly lower financial support by employers to participation in trainings, as well as the cost of trainings, are important barriers for participation. In business services, the difference is not so much in the required level of skills, but rather again in the availability of trainings (i.e. lower financial support by employers and the cost of training courses are a significant barrier in Estonia). At the same time, people employed in business services as well as in manufacturing in Estonia feel a much greater need for additional training than their colleagues in Finland.

Participation in learning also depends on the size of the company: the general pattern is that people who work in larger companies tend to participate more in non-formal learning. Finland and Estonia differ from this pattern in that in the case of companies of more than 50 employees, participation levels stop growing with company size. In Estonia, the cost of training is an especially significant factor hindering participation for small companies. This is no doubt one of the reasons why participation in non-formal learning is lower in smaller companies. A very large proportion of the companies of Estonia have less than 10 employees.

2.4.3 Factors influencing participation in learning

Figure 2.4.5 shows the pattern of odds ratios, which affords an opportunity to compare the likelihood of participation in learning for two groups. The analysis, comprising all participants in the survey, shows that participation is significantly influenced by gender, age group, parental status, the age of the youngest child, and education level, as well as the level of literacy. Men are less likely to participate in non-formal learning than women. However, the impact of gender is rather indirect: men participate less in non-formal learning because they work in sectors and in positions where participation is smaller. Differences can also be seen between age groups: compared to 35–44-year-olds, younger people (aged 25–34) are a bit more likely to participate in non-formal learning, and older people (aged 45–65) a bit less likely. The region also plays a significant role: inhabitants of Central and Southern Estonia participate a bit less in non-formal learning. Compared to

³ Numeracy was also analysed, but as the results were similar to those of literacy, they are not displayed.

⁴ When comparing job groups, the ISCO job classification is used. By clerks, all performers of routine work tasks in office are meant, not public officials.

TABLE 2.4.1 Participation in non-formal learning across job groups, by %

	Executives	Professionals	Associate professionals	Clerks	Service and sales employees	Agricultural skilled workers	Skilled workers and operators	Unskilled workers
ESTONIA	70	82	71	59	60	38	37	31
FINLAND	84	87	82	72	67	47	57	55
OECD	66	75	68	56	49	36	42	32

those whose home language is Estonian, those whose home language is Russian are less likely to participate in non-formal learning, but the influence of the language spoken at home is also rather indirect, i.e. the lower participation level of Russian-speakers is caused by their work-place and position.

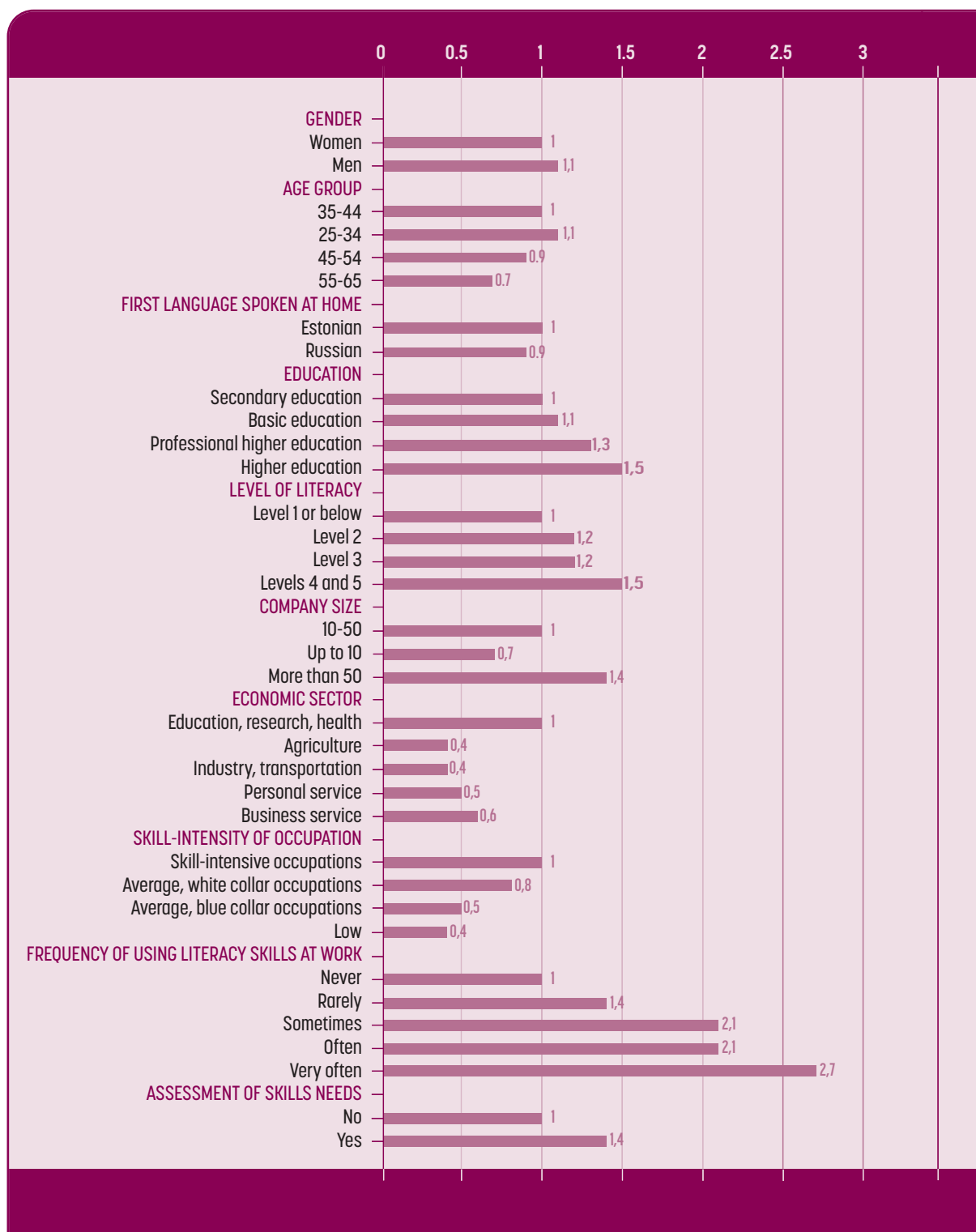
Education level has a significant effect on the likelihood of participation in non-formal learning: the likelihood is highest for people with higher education and lowest for those who have only basic education. The impact of education level is more significant than that of literacy. Therefore, opportunities to participate in trainings are more related to educational level than to acquired skills. The “queue model” described by [Thurow \(1975\)](#) seems to apply for non-formal learning: an educational diploma is an important factor for the employer in selecting who will be offered training opportunities. Analysis of the data from PIAAC has shown that this rule also applies to employment and salary, i.e. employers value acquired education level more highly than skills ([Halapuu, Valk 2013](#)). At the same time, a person's actual level of skill is necessarily directly related to his/her educational level: firstly, it depends on the quality of the education, and secondly, a person can learn new skills in life, thus improving their skills level, while skills obtained earlier can also be forgotten.

Variables describing the employer and the workplace also affect participation in non-formal learning significantly. Compared to medium-size enterprises (10–50 employees), the employees of small enterprises are less likely to participate in non-formal learning, and those of companies with more than

50 employees are more likely to participate. Participation in learning also differs across economic sectors people working in agriculture, industry and transportation, in business or other services, are half as likely to take additional training than those working in education, research or health. Participation in non-formal learning is also dependent on the skills-intensity of a person's job. Depending on a person's subjective evaluation of the level of literacy required at his/her job, there are also differences in the likelihood of participation in non-formal learning: the more it is needed, the more likely the participation in learning; and in job positions where this need is high, the likelihood of participating in non-formal learning is several times higher than in the case of jobs requiring a low level of literacy. It must also be kept in mind that skills-intensity is not the same as a high or low level of usage of skills. They obviously coincide to a large extent, but by definition, skills-intensity is determined on the basis of the main categories of the ISCO, while the frequency of usage of skills is determined according to a respondent's subjective report.

Opportunities for participating in learning are higher for people whose level of education and/or skills is high. Thus, a cumulative effect can be seen in participation in adult education, increasing rather than lessening the inequality of participation - those who already have good skills, a higher level of education and a higher job position are more likely to participate.

FIGURE 2.4.5 Comparison of the probability of participation of different groups in non-formal learning, age group 25-65, odds ratios.



Source: PIAAC 2012.

NOTE: An odds ratio is the relation of frequencies of occurrence for the two groups compared. It presents an opportunity to compare the probabilities of the participation of two groups. An odds ratio below 1 means that the chances of the given group participating in learning are smaller than those of the reference group. A value over 1 indicates a better chance of participation. The probability of participation for all the groups shown in the Figure differs from that of the reference group. The reference group has an odds ratio of 1.

Conclusions

The most important conclusion to be drawn from this analysis is the fact that in Estonia, the person's job type and the characteristics of his/her work position influence the participation of the person in lifelong learning more significantly than the characteristics of the person (including his/her education and skills level). Thus, the demand side plays a more important role in the participation in learning, and the new skills and/or higher level of education acquired in the learning process have no independent value without practical application. Although skills are important, their value, as a factor guaranteeing participation in learning, depends on whether these skills are needed in the labour market. This result is consistent with an earlier conclusion (Desjardins, Rubenson 2011) that the contents and character of a person's job are much more important factors influencing participation in learning than the employee's skills and education level. As demonstrated by an initial analysis of the data of the PIAAC study (Halapuu, Valk 2013), the level of skills used at work is lower in Estonia than the international average. In Estonia, people have higher skills than the labour market needs in practice. Therefore, an increase in a person's level of skills does not necessarily result in his/her more active participation in adult education (as stipulated, for example, in human capital theory and presumed by a number of policy documents and corresponding programs). If there is no real demand for skills in the labour market, participation in adult education is also low. If only the supply side (a person's skills and education) is con-

sidered, structural factors (skills-intensity of jobs) are left out, while these play a more significant part in participation in learning. If there are not enough skills-intensive jobs, employers see no need to provide learning and employees see no need to acquire additional skills. A program of increasing the skills and knowledge of people whose skills level is low should definitely be related to programs focusing on job innovation (work culture, work organisation etc.).

This result corroborates the conclusions drawn earlier in other countries from analyses of the results of programs focused on increasing skills levels: increasing the skills level of a person does not necessarily result in better opportunities for the person in the labour market if those skills are not needed and the economy tends to be oriented towards a workforce with low skills levels and low salaries (see Payne 2007). A polarised labour market, the domination of low-paying and low-skills-level jobs, underuse of employee skills by employers and the employers' desire to delegate all responsibility for preparing the labour force to the state and the people themselves, mean that such programs focusing on increasing employees' skills will remain a one-time effort and will not bring long-term change. An integrative approach is needed that would not see preparation of workers as separate from the whole of economic and labour market policy. This critique is consistent with the concept of the varieties of capitalism (see Hall, Soskice 2001), which stresses the interrelatedness of institutions and policies. ●

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MIGRATION

2.5

Migration of Labour in Estonia

► ANU TÕNURIST

Introduction

The geographic mobility of Estonia's workforce is growing every year, within-country as well as internationally. Work-related mobility results in less home-relocation, and is increasingly related to travelling long and time-consuming distances instead (Landesman, Seward 2013). Today, work-related commuting is so widespread, in fact, that more than one-third of all employed people in Estonia work in a different municipality than the one they live in, or commute to work to another country. Inside Estonia commuting usually means travelling from rural areas to work in cities. The deficit of jobs in rural areas increases the dependency of workers living in the country on the labour markets of cities (Partridge et al. 2010). The suburbanisation process that started in the 1990s is bringing everyday work-related commuting into the lives of an increasing number of people.

Work-related commuting is an important topic on the level of the individual as well as society, as it is, on the one hand, a factor influencing the subjective well-being of persons, and on the other hand, an input for state-level plans and strategies to deal with the preferences of people regarding their choices of residence, workplace and other activity spaces. Therefore it is important to look at the changes that have taken place in commuting patterns – asking what are the central cities and labour market areas in Estonia today, and what are the social-demographic characteristics of people who commute between a workplace and home.

The following analysis of labour migration is mostly based on the data of the population and housing census of 2011, but we will also compare data with the results of the previous census that took place in 2000. In the context of this article commuting means going to work in one municipality and living in another one. People with a mobile workplace were also

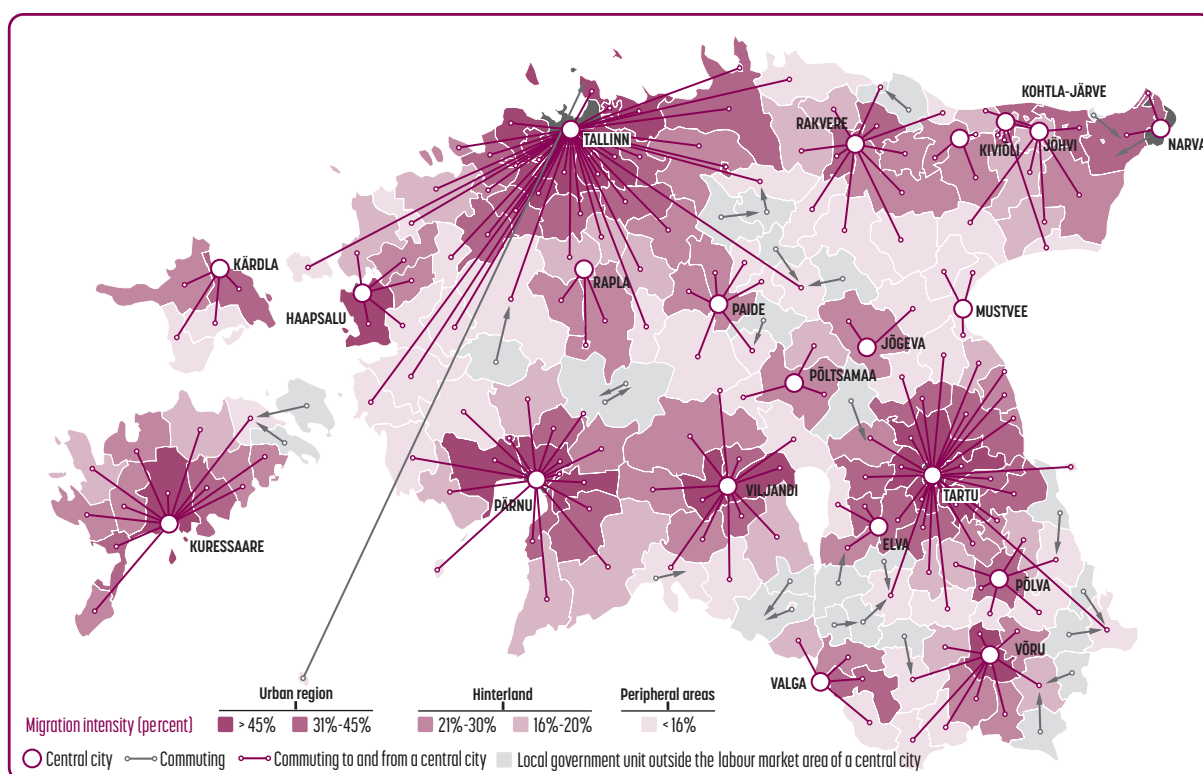
counted as commuters if they had indicated a municipal-level workplace into the questionnaire.

2.5.1 Central cities and commuters

The main centres of attraction for commuters have remained unchanged for a long time in Estonia. Usually they are regional and county centres (Tõnurist 2013; Ahas, Silm 2013; Raagmaa 2011; Tammaru 2001). Relying on the data from the last census, we can say that there are 19 central cities¹ for commuters in Estonia¹. This result is quite consistent with the findings of the survey by Ahas et al. (2010) that used mobile positioning, and determined that there are 18 centre towns in Estonia. The most influential of Estonia's central cities is of course the capital, Tallinn, which is the main commuting destination for 43 municipalities, including all the rural municipalities of Harju county and a few rural municipalities from other neighboring counties, but also for some more distant towns, like Pärnu, Valga and Kärđla. The wide influence area of Tallinn shows how the capital becomes an attractive concentration centre of jobs in a small country. Of course, people who come from further away do not commute between their home and workplace every day. Nineteen percent of cross-county commuters live in another home for a part of the time, while the number is just 10% for people who live and work in the same county. There is also a connection between time

¹ Towns that were the main commuting destination for at least three municipalities were defined as central cities.

MAP 2.5.1 Labour market areas of central cities, Dec 31, 2011



Source: Population and Housing Census, 2011.

spent in the other home and commuting – compared to in-county commuters, the number of those who spend 3-6 months in the other home is higher among people involved in cross-county labour migration (27% and 31%, respectively) or more than 6 months (6% and 26%, respectively). Thus, a workplace located away from home may be one of the reasons for having a second home.

Besides Tallinn, other important central cities in Estonia include Tartu, Pärnu, Kuressaare, Rakvere, Viljandi and Võru (see also Tammaru 2001; Ahas et al. 2010). Centres of a smaller magnetic importance include the county centres Kärđla, Haapsalu, Rapla, Paide, Valga, Põlva, Jõhvi and Jõgeva as well as the towns of Põltsamaa, Elva, Kohtla-Järve and Kiviõli. Jõgevamaa is the only county where the county centre does not correspond to the formal requirements of a central city. The town of Jõgeva is the main commuting destination for the rural municipalities of Torma and Jõgeva only. Põltsamaa, meanwhile, is the predominant commuting destination for the workforce of the rural municipalities of Pajusi, Põltsamaa and Kõo. The stronger status of Põltsamaa compared to Jõgeva is also demonstrated by its higher place in the chart showing the viability index of local authorities (Noorkõiv, Ristmäe 2014). Another central city in Jõgevamaa is Mustvee (the main destination for the rural municipalities of Kasepää, Avinurme and Lohusuu). However, considering the fact that more than 800 people commute to work to Jõgeva, while the number for Mustvee is just over 130, there is no doubt that in reality, Jõgeva is a stronger centre today than Mustvee.

There is also a number of rural municipalities in Estonia

that can be viewed as local minor central city, as the companies there provide employment for a large number of people in and close to the municipality. Examples of such rural municipalities include the municipality of Helme in Valgamaa, which is the main commuting destination for the municipality of Põdrala and the town of Tõrva; the municipality of Vastseliina that provides employment to the people of the municipalities of Meremäe and Misso; the municipality of Orissaare where people from the municipalities of Muhu and Põide go to work; and the municipality of Koeru, which is the destination for workers from the municipalities of Järva-Jaani and Rakke (Map 2.5.1).

The strength of a town as a central city is indicated by the number of inhabitants and commuters who find employment in the town. Drobne et al. (2012) also point out that if the number of people whose workplace is located in a central city exceeds the number of its local employed inhabitants, the centre can be viewed as external-labour-oriented, otherwise it is inhabitant-oriented. We see somewhat surprising results here in the context of Estonia. The greatest labour force potential is shown by the town of Jõhvi, where the commuting/inhabitant worker ratio of 1:31 shows that the number of people who work here is significantly higher than the number of employed people who live there. Consequently, Jõhvi can also provide work for a significant number of workers from other municipalities (Figure 2.5.1). Among other central cities, Tartu, Põlva, Rakvere, Tallinn, Pärnu and Kuressaare also show good labour force potential. In all these towns, the number of workers is higher than the number of employed people living in

the town. These are towns that need external labour in order to cover the labour needs of all businesses. The labour-related potential indicator is weakest (0.61) in the town of Kohtla-Järve, meaning that there are many employed people living in the town, but few whose workplace is located here. Kohtla-Järve is a town unlike others – while the number of people in a town usually grows during working hours, here there is a significant reverse movement out of town. To understand this tendency, we have to look at the job structure of East-Virumaa. The main employers in the county are companies engaged in mining and processing oil shale or producing electricity, industries which are usually located outside of larger towns.

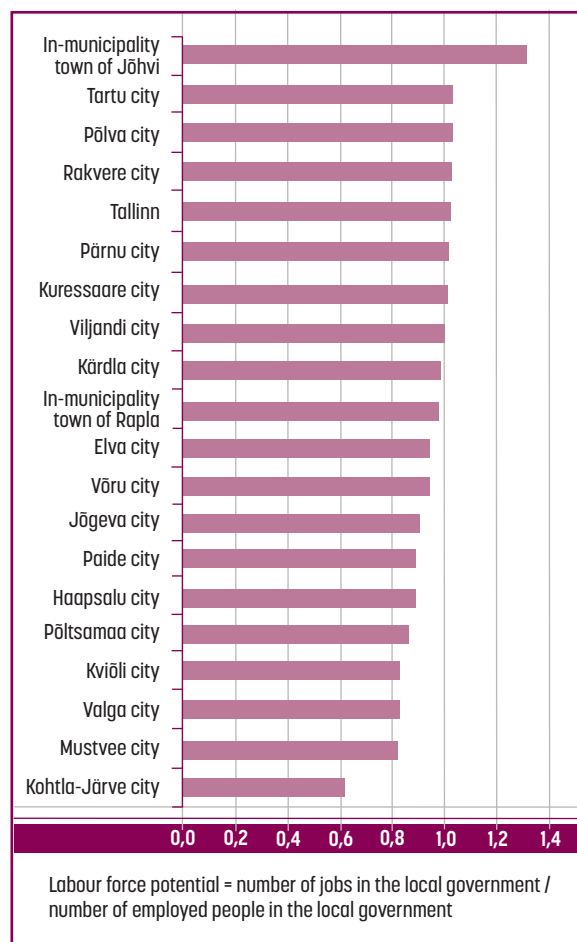
2.5.2 Labour market areas

The influence area of a central city where the municipalities linked to the centre via commuting are located is called a labour market area. Its parts are the urban region, the hinterland of the central cities, and peripheral areas. Connection to the centre is strongest for municipalities located in the urban region, from where an average of 30% of all people employed in Estonia go to work in the centre. Not all centers necessarily form an urban region, but all of them have a hinterland. The municipalities of the hinterland have a weaker connection with the centre – 16–30% of people living there and employed in Estonia go to work in the centre. Depending on the proportion of the inhabitants of a town or rural municipality commuting to work in the central city, it can be classified as close or distant hinterland. Peripheral areas are the municipalities whence less than 16% of the people employed in Estonia go to work in the centre.

Urban regions in Estonia can generally be viewed as monocentric. This means that there is one major town dominating the region, with no competing central cities of comparable size in the vicinity, and with the hinterlands of the larger towns not overlapping (Ahas 2010). Estonia's largest urban regions form around the cities of Tallinn, Tartu, Pärnu and Viljandi (Map 2.5.1). Over half of all workers of the municipalities of Viimsi, Harku, Kiili, Rae, Saue, Jõelähtme and Saku, as well as the town of Saue, commute to Tallinn; more than half of the workers of the municipalities of Sauga and Paikuse move to Pärnu during working hours; and from the municipalities of Ülenurme, Tähtvere, Luunja, Haaslava and Tartu, the movement of workers is to Tartu. The urban regions of Tallinn and Tartu extend beyond county borders. Tallinn's urban region includes the rural municipality of Kohila from Rapla county, and Tartu's urban region the rural municipality of Tabivere in Jõgevamaa county.

The municipalities of an urban region that depend on a central city for their jobs have long ceased to be called rural settlements. They are essentially suburbs sharing certain functions (e.g. jobs, shopping facilities etc.) with the centre. In Northern and Western Europe, Northern America and Australia, the 1960s are seen as the time when suburbanisation

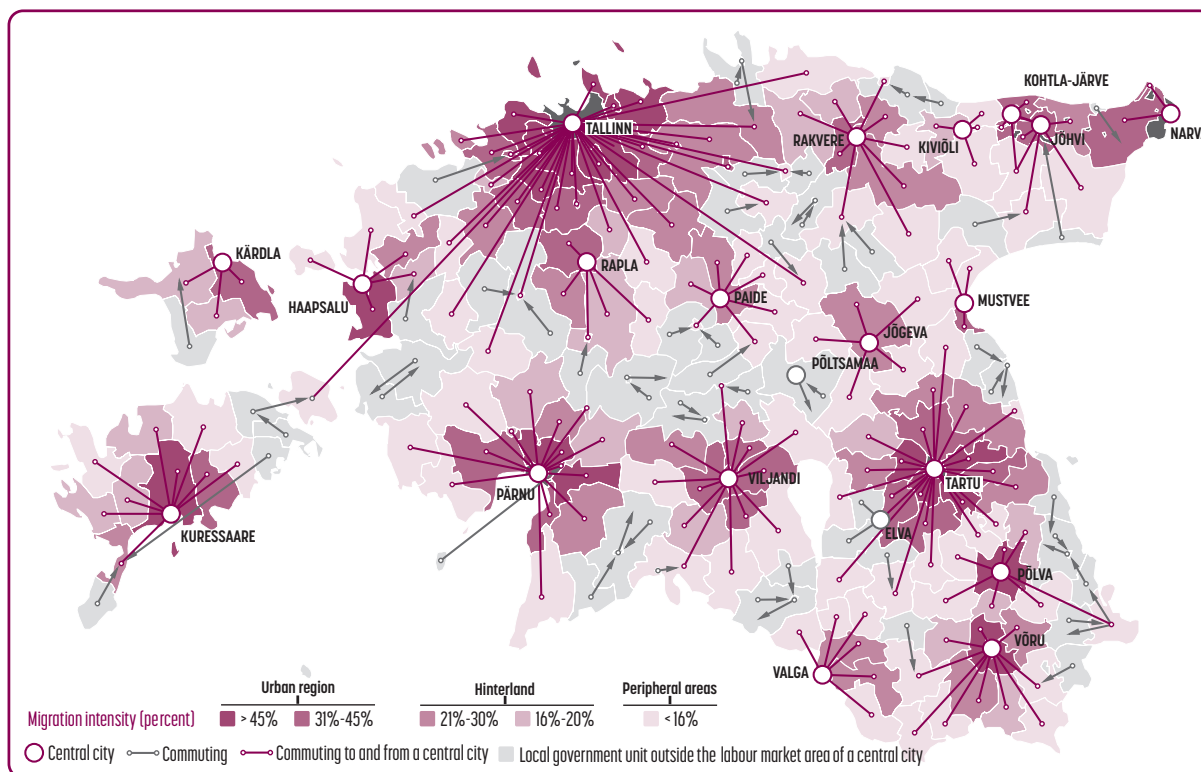
FIGURE 2.5.1. Labour force potential of central cities



Source: Population and Housing Census, 2011. Author's calculations.

began, with populations multiplying in the hinterlands of cities (Champion 2001). In Estonia as well, the increasing choices in the residential market and the growth of subjective well-being have led to a situation where many people value a peaceful and clean living environment, and prefer to live in a settlement further away from city noise, while still within convenient commuting distance from the downtown area. For people living in rural municipalities not far from towns, dividing their activity spaces (work, family and spare time activities) between the commuting centre and the local municipality is common. Ory et al. (2004) add to this that driving to work is not always seen as a negative thing. It is quite common to use this time for thinking, listening to music, reading, sleeping or other practical activities (ibid.). For the local municipalities, this is a beneficial situation – tax income from the inhabitants can be used for developing the infrastructure, building schools and kindergartens, providing leisure activities for the inhabitants and developing the living environment, thereby further strengthening the people's wish to maintain a long-term relationship with the municipality. The function of providing jobs for the inhabitants has meanwhile been taken over from those settlements within the urban region by the local central city.

MAP 2.5.2 Labour market areas of central cities, March 31, 2000



Source: Population and Housing Census, 2000

The hinterland is another part of the labour market area of a town, including local municipalities that are usually a bit further away from the central cities, outside the urban region and/or not very strongly connected to the centre via commuting. As a rule, the local municipalities of the county form the hinterland of a centre, but in the case of Tallinn and Tartu we can see that the hinterland extends considerably further. Thus several rural municipalities of Rapla and Läänemaa belong to the hinterland of the capital. The hinterland of Tartu extends to the counties of Jõgevamaa and Põlvamaa. In towns less attractive – Põltsamaa, Jõgeva, Mustvee, Rapla, Paide and Kiviõli - there is no urban region at all, but there still is a hinterland. For instance, the rural municipalities of Paide and Vätsa belong to the close hinterland of Paide and the municipalities of Roosna-Alliku, Kareda and Türi belong to its distant hinterland. The rural municipalities of Raikküla and Kehtna belong to the close hinterland of the in-municipality town of Rapla. The close hinterland of Kiviõli includes the rural municipalities of Lügause, Maidla and Sonda (Map 2.5.1).

Peripheral rural municipalities, rather weakly connected to the central cities via labour migration, are quite numerous in Estonia, but not all of them can be treated as typical peripheral areas. The classic view sees rural municipalities with a diminishing and ageing population as peripheral areas, with a large part of the population being not active in the labour market and/or unemployed. Comparing data from the local municipalities viability index and its changes (Kivilaid,

Servinski 2013) with the commuting-related data from the census, the rural municipalities of Hanila, Lihula, Varbla, Koonga, Kärü, Kõo, Laekvere, Koeru, Roosna-Alliku, Aseri, Laheda, Antsla and Taheva can be cited among others as typical peripheral municipalities (Map 2.5.1). However, there are also rural municipalities in peripheral areas that have a weak commuting connection with the central cities because local businesses can provide sufficient jobs for the population and there is no need for people to move away from their home area to find work. Such independent rural municipalities include for instance Imavere in Järvamaa county, Väraska and Rāpina in Põlvamaa county, Koeru in Järvamaa county and the rural municipality of Otepää in Valgamaa county. In these municipalities, at least 69–73% of the people employed in Estonia work locally. Some municipalities are considered peripheral areas because commuting from them is not related to a specific central city, but rather divided between several municipalities. For instance, in the case of the rural municipality of Laheda in Põlva county, the main commuting destination is the town of Põlva, where 13% of all workers go to work. Thirty-seven percent of the workers of the municipality work locally, and other important commuting destinations include the town of Võru, as well as the rural municipalities of Võru and Kanepi.

While in an urban region, commuting to a central city is made possible by the person's desire and ability to keep the home and the workplace separated, in municipalities located in distant hinterlands or peripheral areas commuting to central cities is clearly necessity-based; the local employment

market does not satisfy the inhabitant's expectations. This may be because of a general or structural unemployment in the place of residence, or because of a hope to earn more. The activity structure of businesses in rural areas provides jobs that require a lower level of qualification, thus forcing workers with higher qualifications to find alternative employment in larger cities (Partridge et al. 2010).

Commuting from distant settlements is also a demanding affair both materially and emotionally. Stutzer and Frey (2008) have used the example of Germany to show that moving because of work means stress, a physical and mental burden and a decrease of subjective well-being for the majority of people. So why do people still prefer commuting to moving permanently? From the economic aspect, commuting is one of the many rational choices a person makes: one decides in favour of it if the incurred costs are compensated by either a better job or by benefits obtained from the situation in the residential market (Stutzer, Frey 2008). On the other hand, it is the social network that keeps people from abandoning their home region, relationships and a "sense of home" – an emotional connection to the place of residence. Although covering long distances significantly reduces the time one could spend with friends and family or on one's leisure activities, people still do not want to move. It has been estimated that every ten minutes spent on commuting decrease the commuter's social relationships by 10% (Putnam 2000). Comparing the subjective and economic aspects, we can see the paradox that is summed up by Stutzer and Frey's (2008) words: "Commuting seems to encompass stress that does not pay off, i.e. the rational and economically-derived benefits to be gained from commuting cannot account for all the factors involved in making a decision to commute.

Comparing today's commuting patterns with those of the year 2000, when the last census was held, an intensification of the suburbanisation trend can be seen. This trend started already after the collapse of the Soviet Union, when extensive political and economic reforms brought about a disappearance of jobs in rural areas and the agricultural sector (Puur 1997). By 2011, the urban regions and hinterlands of major towns had continued growing: in 2000, the urban regions of Tartu and Tallinn did not extend beyond county borders. (Map 2.5.2). The number of municipalities in the urban regions of Pärnu and Rakvere has also grown.

History (the occupation years, re-independence, accession to the EU etc.), demographic and economic processes and the development of the population settlement system have caused changes in the list of central cities and the extent of their influence areas. Compared to a few decades ago, at the time of the disintegration of the Soviet Union, some of the industrial towns in East-Viru county, e.g. Püssi and Sillamäe, have lost their importance as providers of employment for the surrounding municipalities. Concentration of jobs into the service sector instead of agriculture and industry has strengthened major towns further. The growing influence area of Tallinn, for example, has caused the municipal area of the town of

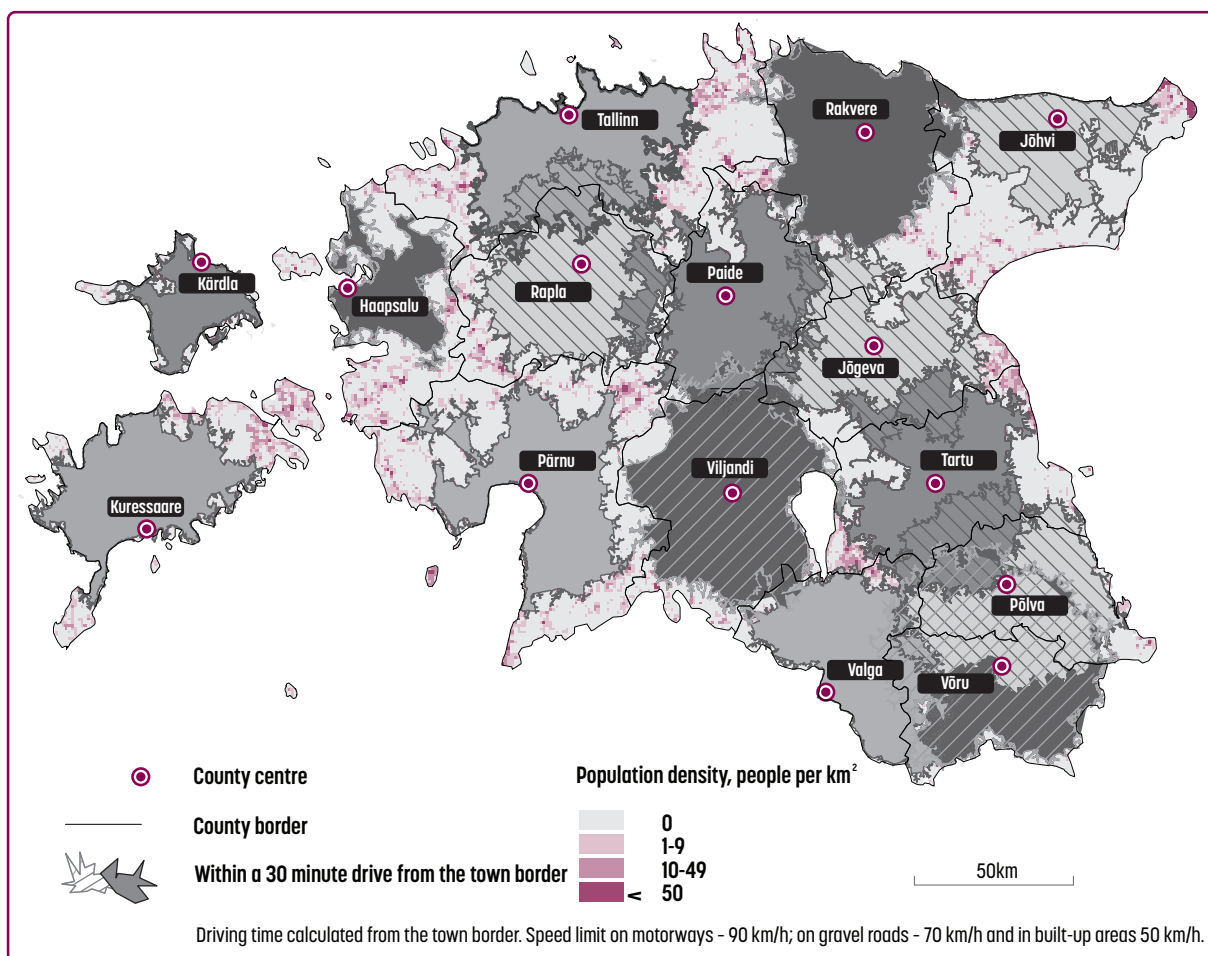
Rapla to lose its importance as a central city, and similarly, the growth of Tartu has diminished the influence area of Jõgeva. At the same time, there are a few smaller towns that stand out as central cities – such as Elva and Põltsamaa – with a slight growth in the labour market area between the last censuses. The strength and extent of the influence area of central cities is also impacted more and more by an ageing population – the working-age population is decreasing in rural municipalities, within-country migration – people moving within Estonia to be closer to towns and thus also to employment, as well as cross-border migration – moving abroad in search of better work and earnings, often taking the family along, also has an impact. These changes in the population structure are influenced, and exert influence on, developments in the area of business. Several smaller towns have lost their attraction, as the jobs there have disappeared. The jobs, in turn, are disappearing because there is no suitable labour and infrastructure for businesses, or no local consumers for products and services. Accession to the European Union has also had a great impact, making it easier to find employment abroad. According to the last census, over 4% of the working population of Estonia, approximately 25,000 work abroad.

2.5.3 Time Spent on Reaching the Workplace

Starting from the early 1990s, more than 80% of all jobs disappeared in rural areas over a short period of time (Raagmaa 2011: 178). In the context of domestic migration to towns it is understandable that in the future also, economic activities will be concentrating in and around central cities where there is labour needed by businesses, clients for their products and services, and infrastructure for organising logistics and distribution of products. This in turn means a growing distance between home and workplace for workers living in rural areas.

Stutzer and Frey(2008: 341) show that the average time spent on commuting is 37.5 minutes in the EU-15 countries and 48.8 minutes in the US. In a comparison of countries, Estonia with her 47.1 minutes ranks 5th after Hungary, Romania, USA and Latvia (ibid.). The National Spatial Plan "Estonia 2030+" states that a half-hour journey between home and workplace is optimal. It is not specified, however, which means of transport are meant (car, public transport, train etc.) and whether time spent in urban traffic is also included. A study of domestic occupational mobility shows that more than half of the people of Estonia use a car to get to work (RAKE 2011). For 46% of the respondents, time spent in getting to work is under 15 minutes, and for 25% it is between 15–29 minutes (RAKE 2011). Thus, a total of 71% of the respondents reach work in half an hour (ibid.). These numbers, however, cannot be seen as applying to the whole of Estonia, as the municipalities of Harju and Tartu counties were not involved in the

MAP 2.5.3 Areas within a 30-minute car drive to county centres



Source: The Land Board. Population and Housing Census, 2011.

study. People commute to work in the major central cities from the remoter points of these counties, with time spent in urban traffic adding to their commuting periods.

It is mostly peripheral area municipalities with sparse populations that are further than a 30-minute car drive away from county centers, but not always - in larger counties, more densely populated regions can be seen as well (Map 2.5.3). The problem is most acute in the counties of Harju, East-Viru and Pärnu, where the areas outside a half-hour car drive are the largest. In Saaremaa, the rural municipalities of Orissaare, Põide and Muhu are outside the driving area of Kuressaare. In Läänemaa it is the rural municipalities of Lihula and Hanila as well as a part of the densely-populated habitation areas of the rural municipality of Kullamaa; in Raplamaa, the remote rural municipality of Vigala; in Lääne-Virumaa, the inhabitants of the rural municipalities of Tapa, Laekvere, Rakke and partly also Väike-Maarja, that cannot reach Rakvere with a 30-minute car drive. Viljandi cannot be reached in a half-hour car drive by the inhabitants of the rural municipalities on the southern border of the county (the rural municipalities of Karksi and Abja, the town of Mõisaküla). In Jõgevamaa and Tartumaa, a part of the densely-populated area on the shore of Lake Peipus, is left out - the town of Kallaste, the rural mu-

nicipalities of Peipsiääre and Pala. In smaller counties, almost all of the territory is within a 30-minute car drive from the centre. Getting to work in the county centre in half an hour is not a problem for the majority of people living in Hiiumaa, Valga, Põlva (excepting the rural municipality of Värskla), Võru and Paide counties.

However, the distance and the corresponding costs are not the sole factors for making a commuting decision (Partridge et al. 2010). It is often a major town, an "engine of economic growth" that is chosen as a commuting destination rather than a smaller town that is closer (ibid.). The decision by people to cover long distances may be motivated not only by a simple search for employment, but there can also be the considerations of career opportunities in major central cities, better compatibility of available jobs with one's skills, or a better salary with the possibility of retaining the safe, peaceful and beautiful living environment of the countryside (see also Partridge et al. 2010; RAKE 2011). This tendency can also be seen in Estonia and it is illustrated by the broadening labour areas of Tallinn and Tartu, as well as the diminishing role of smaller cities.

A balanced development of the population settlement system requires a better transport connection between the

centre and its hinterlands (**Regional Development Strategy of Estonia 2020**). Considering the growing spatial mobility of people, the distance that one has to cover for getting to work is likely to grow from 30 to 40 km in the future (major towns have a commuting radius of 50 km) with the time involved, however, remaining 30 minutes, because of better roads and public transport connections (**National Spatial Plan 2030+**). Thus, connections between central cities and remote areas far from county centers are a key priority for a balanced regional development.

2.5.4 Main Socio-Demographic Characteristics of Commuters

Commuting patterns differ across population groups. Most earlier studies have found that commuters tend to be younger people with a higher education and that men commute over longer distances than women (**Crane 2007; White 2001; Tammaru 2005**). It can be said that these tendencies hold largely true for Estonia as well. Only commuters to the main commuting centres were analysed in terms of their main socio-demographic characteristics for this study.

Gender

There are no significant gender differences in commuting intensity in Estonia. The number of women is slightly higher among commuters to main commuting destinations (53% vs 47%). Men, however, tend to cover longer distances for getting to work, with women working closer to home. Women dominate over men in the commuting flows that connect urban region municipalities with central cities, as well as in those where the movement is from the home to the neighbouring rural municipality. The dominance of men is characteristic of commuting flows from hinterland municipalities (especially from distant hinterland areas) to central cities as well as the flows connecting major cities.

There can be various reasons for the gender differences in commuting patterns in Estonia. First, there is the rather traditional structure of society where the woman has a larger role in performing household duties and raising children, and the man is the breadwinner. For a better earning opportunity, men are ready to accept longer commuting distances and the corresponding time losses. Women on the other hand prefer to work closer to home, to make it easier to manage both work and family life. **Crane (2007)** demonstrates that married men commute for longer distances than unmarried men. Married women, on the other hand, commute for shorter distances than unmarried women (*ibid.*). To explain this, the author suggests that the additional family-related duties require women to stay closer to home, while it is the other way round for men. If a family has to decide whether the man will go to work further away, or the woman, the salary difference often be-

comes decisive – the lower salary of women often does not justify commuting for long distances (**Crane 2007**).

Age

People of different age groups are characterized by different, clearly distinguishable and characteristic commuting patterns. **Tammaru (2005)** found in an analysis of the commuters of Tallinn and its close proximity that commuters tend to be younger than the local workers, and that as a person grows older, his or her commuting likelihood diminishes.

It is typical of young people from the age group of 20-29 to commute from a rural settlement far from a central city to a larger town. This characteristic migration pattern of youth can be explained by the fact that jobs in major centres are seen as attractive even if the home is far from the town. Young people also commute between major towns (**see also Ahas et al. 2010**). For instance, 36% of the commuters from Tartu to Tallinn, 35% of the commuters from Pärnu to Tallinn, and 30% from Valga to Tallinn are in their twenties.

The migration pattern of people in their thirties differs considerably from that of the younger bracket, with movement from an urban region municipality to a centre being the key characteristic. People between the ages of 30 and 39 are the most numerous age group among commuters from the rural municipalities close to Tallinn and Tartu to the central cities. New residential areas close to towns are mostly inhabited by younger, employment-age people with families, often employed in the centre.

There are several municipalities where commuters in their forties are the largest age group among those who commute to central cities. This is to be expected, considering the fact that the overall number of employed people in numerous municipalities is in this age group. While younger commuters tended to move to larger cities and move between the cities, older people in their forties are characterised by a movement from rural settlements to minor commuting centers. In the context of Estonia, this means commuting to county centres (except Tallinn and Tartu), as well as some rural municipalities that are more attractive.

Level of Education

The general trend that the share of people with a higher education is larger among commuters than among the general population (**Sandow 2010**) is true in Estonia. Forty-four percent (44%) of commuters to main commuting destinations have acquired a higher education, while among the general population of Estonia the number is approximately 30%. Twenty-eight percent (28%) of commuters to main commuting destinations have a vocational education, 18% have an upper secondary education and 10% have a lower secondary or lower education.

Movement between and towards larger cities is characteristic of workers with a higher education. For example, 54% of

the commuters from Tartu to Tallinn and 44% of the commuters from Pärnu to Tallinn have a higher education. The percentage of people with a higher education is also high among commuters between the urban region and the central city. For example, 64% of the commuters from the rural municipality of Viimsi, 59% from the rural municipality of Harku and 55% from the rural municipality of Rae to Tallinn have a higher education.

Tammaru (2005) points out that the percentage of people with a higher education is higher among those who commute from neighbouring rural municipalities to Tallinn than among those who work locally. Also, the share of white-collar workers is higher (ibid.). The author explains this by the lack of suitable jobs in suburbanised rural municipalities: industrial enterprises that have moved out of town start their business in suburbanised rural municipalities, and the jobs they provide are not attractive for highly-educated white-collar workers, so they go to work in Tallinn instead. This pattern that Tammaru describes can also be extended to other suburbanised regions in Estonia, like the outskirts of the towns of Tartu and Pärnu.

Conclusion

In the last decade, the work-related spatial mobility of the people of Estonia has grown considerably. This is most clearly expressed in the constantly-expanding labour market areas of Tallinn and Tartu – people move to work in larger cities from the remoter municipalities of the county as well as from the new residential areas close to the cities. The hierarchical structure of the population settlement system in Estonia has remained largely unchanged for a long time, but nonetheless, historical events as well as demographic and economic processes have brought about some minor changes. The main central cities besides Tallinn and Tartu include county centers and some smaller towns. Comparing the commuting-related data of the last census with data from the previous

one, we can clearly see how the labour market areas of the main centres grow year by year. The attraction of some smaller towns and Soviet-era industrial towns is decreasing on the other hand.

The main socio-demographic characteristics of commuters are similar in Estonia, Europe and the US. In Estonia, women slightly outnumber men among commuters to main commuting destinations, but in Estonia just like elsewhere, men tend to commute for longer distances than women. Working far away from home is characteristic of younger people in their twenties. The commuting patterns of people in the age of establishing a family (in their thirties) partly reflect a rational choice and a desire to keep home and work separated – they work in town, but live outside of town. The share of highly-educated people is higher among commuters than it is in the general population. The concentration of high-salary jobs that require a higher qualification level into central cities results in people with a higher education commuting there. Although state policy documents articulate a goal of retaining the situation where the workplace can be reached from home in 30 minutes, the ongoing concentration of jobs in and close to central cities may mean that people commuting from the outskirts of the county may not be able to cover the required distance in this time. A better integration of towns and rural areas could be set as a goal for the future. This would mean an improvement of living environment on the one hand, and making commuting as convenient as possible on the other. As a significant number of people prefer living in beautiful and peaceful settlements, efforts should be continued to make residential areas as attractive as possible, which means building cycling and pedestrian paths, creating increased attractions for spending time, promoting active community work etc. At the same time, the municipalities of the hinterland and peripheral areas have to be connected to central cities via transport connections and road networks to make commuting quick and convenient. This will aid the integration of living in the country and working in town. ●

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MIGRATION

2.6

Contemporary Emigration: Trends, Causes and Impact on Estonia's Development

► TIIT TAMMARU, RAUL EAMETS

Introduction

Emigration is growing year by year and is probably one of the most important concerns for the inhabitants of Estonia. People leave for different reasons – because of employment, family, studies, disillusionment, to discover the world, to search for new and exciting experiences, and many other factors (Anniste 2014; Anniste, Tammaru 2014; Tammaru et al. 2010). Estonia's emigration is part of the wider East-to-West migration in Europe (Castles, Miller 2009; Cook et al. 2011; Ivlevs 2013). Two structural factors are important in understanding this migration: the demographic developments of Eastern European countries, and differences in east-west living standards. In the case of Estonia and Latvia, there is also a third structural factor: massive Soviet-era immigration and related sizeable minority population. It is therefore not surprising that the removal of migration restrictions, especially in connection with the EU enlargement into Eastern Europe, has notably increased migration from Eastern Europe to Western Europe. This migration flow got a new momentum with the economic crisis that started at the beginning of 2008, which especially affected Eastern Europe (and Southern Europe). The economic crisis coincided with a period of large numbers of entrants into the labour market on the one hand and, on the other hand, a decrease in jobs for people who were already in the labour market. This has created the “age of migration” in Eastern Europe (Castles, Miller 2009).

Although migration from Eastern Europe, including Estonia, to Western Europe is massive, it is relatively difficult to measure it accurately (Raymer et al. 2011). The UN definition of permanent change in country of residence states that a person is considered a permanent resident in a new country when

he or she has lived, or plans to live at least for 12 months, in that country. At the same time many people are moving constantly between two and more countries, which means that in addition to permanent relocation to a different country, there are now also several other types of spatial mobility and people have parallel residences in several countries. Maintaining parallel lives in two countries is called transnationalism, while constant mobility between two or more countries is known as cross-border commuting (Vertovec 1999). It is relatively complicated to draw a clear line between commuting, temporary migration and permanent migration. The most common is work-related commuting. Estonia has its fair share of such migrants as well, people who work in Finland and spend their weekends in Estonia with their family. There is also a definition of permanent place of residence for this common migrant – a person's permanent place of residence is determined by the family's place of residence, which in this case is Estonia. However, real life is much more complex. From the person's viewpoint, it may be useful or necessary to register as a resident in the new country as it simplifies paperwork or helps to find employment (Anniste 2014). In addition, there are many people who live in several countries, such as students. Although they are also subject to the 12-month rule, and family place of residence criteria, it is these young people that cannot implement these two criteria at the same time. Moreover, Estonia and Finland form one of Europe's busiest cross-border commuting area (Silm et al. 2012) – because of their shared labour market, the capitals of Estonia and Finland have even been called also Talsinki or also Hellinn.

Estonia uses a parallel system, combining the population

census and population registry, both of which provide a different picture of migration. Therefore it has not been possible to determine accurately and clearly how many people have left Estonia since 1991. It is clear, however, that the number of people who have migrated from Estonia, mainly to Finland and to other European countries is large, and it is possible to indirectly assess the extent of emigration by using different data sources.

By using census data from 1989, 2000 and 2011, this article aims to (a) determine the extent of emigration from Estonia by applying a simple balance method, and to compare the results with other data sources, (b) present a profile of Estonia's emigrants and (c) analyse the possible impact of emigration on Estonian population and labour market developments. To start, we will place the present-day emigration into the context of two earlier waves of massive migration: the first occurring at the end of the 19th/beginning of the 20th century (a migration caused by demographic transition), and the second occurring during the Second World War (a huge migration associated with the wave of refugees escaping from the Soviet occupation).

2.6.1 Earlier waves of emigration in Estonia

If we leave aside mass deportations, which form a separate sad chapter in Estonia's population history, there have been three large waves of emigration in Estonia. The first of them started in the middle of the 19th century and lasted until the creation of an independent Estonian state. The wave of migration was caused by population developments – specifically, by the demographic transition that was taking place in Estonia at that time (mortality was quickly decreasing, followed not long thereafter by a decline in births) and from the emigration pressure from rural areas (a majority of Estonians were at that time living in the countryside). **Kalev Katus (1989)** has illustrated this change with a concise summary. Before the demographic transition, families had on average five children, two of which lived to adult age. Statistically, one of them was a boy and the other was a girl, which kept the population in balance in the countryside. In the course of demographic transition, mortality rates decreased so that four out of five children reached adult age. Statistically, two of them were boys and two were girls, but the balance in the population was lost, resulting in migration pressures from the rural areas. Although the industrial development that started at the same time in the cities created many new jobs for rural out-migrants, they were often filled with immigrants from Russia as Estonia was part of the Russian Empire at that time.

The pressure to migrate caused by overpopulation in the countryside, plus limited opportunities for finding work in cities, triggered the first major wave of emigration, in the course of which about 200,000 people left Estonia, mainly for Russia which had plenty of vacant land (**Rosenberg 1998**). This created a community of Estonians in Russia which is today

known as the Estonian Diaspora in Russia. These 200,000 persons made up about 20% of the Estonian population, i.e. one in every five Estonians left Estonia (**Kulu 1992**). At present, the Estonian Diaspora in Russia has decreased to 20,000 people, with about half of this decline having been caused by return migration to Estonia, and the other half due to Soviet terror-related deaths and assimilation into Russian society (**Tammaru et al. 2010; Tiit 1993**).

The second major emigration wave was very different from the point of view of its causes and geography. At the beginning of the autumn of 1944, approximately 80,000 people left Estonia to escape the second Soviet occupation, and this migration wave has been called the Great Exodus (**Andrae 2005; Kumer-Haukanõmm 2012; Reinans 2006**). Those who left included many from the cultural and political elite, with the majority of emigrants being young, as well as people from coastal areas. These refugees set up larger Estonian communities in Sweden, the USA, Canada and Australia (**Kulu 1992**). Today this segment of Estonians living outside their home country is known as the Western Diaspora. For understandable reasons, their return to Estonia has not been very extensive (**Kulu, Tammaru 2000**): the Iron Curtain during the Cold War precluded return migration, while by the time Estonia restored independence the former emigrants were in their old age and their children, who were born abroad, had already established their roots deep in the soil of their new home country. At the same time we should not underestimate the role of the Western Diaspora in restoring Estonia's independence and in the state-building that followed the restoration of independence. One example of this is the fact that Estonians who have returned to Estonia have held quite a few important positions on Estonian political and business life.

2.6.2 Extent of current emigration

The third major wave of emigration from Estonia coincided with the period after the restoration of independence. All in all, in a little more than two decades, approximately 200,000 people have left Estonia, i.e. as much as in the first wave of emigration during the demographic transition (**Table 2.6.1**). For a small country, this is a massive loss of population, and in absolute numbers it is comparable to the first emigration.

What is clear is that emigration from Estonia has taken place in the form of two sub-processes. First, the majority of emigrants from Estonia left to the East, mainly to Russia, which means that it was essentially the return of people who had arrived in Estonia during the Soviet era (including military and people linked with the military industries and their family members) to their home country. Secondly, new emigration where the main destination country is Finland. While very few Estonians were living in Finland before the restoration of Estonian independence in 1991, Finland houses today the largest Estonian diaspora. New emigration from Estonia increased after Estonia's accession to the European Union, and accelerated further at the onset of the global economic crisis

in 2008. During the five years since the economic crisis, the number of Estonians living in Finland has doubled, from approximately 20,000 people in 2008 to approximately 40,000 people in 2013 (see Figure 2.6.1).

2.6.3 Causes of emigration

The most influential factor in the massive current emigration is, undoubtedly, the side-effects of the large immigration that took place during the Soviet era. While in the Soviet era, Estonia (and Latvia) differed from other East European countries in terms of their high immigration figures, the same immigrants are now largely shaping the extent of current emigration. This partly helps to explain Estonia's notably bigger population loss through emigration in comparison with other East European countries. Therefore, it is important to note that immigration during the Soviet period and the sizeable minority population leaving Estonia have been shaping Estonia's emigration processes even up until today; it is not limited only to return migration in the 1990s back to Russia, but it also includes migration to the EU. The results of the 2011 population census also show that the negative net migration of other ethnic groups exceeded that of Estonians also in the 2000s.

If Soviet-era immigration as a factor of emigration was a unique feature to Estonia and Latvia, two other structural factors – demographic composition and a difference in living standards compared with Western Europe – were similar in Eastern European countries. Demographic composition primarily means that in all of Eastern Europe, including Estonia, the large generations born in the 1980s are now at prime migration age (in their 20s). At that time, birth rates were high in all of Eastern Europe. These young people who were born in the 1980s are now also at the age of entering the labour market. In other words, both Estonia and Eastern Europe in general have very many people who are potential job seekers

and emigrants. At the same time Western Europe is ageing very rapidly: their largest generations were born already several decades earlier, after World War II, and are reaching retirement age. In short, while there are many people in Eastern Europe who are entering the labour market, Western Europe has a high number of people who are leaving the labour market. The difference in living standards between the countries is “channelling” people from less wealthy countries to wealthier countries for different reasons (employment or studies). In the last five years, the economic crisis has caused the river of emigration from Estonian to flow very quickly.

In the shadow of such negative primary trends, there is however also a small consolation in that some emigrants also return to Estonia. Moreover, both population census data (see Table 2.6.1) and registry data provide a similar picture about immigration: from 2000 until 2012, there were 29,000 people, mainly return emigrants, who registered their place of residence as Estonia. The number of people arriving in Estonia also includes, in addition to return migrants, immigrants from other countries. What is interesting is that in the last five years, the number of migrants to Estonia exceeds the number of emigrants who left Estonia in the years 2000–2005. In terms of return migration, Estonia stands out in comparisons with all other European countries, not just with other East European countries. Namely, the data of the 2008 European Social Survey shows that, based on the number of people born in any given country, Estonia has the largest share of people in Europe who have employment experience from abroad. These are people who have lived and worked abroad for some time, but now live and work in their home country. Close work-related links of Estonian residents with Finland are clearly one factor that makes it simple to find employment abroad and to return home after a while.

If one regards the current situation from the long-term perspective, it is important to note that while the number of Estonians living abroad has grown significantly in the last

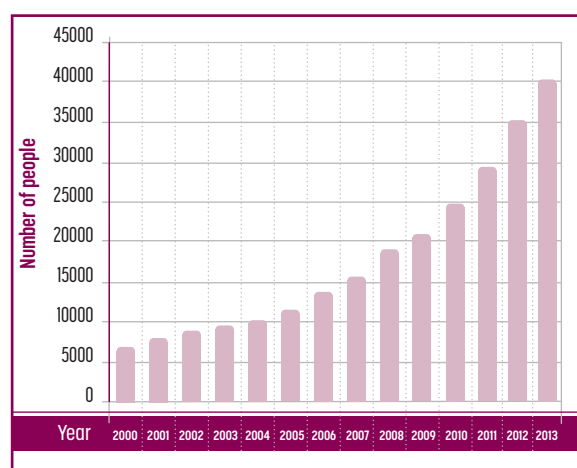
TABLE 2.6.1 Components of population change 1989–2000 and 2000–2011

	1989–2000	2000–2011
Population at start of period	1 565 000	1 370 000
Population at end of period	1 370 000	1 294 000
Change in population	-195 000	-76 000
Differential in birth and death rate	-40 000	-33 500
Net migration*	-155 000	-42 500
Immigration	14 500	28 000
Emigration*	165 500	70 500

* also includes the differences in population censuses related to under-reporting.

Source: Statistics Estonia.

FIGURE 2.6.1 Number of Estonian migrants in Finland, 2000–2013.



Source: Statistics Finland.

decade (Figure 2.6.1), their share (approximately 15%) remains at the average level of the last 100 years, mainly because of the balancing factor of return migration. People return to their home country predominantly for one simple reason: being at home with one's own language and culture feels better than being abroad (Kulu, Tammaru 2000) and sooner or later this is understood by many (but naturally not all) who left (Anniste, Tammaru 2014).

2.6.4 A profile of the emigrants

Migration processes are always characterised by selectivity, i.e. people who leave do not originate from all population groups equally; certain groups stand out. Frequently, the majority of emigrants are men who take up employment abroad and who either return to their home country later or are followed by their family. However, the data of the 2011 population census on emigrants from Estonia in 2000–2011 show that the majority of Estonian emigrants were women (Table 2.6.2). An analysis of people who emigrated to Estonia shows that apart from labour migration, there is also significant family emigration (compare with Anniste, Tammaru 2014). In addition to family reunification, a new growing type of migration in Europe is migration due to family formation (marrying a foreigner). Women are significantly over-represented in this form of emigration from Eastern Europe to Western Europe (Niedomysl et al. 2010). As expected, the proportion of young people among people leaving is high. What is somewhat surprising is the very high number of children among migrants, especially young people in the 15+ group. A general rule of thumb is that the younger people are when they leave the less likely they are to come back to their home country. We can also see that households with children are in the majority among those who leave. Although there were fewer married people among emigrants than among the general population of Estonia, there are many couples with children among emigrants. The large percentage of children among emigrants is definitely a sign of danger. They will be educated abroad, they will form friendships when attending schools abroad and will learn the unwritten rules of their new home country, which all will inhibit their wish to return to Estonia.

“Brain drain” remains an important topic in the wider discussions on East-West migration in Europe (Olofsson 2013; Olofsson, Malmberg 2010). Highly-educated people that leave often start to work in jobs that are below their qualifications. Estonia is clearly different from many other East European countries in this respect because the share of emigrants with higher education is low, while the share of emigrants with basic education is high. The reason is in the age of the emigrants: as we saw from above, many left Estonia in their childhood, i.e. they have only primary education. But Estonia is special also with regard to adults as data on occupations reveal. Namely, managers and senior specialists are clearly underrepresented among emigrants, while service staff and unemployed individuals are overrepresented. The latter means that emigration is also easing the pressure on the Estonian

social welfare system since these people face biggest problems in finding a job in Estonia. The analysis of Estonian emigrants in Finland points to another interesting aspect: although managers and senior specialists who leave Estonia agree to work their qualifications but it is a temporary phenomenon and they quickly find a job that matches with their qualifications (Anniste, Tammaru 2014). In other words way, emigrants soon work at similar positions as they had in Estonia, and the occupational structure of Estonians in Finland does not differ from that of Finns.

Among emigrants, the percentage of people whose mother tongue is Estonian is slightly lower than among permanent residents, but differences with other ethnic groups are insignificant. At the same time, as mentioned earlier, there are

TABLE 2.6.2 Profile of emigrants from Estonia (‰)

	Permanent residents 2000	Emigrants 2000-2011
GENDER		
Male	45	39
Female	55	61
AGE		
0-19	31	57
20-29	15	24
30-39	15	12
40-49	15	6
50+	24	1
SIZE OF HOUSEHOLD		
1	9	5
2	22	15
3+	69	80
MARITAL STATUS		
Married	49	23
Other	51	77
EDUCATION		
Higher education	14	7
Secondary education	51	43
Basic education	35	50
EMPLOYMENT STATUS		
Managers	11	8
Senior specialists	12	8
Specialists	13	12
Clerical workers	5	6
Service and sales workers	11	18
Skilled agricultural workers	2	1
Skilled and manual workers	14	12
Machine operators	10	8
Manual workers	9	7
Unemployed	13	19
MOTHER TONGUE		
Estonian	69	65
Other	31	35

Source: Census 2011.

major differences in return migration, i.e. while many Estonians are leaving temporarily, for other ethnic groups leaving Estonia, however, is usually a permanent decision. The geographical breakdown of emigrants from Estonia is diverse, and includes those from Tallinn and from other larger cities as well as from Estonia's peripheral areas (Map 2.6.1). In addition to Finland, the other main destinations countries are other Scandinavian countries, the UK, Germany and Russia (Map 2.6.2).

2.6.5 The impact of emigration on Estonia's development

Considering the extent of current emigration, a valid question is how long can such a situation be sustained. Today, the combination of economic and demographic factors in both Estonia and other Eastern European countries contribute to massive emigration. The economic crisis has amplified emigration. Emigration is boosted also by the difference in quality of life between Eastern European and Western European countries (which has notably decreased in comparison with the 1990s, but remains considerable) as well as the stronger impact of the economic crisis on East European countries, especially in comparison with Scandinavian countries. These economic factors would not have had as great an impact if both Estonia and Eastern Europe did not have such large populations born in the 1980s who are now in the prime migration age. Although people leaving Estonia come from all ages, the majority of emigrants are between 20 and 39 years old, and these age-groups (and their children) are very large in Estonia today. However, in the next 5 to 10 years, this situation in Estonia will change and, starting from the second half of this decade, it will be the small generation born in the 1990s that will reach the prime migration age. In other words, one can say that Eastern Europe is living at the age of migration, characterised by extensive

emigration triggered by both economic and demographic reasons. One can assume that the generational effect on emigration will decrease in the future. Hopefully, also the welfare differences will reduce the extent of emigration.

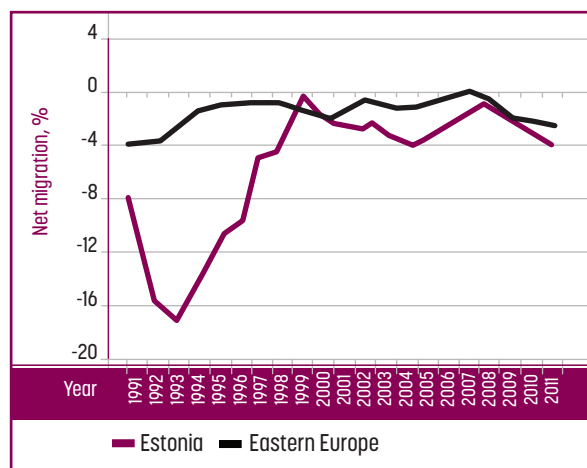
It seems that studying and working abroad is becoming more and more common with each new generation. While 100 years ago, most people worked and lived in their village. Today it is increasingly difficult to limit people's activities within the borders of one state, especially in the case of such a small and open country as Estonia. This means that people are increasingly living in one country and working in another country (there are 30,000 people like that in Estonia, according to the 2011 population census) or live in different countries in different periods of their lives. The proximity of and easy access of Finland have created a joint cross-border economic area in Northern Estonia and Southern Finland where people are constantly moving between the two countries.

Although free movement of labour is one of the EU's most important fundamental principles, Estonia's most fundamental principle is the preservation of the Estonian language and culture. We should ask ourselves whether these two fundamental principles are mutually exclusive. At first it seems that the answer is yes. But we should also ask how large of a share of Estonians need to live in Estonia in order that Estonia can develop dynamically and feel herself as a secure and independent country. From the viewpoint of public governance, would it be ideal for the Estonian state if all Estonians were living in Estonia? Or perhaps is the optimal solution having 10-20% of Estonians living abroad – as has been the case in the last 100 years – driving Estonia's development, ensuring the exchange of skills, knowledge, networks, contacts, etc.? How would Estonia have developed in the last twenty years if there had been no support from Estonians living abroad or if those who lost work in Estonia would not have been able to find employment abroad, mainly in Finland?

In the case of emigration, in addition to negative side-effects there are also many positive aspects. Among others, emigration is increasing the domestic mobility of the workforce. For instance, if bus drivers in Tallinn leave to work in Finland, they will be replaced by bus drivers from the rest of Estonia. If a bus driver in Northeast Estonia moves for work in Tallinn, some unemployed miner could become a bus driver in Northeast Estonia, etc.

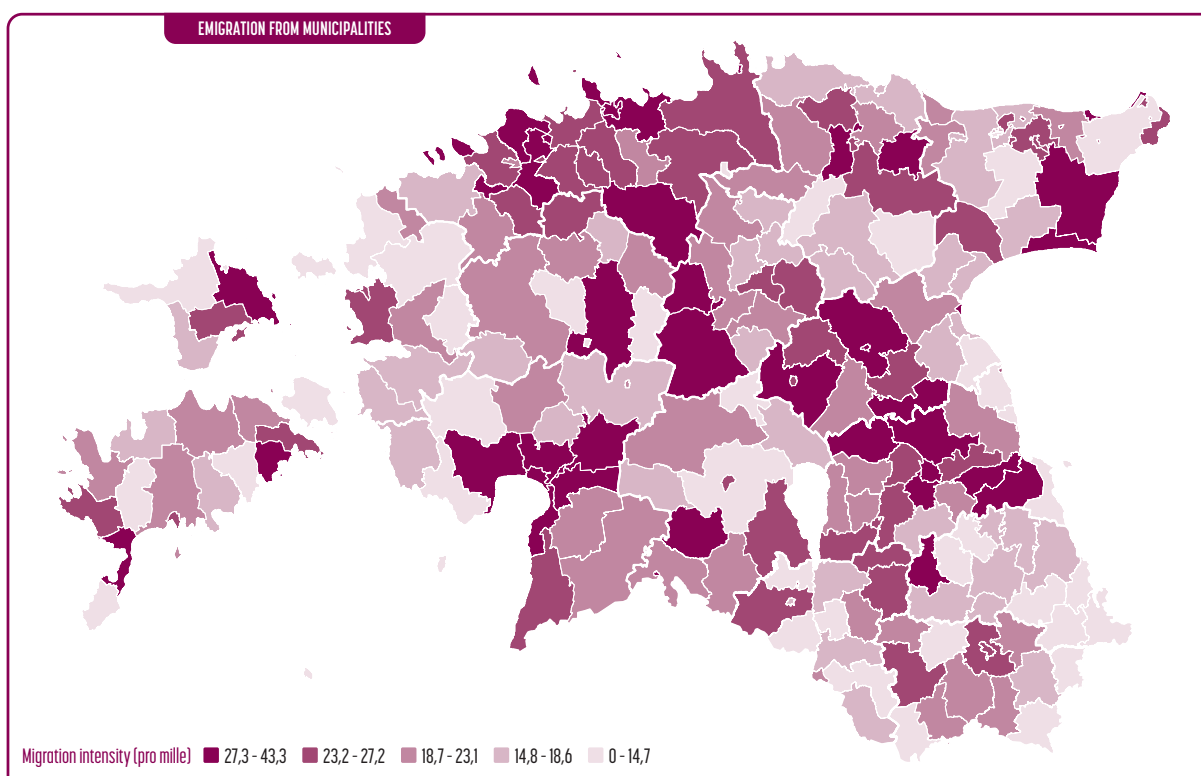
Temporary work abroad or student migration (a person obtains education abroad after which he or she returns home) is improving the human capital of Estonian residents: they acquire new skills; expand their knowledge; learn to understand new cultures; master new languages. What is interesting, for example, is also that, while studying is not a significant factor driving emigration to Finland, very many people who left Estonia have studied and got training in Finland (Anniste, Tammaru 2014). In the case of student migration, one positive aspect is that the need to train representatives of a certain profession in Estonia diminishes. Emigration has also clearly been a buffer for unemployment because emigration reduces the load on the Estonian social welfare system. One should

FIGURE 2.6.2 Net migration per 1,000 people from Estonia and Eastern Europe, 1991-2011



Source: Sakkeus, Puur and Tammaru, 2013.

MAP 2.6.1 Most recent place of residence of emigrants from Estonia



Source: Census 2011.

also not underestimate remittances of Estonians working abroad to their home country, as well as spending their income in Estonia when they are visiting Estonia. According to the World Bank, on average 350 million to 400 million USD is transferred to Estonia every year. True, the majority of this

USD 155 million was transferred to Estonia from Russia. Still, 45 million USD were transferred to Estonia from Finland, followed by Sweden and the US (World Bank 2014). Anyway, the majority of Estonians who have emigrated, especially to Finland, remain very closely linked to Estonia (Anniste 2014; Anniste, Tammaru 2014).

At the same time, the spending of foreign earnings in Estonia can increase inflationary pressure, especially in Tallinn where remittances can push up prices of primary goods and real estate. Looking at this from the viewpoint of entrepreneurs, another negative aspect is that emigration of workers could cause wage pressures in some sectors in Estonia. For instance, in 2007, wages in the Estonian construction sector increased approximately 30%. This was caused both by the real estate boom and also because many workers had left for Finland for work and it was necessary to significantly increase wages to keep them or attract them back.

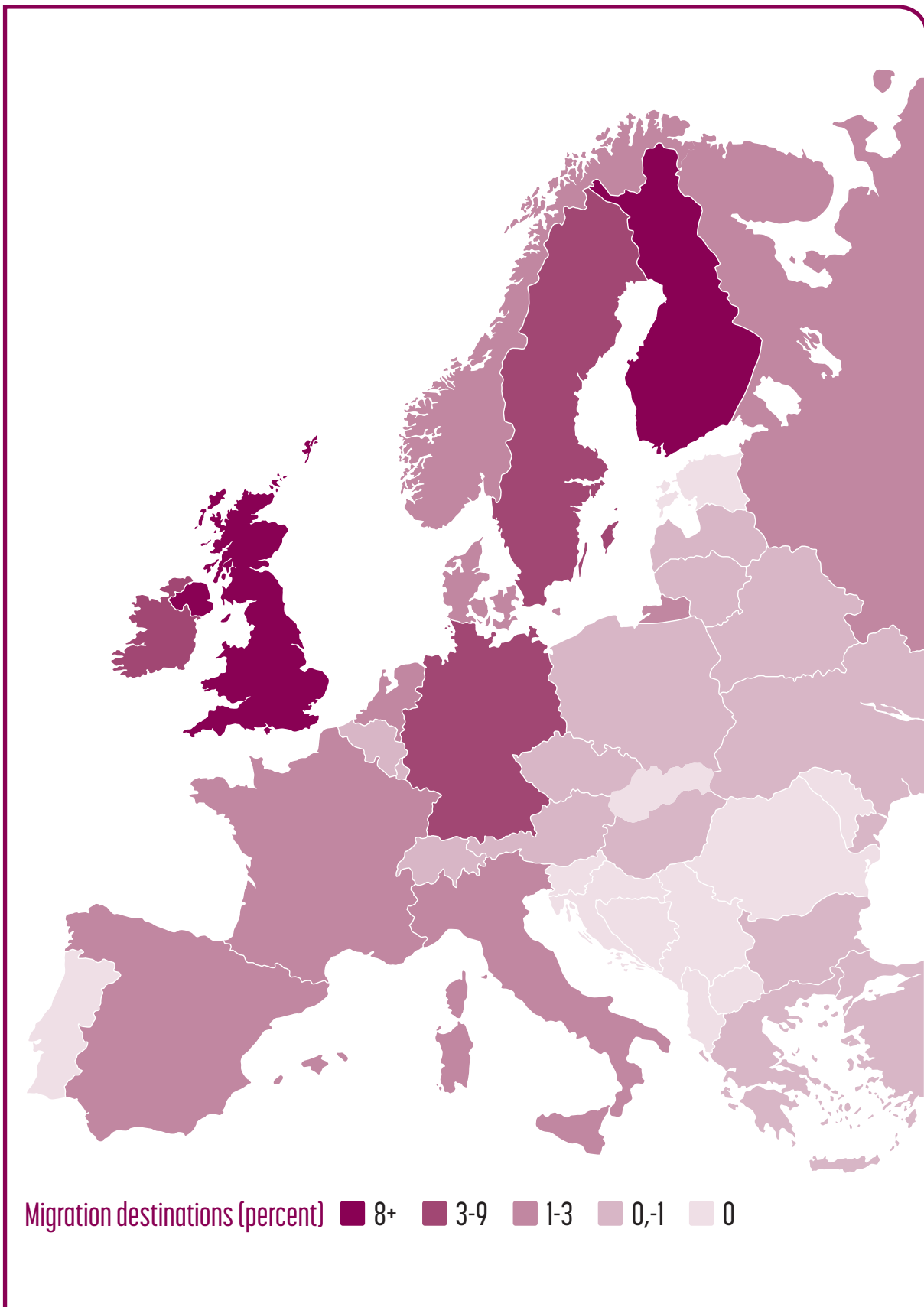
A negative aspect of emigration is, undoubtedly, the departure of educated and highly-skilled employees. The so-called “brain drain” especially hurts small countries where every highly-qualified employee is very valuable. In the long run, such a trend may cause a loss in productivity and the country’s competitiveness.

Since emigration is increasing domestic mobility towards

Tallinn, emigration is also increasing regional inequalities in Estonia. Peripheral areas which have fewer jobs and where the population is ageing faster are facing greater losses due to emigration than the large urban centres, and the disparities with urban centres increase. The negative migration balance further amplifies problems resulting from the ageing of the population because the people who are leaving are mainly young people in their prime childbearing age. As noted earlier, very many children are also leaving Estonia. Work abroad is also creating many social problems such as children being left to be raised by grandparents or remaining on their own, many families are split up. Another problem is that growing emigration affects labour market equilibrium, increasing labour demand as a result of emigration can cause increase in immigration.

The example of Southern European countries from the 1990s shows that emigration can shift to immigration very rapidly and extensively. Taking into consideration that immigration has been increasing year by year in Estonia, the current debate on the principles of Estonia’s immigration policy, including how Estonia should position itself in the so-called global talent hunt for educated and highly skilled workforce, is highly relevant.

MAP 2.6.2 Target countries of emigrants in Europe



Source: Census 2011.

Summary

Demographically, many Eastern European countries have reached the point where the large generations born in the 1980s are entering the labour market and reaching the main migration age. In the old Europe, people born during the baby boom of the 1950s are leaving the labour market. Demographic pressures, including significant disparities in income, are one of the main causes of East-to-West migration in Europe. In addition, emigration from Estonia is being influenced by the global economic crisis that started in 2008 and followed with the rapid growth of unemployment. In addition, one of the main reasons of current emigration is the immigration of Russians into Estonia during the Soviet era, as they either return home or move onwards to Europe. In the case of Estonia, we can also talk about temporary migration because many people who have left for Finland for work regard it as a temporary measure for improving the quality of life of their households.

Looking back historically at Estonia's migration, one can clearly detect three large emigration waves. The first started in the middle of the 19th century and lasted until Estonia became independent. The second wave occurred mainly in 1944 and, as a result, approximately 80,000 people left Estonia. The third wave has coincided with the second independence period, as in the last twenty years approximately 200,000 people have left Estonia. In the cases of the first and third emigration wave, one should also note the relatively high return migration levels (the same goes for deportees). Of the 230,000 people who left during the restoration of independence, a very significant number (approximately 170,000 people) were of other ethnic groups. In this category, the most important group is people linked to the Russian army and the military industry that left at the start of the 1990s.

According to the census data, between 2000 and 2012, a total of 70,500 people left Estonia; approximately 40,000 of

them have moved to Finland. By profile, an average Estonian emigrant is a young single woman who mainly has basic or secondary education. Among emigrants, the overwhelming majority are service staff and unemployed. A positive message contrasting with the negative background of such relatively high emigration figures is growth in return migration. About 28,000 people have moved to Estonia, many of them are return migrants.

Summarising the impact of emigration on the Estonian economy, the positive impact includes income earned from abroad that is transferred to or spent at home, i.e. in Estonia. According to the World Bank, such funds made up from 1.5-1.8% of the Estonian GDP. Emigration increases domestic consumption and in the case of student migration, decreases the need to train certain professions in Estonia. Temporary emigration is increasing people's occupational skills, improving work culture and enhancing education. Positive experiences increase tolerance towards people with different cultural background and provide knowledge of foreign languages.

Though economically, emigration has had a certain positive impact, the demographic and social impacts are, however, mainly negative. In a small country like Estonia, massive emigration is clearly a problem. The fact that in the last five years, the number of Estonians who have moved to Finland has doubled is alarming. Also temporary emigration could bring about social problems, split families, force children to be raised by grandparents, etc. At the same time it is very difficult to shape emigration with explicit policies. This leaves only indirect policies for regulating extensive emigration, especially those that are aimed at reducing welfare differences with the destination countries. Time will tell when the backbone of today's massive migration will be exactly broken, but current massive emigration is not sustainable over the longer period of time. ●

Acknowledgments

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MIGRATION

2.7

Reasons for migration and the changing identity of migrants

► MAARJA SAAR, MARI-LIIS JAKOBSON

Introduction

Although emigration has been on the rise for the last ten years, it has become a subject of public debate only recently. The topic has been discussed in the media (see e.g. Vengerfeldt 2009; Rosin 2013) as well as by politicians. The views of political parties on why people are leaving are quite contradictory. Keskerakond (the Estonian Centre Party), which took part of their election campaign to the port where ships leave for Finland (ERR 2014a), and Eesti Konservatiivne Rahvaerakond (the Conservative People's Party of Estonia), which put up a subunit in Finland (Postimees 2014), see emigrants primarily as victims of the domestic policy of the governments who have been in power in Estonia so far. An alternative position was presented by Tõnis Lukas, who caused a lively discussion in the media by saying that as a rule, contemporary migrants are comfort and convenience refugees, choosing the path of least resistance over contributing to the improvement of the life in Estonia (ERR 2014b). Reformierakond (the Estonian Reform Party), on the other hand, seems to have an opinion that emigration is an act of free will on behalf of every individual which does not have to be addressed by domestic policies of the state (ERR 2010). Their view is rather that the migrants are likely to return to Estonia after having gained experience abroad (Sippola 2013).

To interpret the ongoing debates in a more meaningful way and to add to the media perspectives that have been studied quite thoroughly, we will rely on various qualitative surveys and present a brief overview of what motivates migrants to leave Estonia and how they see their connection with Estonia. Furthermore, we will also aim to analyse what could motivate the migrants to return or strengthen their ties with Estonia.

This overview is mostly based on qualitative research on migration from Estonia. Our main sources include the Trans-Net Project of the 7th Framework Programme of the European Commission (see e.g. Jakobson et al. 2012) that studied the Finnish-Estonian transnational space, as well as interviews with highly-skilled Estonian immigrants in England (Saar 2015). According to Statistics Estonia, Finland and Great Britain are the primary migration destinations for Estonians, although attractive to different types of migrants. Finland could be considered attractive for the reasons of proximity, but also because of its generous welfare regime, whereas England, especially London, draws migrants that are interested in career and self-development.

2.7.1 Migrants' Reasoning for Migration

In a somewhat simplified manner, the reasons for leaving Estonia can be described on a linear scale (see Table 2.7.1). At one end of the scale there are those for whom migration is rather a forced choice and, at the other, those for whom migration is a way to find new opportunities and discover the world.

One of the most popular destinations for "economic migrants" is Finland (Randveer et al. 2010), however given the large number of Estonian migrants in Finland, it also attracts other types of migrants (see e.g. Jakobson et al. 2012). Among people interviewed within the Trans-Net project, there were those who found it impossible to ensure subsistence for their families with the salaries and social support system in Estonia, or because of a divorce or being widowed; problems with

TABLE 2.7.1 Reasons for emigration by groups

SELF-FULFILMENT MIGRANTS	QUALITY-OF-LIFE MIGRANTS			FORCED MIGRANTS
Migration as a strategy for enriching one's life experience	Migration as a strategy for adopting the soft values of the destination country	Work migration as a strategy for relieving the family's relative poverty	Migration as an opportunity to raise one's quality of life with the social guarantees of the destination country	Migration as a strategy for mitigating poverty

MIGRATION AS OPPORTUNITY

MIGRATION AS NECESSITY

monthly repayments of loans were also mentioned as a reason by some (*ibid.*). The so-called forced migrants are more likely to be workers, males, non-Estonians and older people (*see Saar 2015*).

The other group, for whom migration is an opportunity rather than a necessity, tends to be younger and with a higher education. For them, migration is often just one of the possible ways for self-development. Self-development is seen as an opportunity to further one's career, to discover the world or to test oneself. Unlike the so-called forced migrants, the motivations of the self-development-oriented migrants are more similar to the motivations of other Western migrants, who move less often for economic reasons and more for self-development purposes. Thus, the most popular reasons include a wish to experience other cultures and, especially in the case of young people, there is also an element of "taking time off" - time spent abroad is seen as the last opportunity to enjoy a carefree life. For example, many New Zealanders move to London to enjoy the local vibe, to travel etc. Although they often also work in their field of specialisation, making a career is not the reason for migrating (*see Conradson, Latham 2005*).

However, the similarity between the self-development migrants of Estonia and Western migrants is only partial. Based on the interviews conducted with highly-skilled migrants in the UK, we can say that unlike the New Zealanders described above, Estonian migrants looking for self-development are more career-oriented. They also often have a specific reason for moving, related to their work or studies. In addition to that, many young people go to foreign universities to study subjects not offered by universities in Estonia. Amongst those who go to England, there are a lot of creative professionals for whom the labour market in London offers significantly more opportunities. In many areas, moving to a larger country offers a chance to specialise further. The Estonian labour market sets limits on people with higher education, forcing them to work in positions that do not correspond to their specific training. This does not necessarily mean that these university graduates are over-qualified for jobs, it is rather that they have been trained in a field where the number of jobs available in Estonia is limited.

Besides the two aforementioned groups, there is also a

third group of migrants, which could be defined as quality-of-life migrants (*see Saar 2015*). However, this group in fact includes people who perceive quality of life in different ways, therefore their motives might vary, embracing the whole spectrum from financial concerns to living and working conditions. Differences can also be discerned within this group according to whether moving takes place with the family or alone. For instance, work-related emigration as a strategy for alleviating one's family's relative poverty usually means that one of the members of the family (often the "head of the family") goes abroad. It is not uncommon for the man in the family to work in Finland in order to increase the relative living standard of his family, which stays in Estonia. According to the study by *Uudeberg (2012)*, working in Finland is a way to pay the mortgage; to buy a second car for the family; to save money for repairs; to buy home technology; or to increase the financial security of their children. This kind of "pendulum" commuting can also lead to the family finally following the man to Finland.

Instead of higher salaries, some of the quality-of-life migrants are more interested in better social guarantees and the sense of security provided by living in a welfare society. Family migrants can often be found among those who have moved to the Nordic countries (for example among Ingrian Finns who have migrated from Estonia to Finland), with a safer society being one of the main attractions. But quality of life is not limited to material benefits. A study by *Maripuu (2012)* shows that many highly-educated Estonians decide to stay in the destination country because their living standard would drop significantly upon returning to Estonia - not only materially, but also because, for example, the cultural choices offered are more limited, or the value context in Estonia is comparatively conservative and materialistic. Quality-of-life migrants include non-Estonians as well as ethnic Estonians.

For non-ethnic Estonians, young people is probably discrimination in the Estonian labour market or social prejudice (*see e.g. Aptekar 2009*). This is especially true for highly-educated ethnic Russians who choose to emigrate.

The reasons for migration as described above are by no means exhaustive. For instance, family migration could be treated as a separate category. Family migrants either follow

their compatriot partners or leave the country to move in with their foreigner partner. Some of the emigrants to England that were interviewed had gone there or remained there for family reasons. For family migrants, often finding specialised work might prove to be a challenge. Especially for people with a higher education it can be difficult to find work at the same qualification level, and they are forced to work in a different field or to start at a position that is significantly lower. However, as can be seen in the case of Finland, family migration is becoming a bit more flexible, especially in the case of highly-qualified specialists – interviews showed that sometimes people who form a couple move to live in one country only after both partners have managed to find employment in their own field in that country. Still, this is not always a sustainable strategy, as finding a new job (e.g. after parental leave, because of a restructuring of the company, etc.) may not be so easy.

At the same time, all migrant groups are to some extent influenced by the neoliberal ideology predominant in Estonia and the public discourse it shapes. One of the most significant effects of neoliberal discourse is clearly the importance attributed to material values. Depending on the age group, the importance of material values differs, but compared to the 1980s, for instance, their importance has increased (see **Vihalemm, Klaus 2008**). The significance of material values went through a steep rise in the 1990s and it can be said that although the orientation toward achievement was probably the strongest for the "generation of winners", later generations have also been relatively materialistic. Interviews with highly-educated migrants in England showed that for many of them, working in England was related to position. A good position abroad was often seen as a sign of success, since reaching the same position outside was more challenging. One of the respondents said, for instance, that he is proud of his job, because it is common for Estonians living in England to work in unskilled jobs. Another probable reason why having a good job abroad is seen as prestigious is that in Soviet times the borders were closed and thus emigrating to the West still has a lingering aura of exoticism. Because travelling abroad was almost impossible at that time, it is still sometimes seen as a privilege. Both of these - valuing the position and seeing migration as a challenge - refer to the domestic discourse that considers these values important. In the Nordic countries, for instance, personal harmony was seen as the most important value, while in Estonia it is achievements that people consider most important (see **Vihalemm, Kalmus 2008**). In the case of the quality-of-life migrants who migrated in order to earn more money, it can also be seen that quality of life is defined in terms of the material means of the family, not in terms of spending more time with their family, for example. It must also be added, however, that some migrants leave Estonia precisely for those reasons related to non-material qualities of life - because of the "thin state" or the social climate of values. A number of those who migrate to Finland (but also Finns who have lived in Estonia and are considering returning to Finland) stressed the social guarantees provided by the Finnish

state as an important factor, as well as the public services and the lifestyles made possible by them (**Jakobson et al. 2012**). There were also many migrants who stressed the value structure of Finland and the sense of being cared for. For these migrants, a safe environment with social benefits was more important than financial advantages.

2.7.2 A Sense of Belonging and a Transnational Way of Life

It can be seen from most of the studies mentioned above that migration is usually not considered as a permanent strategy – rather, people leave for a certain period of time, e.g. with a fixed-term employment contract, for a term of studies etc. Often, however, the fixed term abroad is followed by several sequels, thus becoming longer than initially planned and making the decision to return more complicated. At the same time it can be said, on the basis of the studies conducted, that a number of emigrants retain a connection with Estonia – whether through family, friends, the information field, work or other factors (**Jakobson et al. 2012**). Such cross-border identity and relationship networks have become known as a transnational way of life (see e.g. **Vertovec 2009**). Thus the emigrants have not left Estonia for good but rather retain a connection with the country even while living abroad. Its intensity may change over time and periods of closer connections with the homeland may alternate with periods of less contact (**Foner 1997**).

Connection is also kept through identity categories in a more general sense. A mobile view of life has not had a significant transnationalising effect on such identity categories as nationality and citizenship. Estonians living in Finland have a rather primordial view of nationality: being Estonian is a characteristic that one is born with, it refers to one's roots and that these will never change, even if a person lives in another society for decades. There is a certain striving towards social integration in Finland; learning Finnish is considered important and so too is adapting to the local social behaviour patterns, but in the interviews a quote from a song from the era of the national awakening was quoted over and over again: "Eestlane olen ja eestlaseks jään, kui mind eestlaseks loodi" ("Estonian I am and Estonian I remain, since an Estonian I was created to be") (**Jakobson et al. 2012**).

Comparing participation statistics in Finland and Estonia, a characteristically Estonian passivity in social participation can be seen as well. Although several respondents belonged to at least one association in Finland, this participation was usually passive. Membership in a trade union (a form of passive belonging) was mentioned especially often, as this is a prerequisite for receiving various social benefits (*ibid.*). Earlier quantitative studies had also established that Estonians living in Finland are not active members of associations (**Liebkind et al. 2004**). The participation of the Estonian respondents in elections on either side of the Gulf was also rather low. Several re-

spondents were not even aware of their right to participate in the local elections of Finland. Comments on participation in Estonian elections expressed reservations: there were respondents who said that they don't even have a moral right to participate in the elections of Estonia, as they will not have to live by the rules established by the elections. Even more numerous were respondents who plainly admitted that going to vote (**at the Embassy**) was an effort and that they wouldn't even know who to vote for.

At the same time, Estonian citizenship is retained, referring to the possibility provided by EU citizenship to postpone the complicated decision of renouncing the citizenship obtained at birth. Finland's citizenship statistics show that taking Finnish citizenship has significantly decreased among Estonians after the accession to the European Union. By 2004, the number of people changing from Estonian citizenship to Finnish citizenship had risen to 690 people annually, although the next year it decreased by half (291), and the trend continued until the impacts of the economic crisis were felt at the turn of the decade. (**Tilastokeskus 2013**). People interviewed within the Trans-Net project also mentioned that while it was an object of desire in the early 1990s, "coveted by all", after 2004 Finnish citizenship ceased to be an important issue. Citizenship is seen as an instrumental category ("citizenship determines which state is responsible for you") (**Jakobson 2014**). The rise in 2012-2013 cannot be explained on the basis of data from Trans-Net collected in 2009-2010.

The respondents who had changed their citizenship mostly explained their decision as following from the fact that they have settled down in Finland. In some cases, it is a family strategy – all members of the family changed their citizenship simultaneously. But there were also those who regretted their change of citizenship for emotional reasons ("I feel like a traitor") as well as people who had established a long-term connection with Finland but wished to retain their Estonian citizenship as a connection to Estonia to be handed down in the family.

At the same time, although formal citizenship status is usually not changed, several parallel categories of connectedness appear for the Estonians. The Trans-Net interviews showed that emigrants to Finland are characterised by parallel loyalties, i.e. they feel connected to the land, people and to some extent also the society of Estonia, while also being loyal to the state of Finland, to which they are grateful for the opportunities and benefits that the new country of residence has provided (**Jakobson 2014**). The respondents expressed their loyalty to the state of Finland by, for example, complying with its legislation and paying various taxes (car tax, TV tax, progressive income tax), although many pointed out that because of their transnationality, they could have avoided some of the taxes through Estonia's tax system.

By their identity categories, the Estonian-speaking emigrants that were interviewed for the Trans-Net project differ clearly from Russian-speaking emigrants. According to those studies, the decision to emigrate tends to be much more permanent and the lukewarm feelings towards the state of Estonia

are replaced by an indignation towards the exclusive citizenship and language policies of Estonia as well as the ethnic stratification and marginalisation of minorities (**Hughes 2005; Aptekar 2009**).

2.7.3 Returning and its Alternatives

To summarise, many emigrants retain contacts with Estonia and they deepen at certain periods of life, resulting in a possible return to Estonia. The practical rationale behind the motivation to emigrate remains, however. The differences in quality of life between Estonia and elsewhere remain, and are a significant hindrance to returning. Quality of life here does not relate solely to salary differences between, for example, Finland and Estonia but also to the specifics of the labour market – whether a highly-qualified specialist who has had a successful career elsewhere can find a suitable job in Estonia. In addition, there are considerations on the plane of values and cultural possibilities – how large are the sacrifices in lifestyle that have to be made in order to adapt to the opportunities and norms of Estonia? It should also be noted, however, that to a certain extent, returning depends on the career position. There are areas (finance, IT) where returning to Estonia can improve a person's life quality, while in creative industries, the effect can be the opposite. This situation leads to a paradox where some social groups return to Estonia precisely because of the quality of life, while others decide to leave in order to raise their living standards.

However, facilitating and simplifying the return process is not necessarily the only way to keep contact with the Estonians living abroad. Besides being a transnational lifestyle for individuals, transnationalism is also a viable strategy in state policies (**Kalev, Jakobson 2012; 2013**). Several states involve their emigrants in achieving political goals of the state, whether for furthering diplomatic and trade relations abroad; as a transfer mechanism for knowledge and skills; or by establishing consulting bodies of people living abroad (an example is Finland's Expatriate Parliament). There are also states that have given their diaspora a mandate in the representational democracy (Italy); levied special taxes (Haiti); offered double citizenship (Finland, Latvia, etc.); or created other legal statuses for their people living abroad (India).

The Compatriots Programme in force in Estonia at present, which is the closest document we have to a diaspora policy, has so far focused mainly on teaching Estonian language and culture abroad, which is important to parents who wish their children to have connections with the Estonian linguistic and cultural space in their present country of residence. Transnational specialty-related and economic networks have developed rather informally and independently of state policies, which means that their inclusion in achieving state policy goals is dubious. However, a network of Estonian Houses (as well as other Estonian diaspora associations) has a definite potential for more. It can be seen from studies that Estonians have retained their sense of connection with their land and

people, while what they would be ready to do for the sake of their home country is more of a question. A more active and broad-based diaspora policy, however, would communicate the views of the state of Estonia regarding the Estonians living abroad and could possibly change this attitude over time.

Conclusion

To conclude, the discussion above has demonstrated the diversity of emigrant groups as well as the ways that the emigration and return decisions are influenced by a rich combination of different factors, only some of which have so far been included in the political discourse. The neoliberal view of migration as a way to maximise one's opportunities applies to only one segment of migrants. There are those emigrants who "vote with their feet", as well as those who simply use emigration as an opportunity to increase their personal welfare. Therefore, even if migration is motivated by the political decisions of the Government, as is argued by the opposition parties, migrants themselves did not feel that these decisions stemmed from a fault of the Estonian government,

as shown by the studies. At the same time, migrants did not express a direct sense of loyalty or debt to the state of Estonia – there is rather a feeling of being connected to the land and people of Estonia, while the motives behind their actions are individual. Emigrants usually don't want to forfeit their Estonian citizenship, however, and don't exclude the possibility of returning in the future.

Although there were those among the migrants who value the welfare and social security of their new country of residence, calling migration a choice of convenience is clearly questionable, as resettling also brings significant inconveniences. There is a new language environment one has to adapt to; a new employment and service sphere; a new communication culture that differs from that of Estonia, even in closely-related Finland; not to mention possible discrimination or the fact that one has to start at a significantly lower position in the labour market. Although discussion on the topics related to migration in the Estonian public sphere is generally important, the sometimes inconsiderate rhetoric that has been exercised so far may have a reverse, negative effect on the deliberations of Estonians who have settled abroad as to whether to return. After all, they are still among the consumers of Estonian media. ●

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MIGRATION

2.8

Estonians Working Abroad

► SIIM KRUSELL

Introduction

Estonia's net migration has been negative since the 1990s, and combined with negative population growth, this means a continuous decrease in the population of Estonia. There are various reasons for emigration; it can be related to family and personal life, a better living environment, or more suitable climate, but in very many cases, emigration is also work-related. Working abroad, however, does not necessarily mean settling abroad for good. It is often hard to define the border between just working abroad and having settled there. In order to maintain his or her residency, a person living in Estonia needs to stay in Estonia for 183 days per year, but the lack of controlled borders between EU states makes this difficult to record. Also, someone who has emigrated from Estonia cannot be termed a "lost soul" automatically, as a considerable portion of emigrants return to Estonia even after having lived abroad for years. In 2013, for instance, more than half of those who settled in Estonia had Estonian citizenship.

People who work abroad can be defined as cross-border commuters. These are people who work in one country, while having a permanent place of residence in another (Nerb et al. 2009). In the present analysis, we use the term "working abroad" for cross-border commuting. When talking about working abroad, its temporary character compared to a migration decision has been stressed (Nerb et al. 2009). At the same time, working abroad is a factor conducive to making a migration decision, and a considerable number of people working abroad may already have decided to migrate, but this does not yet show up in the statistics of the destination nor the home country, leaving these persons in a "grey zone". In

the case of the present analysis, there is probably a marginal share of people in the "grey zone". The main reason for this is that a census does not take the population registry as its basis, but rather the answers of the respondents or members of their household about whether the family member has already migrated or is only working there.

In neo-classical macroeconomic theory, migrants supply the workforce. The assumption is that individual migration decisions are made because of the differences of supply and demand in the employment markets of the home country and the destination country. Movement of labour is caused by salary differences between countries, which are a result of the imbalance between the supply and demand of labour (Russell 1995). Earlier studies in Europe have demonstrated that for migration to happen, the income difference must be at least twofold (Hadler 2006). Several reasons have been given for migrating for work reasons as well as for working abroad, and especially in the context of economic theories, there is no reason to see the two as fundamentally different. In both cases, there is labour mobility, motivated first and foremost by the workers' desire to gain economic benefits (Eliasson et al. 2003). Leaving the reasons aside, however, Nowotny (2014) has shown that there are differences between those who have settled and those who just work abroad - for instance, a person who only works abroad is likely to spend a large part of what he/she earns at home rather than in the destination country.

Regardless of the differences, however, an analysis of working abroad should also look at studies that have been already conducted on migration or ethnic networks in the destination country. In the case of networks in the destination

country, Finland as one of the main destinations for migration from Estonia as well as working abroad, has a special place.

The chapter will present an overview of the reasons and motives for work migration and the role of existing social networks. The main emphasis, however, is on the profile of persons working abroad, and their position in the employment market abroad. Our main focus is on recent years, based on the data from the Population and Housing Census (PHC), 2011 as well as the Estonian Labour Force Survey (ELFS), 2011–2013, while comparing the data with the PHC 2000, where possible. Besides the general trends, a more detailed look is also taken at working and matters related to it in Finland – and at whether Finland is different from other destination countries, and how.

2.8.1 A Profile of Persons Working Abroad and Their Social-Demographic Characterisation

According to the **Eurobarometer (2011)**, 7% of the people of the EU have experience working abroad, and 3% were working abroad at the time of the survey. In Estonia, 15% of people 15 or older either are working or have worked abroad. Of our closest neighbours, the number is 12% in Lithuania and 11% in Latvia. Various quantitative estimates have been given about people who have left Estonia to work abroad. A couple of years before the PHC 2011, **Nerb et al. (2009)** estimated the number of Estonian cross-border commuters at 20,500, which makes Estonia one of the leading countries of origin for commuter-workers in Europe, at 15.8 commuters per 1000 inhabitants (**Viira 2010**). According to PHC 2011, the number of people working abroad was almost 25,000, and that is many times the number of PHC 2000 (see **Table 2.8.1**). There are several possible reasons for this quick increase, and they work in combination: accession to the European Union; the resulting disappearance of borders and the opening of the employment markets of other countries; a significantly higher salary level in the main destination countries for commuting; geographical proximity; good transport connections; and in the case of Finland, linguistic and cultural similarities as well.

An estimation based on the Estonian Labour Force Survey (2011–2013) can be used for comparison as a source from approximately the same period. This survey also estimated the number of people working abroad to be in the 25,000 range. However, quite different numbers are offered by **Krzywacki (2013)**, according to whom the number of Estonians working in Finland alone was around 30,000 in 2012. Can it be that Estonian sources significantly underestimate the number of people working abroad? The difference here is caused by different study methods. **Krzywacki's 2013** estimation applies to people who have worked in Finland during the year, while the PHC looks at those who worked in Finland during a specific period, which was quite short. Working abroad is not always a long-term affair – it is not unusual to work for 3 months and then return.

Nerb et al. (2009) point out that in the European Union, people working abroad are predominantly male and most of them are in the age group of 25–45 years (**Viira 2010**). In the social-demographic profile of the resident of Estonia working abroad in the period of 2003–2008 or having worked abroad, males and younger people dominated as well (**Krusell 2009**). The censuses of 2011 and 2000 also show that males are predominant; in 2011 females accounted for less than one-fifth of the people working abroad. According to the PHC 2011, there were more people over thirty than younger ones working abroad, which is not very different from the picture characteristic of the EU, as shown by Nerb et al. Compared to the PHC 2000, the PHC 2011 showed that the number of Estonian-speakers among people working abroad had increased. Also, the share of younger people working abroad had risen during the decade.

According to the Eurobarometer, people with a higher educational level tend more to express a readiness to work abroad in the European Union. For them, the possible language barrier, for example, was much less important than for people with a lower educational level (**Eurobarometer 2011**). **Tarum (2014)** has pointed out, however, that in Estonia, the number of potential emigrants was significantly lower among people with a higher education. The PHC 2000 demonstrated that the number of highly-educated people among those who work abroad was almost the same as among those who work in Estonia, while in the PHC 2011 the results differ considerably. The share of highly-educated people among those working abroad had fallen significantly, being only 23%. The share

TABLE 2.8.1 Residents of Estonia working abroad by gender, age and mother tongue: 2000, 2011

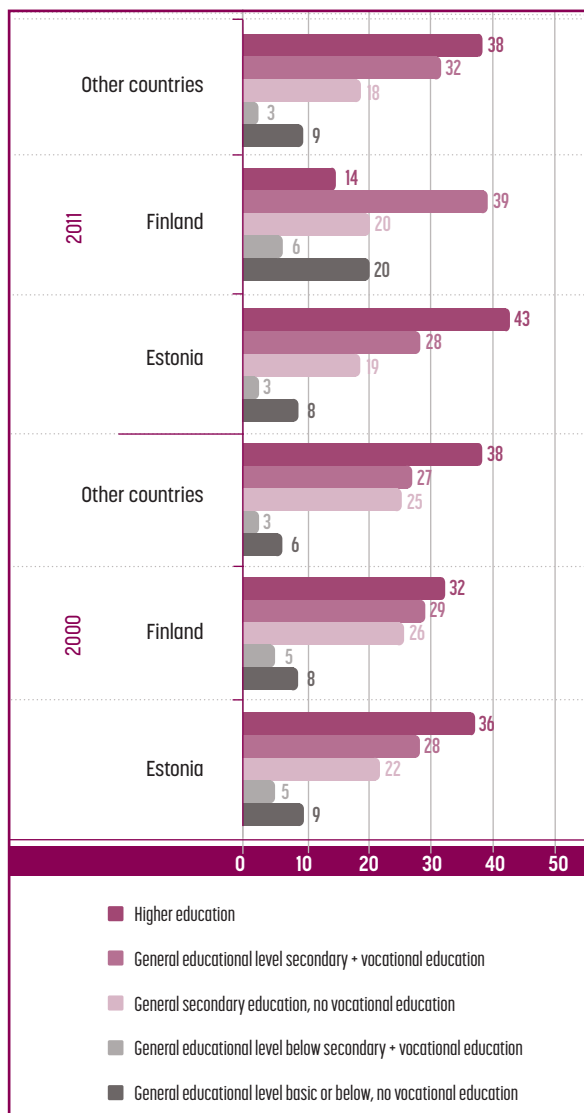
	2011		2000	
	Number	%	Number	%
WORKING ABROAD	24 907	4,4	2646	0,6
GENDER				
Male	20 727	83	1728	65
Female	4180	17	918	35
AGE				
15–29	6862	28	1095	41
30–49	13 943	56	1291	49
50–	4102	16	258	10
MOTHER TONGUE				
Estonian	18724	75	1852	70
Other	6181	25	794	30

Source: PHC 2011.

NOTE: For workplace locations, only clearly fixed locations are shown. Source: PHC 2011.

of people with only a basic education had risen from 6% to 16% and the share of those who have acquired a profession as well as a secondary education had risen from 27% to 36% (Figure 2.8.1). However, the total number of persons with a higher education working abroad had nevertheless increased. Excluding Finland from the analysis, the educational proportions among those working abroad are similar to those among people who work in Estonia. The difference was probably most significant in people with higher education. While only 14% of migrants working in Finland had a higher education, when excluding Finland the share of highly-educated workers rose to 38%. Of those who had gone to work in other countries, only one-tenth had lower than secondary education, while in the case of Finland it is one-fourth (see Figure 2.8.1).

FIGURE 2.8.1 Education levels across workers host countries, 2011, by %



Source: PHC 2011

2.8.2 Destination Countries for Working Abroad

In the PHC 2000 as well as the PHC 2011, the main destination countries for working abroad are Estonia's close neighbours Finland, Sweden and Russia. Working abroad has grown in all the main destination countries, with the increase especially notable in the case of Finland. Somewhat surprisingly, working in Ireland and Australia, for example, is very rare in the PHC 2011. In the case of Ireland, this may be caused by the disappearance of cross-border commuting, i.e. people working in Ireland have settled down there. For Australia, under-coverage may be a more significant reason, or, as with other countries, a position in the "grey zone". This means that according to the civil registry, the person is still living in Estonia, while in reality he or she has already settled somewhere else. The under-coverage of cross-border commuters decreased in the PHC 2011 compared to the PHC 2000, clearly because of the possibility of presenting data about oneself, but the under-coverage is probably still more significant in the case of people working abroad than it is for those working in Estonia. With respect to working abroad, Finland is a special case worth analysing separately, if only for the reason that more than half of the people working abroad work in Finland (Table 2.8.2).

Considering also the earlier surveys, the popularity of Finland as a destination country does not come as a surprise. **Veidemann (2010)** has pointed out that in 2006, as well as in 2009, half of the potential emigrants already preferred Finland. **Mõtsmees (2012)** has estimated that also in the case of people actually working abroad, the share of people working in Finland out of all workers abroad was approximately half in 2009. Out of the people who had worked or were working abroad at the time of being interviewed in the years 2003–2008, also about a half were working in Finland (**Krusell 2009**).

We can say that working in Finland has a significant influence on the socio-economic profile of people working abroad, with respect to gender, mother tongue and education as well as the division of professions. This is clearly demonstrated by the data of the PHC 2011. The differences are especially noticeable regarding gender – there were about 2,000 females working in Finland, while there were 12,000 males, the majority in the age group 30–49. Work in Finland had an additional influence on the division by gender of workers abroad in favour of males. In the case of age, there were no significant differences between workers in Finland and workers in other foreign countries – in other countries as well, Estonian residents from the age group of 30–49 were the most common. The mother tongue of 86% of the migrants working in Finland was Estonian. While across all destination countries, the share of Estonian-speakers was higher than among people working in Estonia, leaving Finland out would reverse this relation. Thus, according to the PHC 2011, not counting Finland, the mother tongue of 57% of workers abroad was Estonian.

TABLE 2.8.2 Working abroad, by main destination countries: 2000, 2011

	2000	2011
FINLAND	662	15140
NORWAY	47	1872
SWEDEN	192	1532
RUSSIA	696	1357
UNITED KINGDOM	71	732
GERMANY	202	616
HOLLAND	25	290
BELGIUM	34	257
LATVIA	165	234
USA	156	183

Source: PHC 2011.

2.8.3 Ways of finding work Abroad

There are various ways of finding a job, from social networks to internet portals or even starting a business of your own. Granovetter has thoroughly studied the role of social networks in looking for work, and has pointed out that although social networks are not focused on or meant for mediating employment opportunities, a large part of the information available in these networks is still related to this topic (Granovetter 2005). The tighter the networks of migrants in a destination country, the more likely the migration is to grow. It has been pointed out in network theory that if a network is strong enough, it will start reproducing itself, so that information about available jobs will become more widespread

and these jobs will be recommended to one's relatives or acquaintances. In strong networks, network-specific companies will appear, recruiting employees mostly from within the network. This will give rise to an ethnic economy (Light, Karageorgis 1994), ethnic enclaves (Portes, Bach 1985) or ethnic niches (Waldinger 1997). In the context of dual labour market theory, Portes et al. (1985) have described processes and mechanisms that determine the essence of an employment market in ethnic enclaves where the employment market works on the basis of a common ethnicity of employers and employees. In such enclaves, foreigners can become concentrated into certain professions, forming a so-called professional niche (Portes et al. 1985). The likelihood of foreigners being employed in low-paying jobs that don't require a high level of education has also been pointed out (Wilson 1999).

It is safe to say that the majority of people working abroad have used social networks for finding employment, i.e. they have found work through acquaintances, with the number being over 70% in the case of people working in Finland. The proportion of people who have found work like this was significantly higher than in Estonia. Various mediating agents or direct contacts had a much smaller role in finding work abroad than they have in Estonia. Finding work as a result of the employee's own competitiveness was not very significant for finding employment either in Estonia nor abroad. Still, this indicator was much higher for jobs in Estonia. In this context, competitiveness means that the employee was either offered a better position or that finding work meant starting their own business.

TABLE 2.8.3 Working abroad according to occupation, 2011, by %

	2000			2011		
	Estonia	Finland	Other countries	Estonia	Finland	Other countries
Managers	13	6	14	11	3	8
Professionals	14	14	13	19	3	10
Technicians and associate professionals	14	13	14	16	5	14
Clerical support workers	6	2	3	6	1	3
Service and sales workers	13	15	18	14	3	9
Skilled agricultural, forestry and fishery workers	3	6	4	2	2	1
Craft and related trades workers	15	18	19	13	59	30
Plant and machine operators, and assemblers	12	13	10	11	14	19
Elementary occupations	11	14	6	8	9	6

Source: PHC 2011.

TABLE 2.8.4 Workers with higher education, according to occupation and country of employment, 2011, by %

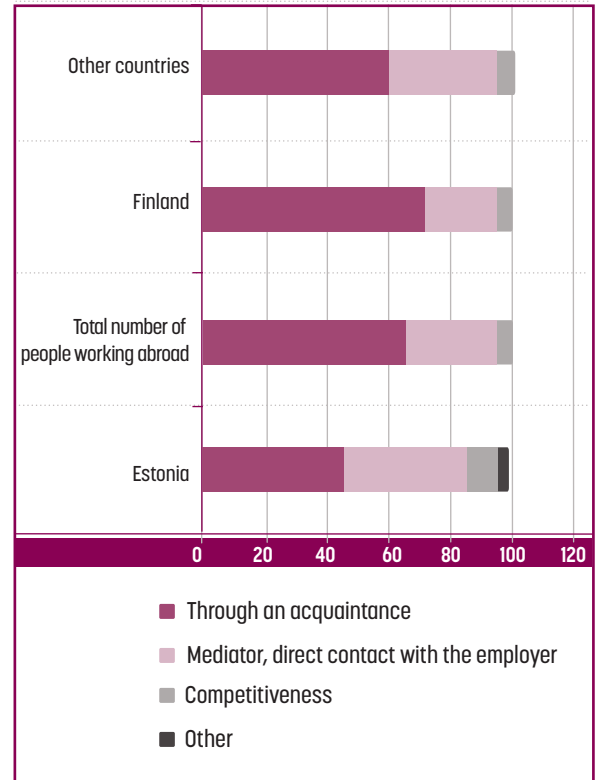
	Estonia	Finland	Other countries
Managers	16	5	17
Professionals	38	18	26
Technicians and associate professionals	18	11	24
Clerical support workers	5	2	4
Service and sales workers	8	7	8
Skilled agricultural, forestry and fishery workers	1	3	1
Craft and related trades workers	5	35	11
Plant and machine operators, and assemblers	4	11	7
Elementary occupations	4	10	3

Source: PHC, 2011.

2.8.4 Persons working abroad according to occupation and field of activity

What is the occupational profile of workers from Estonia abroad? Do these people mainly belong to the secondary labour market as described by Piore (1979) and do they experience difficulties finding a work position that would correspond to their acquired education? The first tendency demonstrated by a comparison of the work position divisions of the two censuses is that while in the PHC 2000, the occupational profiles of people working abroad was similar to that of people working in Estonia, this had changed in the PHC 2011. A significant shift in favour of blue-collar positions had taken place. For instance, while during the PHC 2000 19% of the people working abroad were employed in positions of skilled labour and manual labour, the percentage was as high as 47 in 2011. The proportion of professionals fell from 12% to 5% in the same period. It must be noted, however, that although the relative importance of white-collar employees fell significantly by the time of the PHC 2011, their total number still grew – mostly because the total number of people working abroad grew considerably. When we look at working destinations separately, it can be seen that the main "culprit" in the growth of the importance of blue-collar workers by 2011 is the job position division in Finland. The share of blue-collar positions was significantly higher than in Estonia, and also in other countries, but managers and professionals still accounted for almost one-fifth. Of the people working in Finland, only 6% were managers/professionals in 2011. The proportion of manual and skilled labourers was as high as

FIGURE 2.8.2 Ways of finding work across countries, 2011-2013, by %



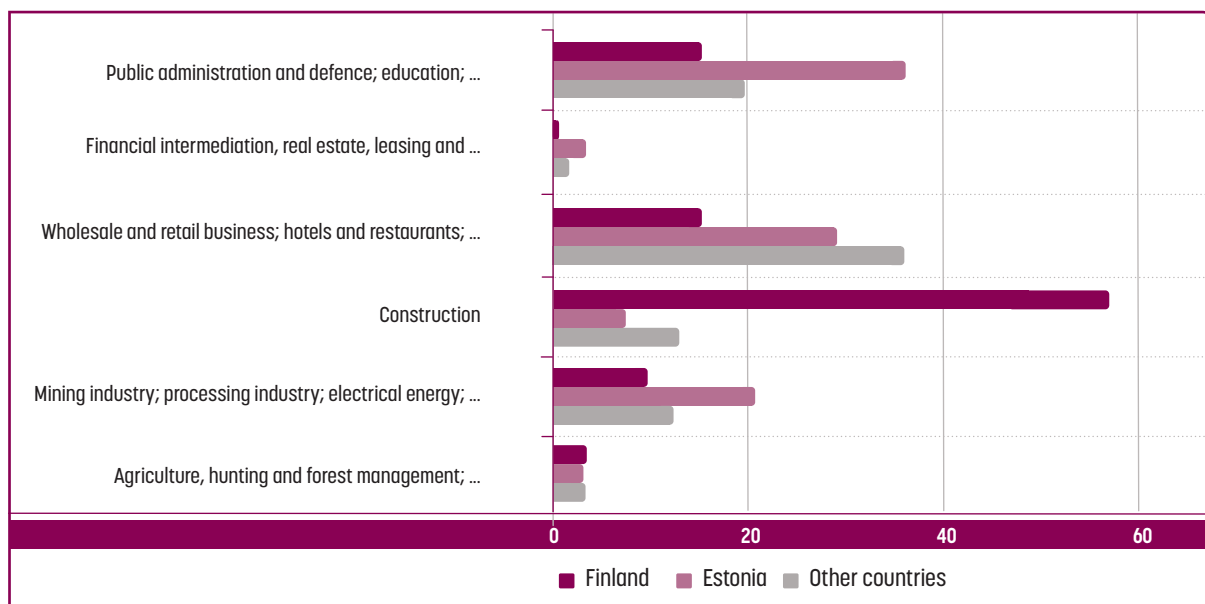
Source: Estonian Labour Force Surveys 2011, 2012, 2013.

NOTE: In this context, competitiveness means that the employee was either offered a better position or that finding work meant starting their own business.

59%, with device and machine operators accounting for an additional 14% (see Table 2.8.3).

An increase in the proportion of blue-collar workers among people working abroad could have been foreseen also through changes in education, i.e. through the decrease of the proportion of people with a higher education among workers abroad for example. This kind of logic, however, does not always apply. Currie (2008) has shown with the example of Poland that brain-drain does not necessarily mean going to a job of equal position abroad, but could mean instead that people with a higher education have taken up jobs that they are overqualified for. Considering the present situation, Estonia is no exception here. Mõtsmees (2012) has established that for 14% of males, going to work abroad meant moving higher on the career ladder, while with females it was 23%. The move was downward for a much larger number – for 42% of males and 34% of females (Mõtsmees 2012). The PHC 2011 also shows that people with higher education often worked abroad in po-

FIGURE 2.8.3 Working across fields of activity and locations of workplace, 2011, by %



Source: PHC 2011.

sitions that did not correspond to their educational level. Thus, 38% of people with a higher education worked as professionals in Estonia, while it was only 22% among those who worked abroad. Five percent of people with higher education worked in positions of skilled labour in Estonia, and 20% of those who worked abroad. Again, the indicators for Finland differed significantly here, with the gaps being even wider than in Estonia. Just 18% of people with a higher education working in Finland were employed as professionals, with the majority working in positions of skilled or manual labour. One-tenth of people with a higher education working in Finland were employed as unskilled labour, which exceeds the corresponding indicator for Estonia many times. Thus, Finland plays an important part in shaping the average job position division of people with a higher education working abroad. Should we leave Finland out of the analysis, the job position division in all other destination countries would not be that different from the corresponding pattern in Estonia. Significant differences would remain – a smaller proportion of professionals, a larger proportion of blue-collar workers – but the overall picture would be much closer to the average division in Estonia (see Figure 2.8.3).

Looking at fields of activity, construction, the hospitality and service industries, and manufacturing have emerged in Europe as popular choices among those who work abroad. As exceptions, agriculture, healthcare and social work dominate in some countries (Viira 2010). Estonia's potential job-seekers abroad do not differ significantly from those in the rest of Europe. The processing industry (20%) and construction (17%) are the most popular among those who want to find work abroad. People working in the retail and wholesale trades form the third largest group (14% of all prospective emigrants) (Järv

2007). According to the PHC 2011, the most popular fields of activity abroad coincide with the ones where potential jobs have been desired. Still, construction stands out among the rest. While workers in construction accounted for less than 10% of all employed people in Estonia, 40% of those working abroad were in construction. As almost half of the people employed abroad were working in construction, the share of people employed in other areas was smaller than the respective indicators in Estonia. Working in construction was especially common in the case of Finland. More than half of the people working in Finland were employed in construction, and looking at the job positions across fields of activity, most of the skilled and manual labour positions were in construction. We can ask if the number of construction workers employed in Finland is already exceeding the number working in Estonia. This is not the case, however, as the majority (approximately 35,000) of the people working in the field of construction are still employed in Estonia. The share of people working in transport and warehousing is larger than the corresponding share in Estonia, and the same is true for administrative and support activities. Working in fields like information and communications, and finance and insurance, on the other hand, was quite minimal in proportion. Leaving Finland aside, the wholesale and retail trade, and the hospitality industry became number one across all other destination countries, but the share of people working in construction still remained higher than the average in Estonia.

Conclusion

There is no reason to doubt that the reasons given for migration in migration theories or reports of cross-border commuting apply to Estonia as well. These entail first of all a significantly lower salary level in Estonia on the one hand, and the costs in time and money that are related to working abroad on the other. Cultural-linguistic similarities and a considerable community in the destination country can also be added. This combination has been most visible in Finland, which has become the main destination country for work-related migration.

Light et al. (1999) have introduced the concept of an ethnic economy, where immigrant entrepreneurs of a certain ethnic group tend to employ members of the same group. In Finland, this can be noted most clearly in the field of construction. According to the PHC 2011, approximately 4% of the people working in Finland were entrepreneurs with employees. This does not look like a very large number at first, but the proportion of entrepreneurs with employees is in the same range as in Estonia. Thus, Estonian entrepreneurs tend to employ workers from Estonia. Surveys and statistics about workers from Eastern Europe who have either settled or are going to work in the so-called "rich" European countries display a trend of usually taking up employment in a blue-collar position, and there are certain fields/sectors that are significantly more popular than others. Workers from Eastern Europe are often also employed in seasonal labour (Kogan 2011). Thus, the tendency of people from Estonia going to work abroad as blue-collar workers is not fundamentally different from the experience of other Eastern European countries. Even leaving Finland out, the occupational division in all other destination countries was still skewed towards blue-collar positions.

The high education level of the residents of Estonia has often been remarked upon, highlighting the large proportion of people with a higher education compared, for instance, with other countries of the European Union. Higher education does provide a competitive advantage in Estonia, but it is poorly convertible to corresponding job positions when applying for work abroad. The main reason for this is not necessarily a lower level of professional knowledge, but rather, as pointed out also by **Portes et al. (1985)**, a lack of fluency in the language and paucity of the strong social networks needed in the primary labour market.

The aim of the present analysis has been to look at the characteristic indicators of working abroad as a whole, and to

focus specifically on Finland as the most popular destination country. A detailed look at the other countries was not our aim, and in most cases, the small size of the sample set the limitations. Still, it can be pointed out that there were countries where white-collar positions dominated. Belgium and the USA stand out for their larger proportion of white-collar migrants and people with a higher education - this is probably because of the international institutions located in these countries, and the number of residents of Estonia working in these institutions. Australia and Russia also stand out as exceptions. In Australia, the dominance of younger people is greater, while the main distinguishing characteristic for Russia is that the mother tongue of people working there is predominantly Russian. Other Nordic countries have a "profile" similar to that of Finland - especially regarding the relatively low level of education of migrants working there, and the predominance of males and blue-collar workers.

Working abroad cannot be viewed one-sidedly, saying that it is only positive or negative - as always, there are two sides to the coin. On the good side, working abroad is an opportunity for many people to avoid unemployment and to improve their own and their family's economic situation. The opportunity to seek employment abroad helped significantly in mitigating unemployment risks in the construction sector, where relative fallbacks were the highest during the economic crisis. Other definite bonuses are the new experiences and skills acquired professionally as well as personally, for example, learning new languages. On the negative side, being away from the family brings about a conflictual situation where a family's economic standing is improving, but the human relations may suffer, which in turn means a higher risk of broken families.

Working abroad does not influence Estonia's demographic situation directly, but it does increase the likelihood of a person settling down in another country, and thus, of course, it does have an influence. As younger people dominate among those who leave Estonia, emigration may also have a significant effect on issues like the birth rate in Estonia. An open job market and open borders mean that nobody is forced to stay in Estonia anymore. It is not uncommon to return to Estonia after working or studying abroad. More than a half of the immigrants to Estonia in 2013 had Estonian citizenship. Not all of them count as returnees, but the majority does. Fortunately, open borders mean that it is not only easier to leave, it is also easier to return. ●

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SUMMARY

► ELLU SAAR

In this chapter we looked at social cohesion. Education has a key role to play in creating the conditions for Estonia to become a knowledge-based society, ensuring both the social inclusion of the population and the social cohesion of society. Therefore we started our analysis in this chapter with education. The Estonian education system displays characteristics that both increase and decrease social cohesion. The rather late division into academic and vocational tracks can be considered positive. General trends in Estonian education seem to be going in a rather positive direction. Estonian students are among the best in Europe in terms of academic outcomes (see Lindemann 2013). The effect of social background on educational results is less than the European Union average. The key information-processing skills of Estonian adults are better than the average of those in the countries that participated in the PIAAC study (Halapuu, Valk 2014). In recent decades the percentage of graduates from higher education has increased, as well as has participation in lifelong learning. The share of students with a low educational level (basic education or below), or not participating in education, has somewhat diminished and remains below the European Union average.

At the same time, there is considerable room for improvement in education. Already at the level of primary education the competitive agenda based on measurement and competition can be seen, which shows up in large cities as the differentiation of schools into “traditional” schools and schools that select students based on aptitude tests. This differentiation involves the preparing of children for school, and results in a compounding of inequality. The analysis in this chapter showed that at the secondary-education level there is a convergence of cultural capital and parents’ resources, particularly at Tallinn’s elite schools, which indicates reproduction of social strata. The reasons behind better results at these schools are primarily the ability to select students, and therefore a student body with favourable social backgrounds. And it remains true that selective schools are unable to even out those differences in students’ academic outcomes that are due to different social backgrounds. The inequality at lower levels of education is carried over to higher education. The experience of the Nordic countries shows that pre-primary education plays a very important role in equalising the educational opportunities of

children with different economic and cultural capital (see Esping-Andersen 2006). Therefore, making pre-primary education more homogenised would contribute to the reduction of social reproduction and prevent the accumulation of disadvantage.

The division of the Estonian educational system into strands based on the main language of instruction, a legacy of the Soviet period, still exerts a chokehold on Estonian education. At the secondary level, the educational paths of young people in Estonia diverge according to their ethnic origin. This is part of the reason why the probability of obtaining higher education is lower among non-Estonian youth. Moreover, the “glass ceiling” effect can be observed in the case of non-Estonian youth. The reforms that began in the 1990s were aimed at transforming the Russian-language branch of education into an Estonian-language one. Unfortunately, the reforms have not contributed to the development of an inclusive environment because they started from higher education rather than the lowest level of the education system, i.e. pre-school institutions. Many problems have come to light in the transition of Russian-language schools to partially Estonian language-based instruction in special subjects, which have brought with them a danger of greater polarisation among the non-Estonian youth, depending on their command of the Estonian language, which in turn tends to correlate strongly with the unequal resources of their parents. Regrettably, the integration of, and cooperation between, the Estonian- and Russian-medium branches of education have been pushed into the background.

A cumulative effect is evident in participation in lifelong learning as well: more resource-rich groups participate more, while those social groups who most need this learning participate less. It is also evident that many people with higher education are overqualified for our labour market, since their knowledge and skills don’t find use and instead start disappearing after graduation. Estonia remains below the international average in terms of skills used at work, meaning that people have actually more skills than possibilities to use them in the labour market. Participation in lifelong learning therefore depends not so much on people’s existing skills as on the nature and characteristics of their jobs.

An important indicator of our society’s social cohesion

is migration, both within Estonia and emigration to other countries. Estonian residents' work-related spatial mobility within Estonia has grown significantly in recent years which indicates that regional differences are growing. This is seen in the growth of the influence areas of the central cities (Tallinn, Tartu and county centres). Commuting is not a free choice for many, but rather a necessity due to general or structural unemployment. We can also observe a "higher education trap": a major portion of the commuters are people with higher education who cannot find a job that corresponds to their education in small towns or villages. The fact that average time spent on commuting in Estonia is significantly higher than the average of the EU's 15 countries is also symptomatic.

In addition to the increase in commuting within Estonia, emigration has also significantly increased. In the period between the two censuses, the migration balance has been negative in an amount exceeding the population of two small towns (over 42,000 people). The reasons for leaving are not always material - some people have left based on non-material quality-of-life considerations. They were motivated by a search for a value context that differs from that of Estonia, by the free availability of social guarantees, public services and a safer environment. The percentage of Estonian residents working abroad has also grown significantly. Unfortunately a tendency that is characteristic of Eastern- and Central-European migrants - the limited convertibility of their education - is apparent in the case of Estonia as well: often the work that is done abroad does not correspond to

the workers' educational level; this trend is particularly notable in the case of those who have found a job in Finland. While the economic impacts of migration are predominantly positive (decreased unemployment, improved human capital, money transfers to Estonia, etc.), the demographic and social impacts are mainly negative: separation of families, the so-called "bank-card kids" (children whose parents are working abroad, and who are left in the care of other relatives or on their own), etc. There is a positive tendency as well: the increase in return-migration. Increasing return-migration has been the main focus in Estonia thus far. Perhaps it would be beneficial, copying the policies of many other states, to shift more attention to ways of retaining contacts with those who have gone abroad within the context of transnationalism.

The analysis in this Chapter reached a number of important conclusions. Firstly, a cumulation of advantages and disadvantages can be observed in Estonian society (in particular in education). The gap between the "knowledge-poor and knowledge-rich" persists. Secondly, the potential of a part of the population is under-exploited: they either leave the country or have no part in the creation of values and feel that they are socially excluded and rejected. Consequently, we have not been able to fully use education to increase social cohesion in Estonia. Thirdly, increasing regional differences have brought with them ever clearer differentiations between the centres and peripheral areas, and boosted emigration. ■

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THE ENVIRONMENT AND HUMANS

ESTONIAN HUMAN DEVELOPMENT REPORT 2014/2015

INTRODUCTION

► MIHKEL KANGUR

The unabated use of natural resources by humankind has dramatically changed our living environment. Due to the technological progress of the 20th century, the area of arable land has doubled, water use has increased 8 times, energy use 16 times and industrial output has grown 40-fold (McNeill 2000). This has led to significant changes in the quality of life for people: increased lifespan, accessibility of education, economic growth, and improvement of overall well-being. Unfortunately, this has resulted in drastic changes in the composition of the atmosphere, which are directly attributable to climate change (IPCC 2013); the degradation of approximately one-fourth of the earth's land (FAO 2011); a rapid decrease in clean water supplies (JMP 2011); and a loss of biodiversity (MEA 2005). These are the four factors that most affect the balance of the global ecosystem, and the future well-being of humankind depends directly on their quality. While global changes have not been very dramatic in Estonia, we are not living in isolation from the rest of the world. Global changes affect our well-being and our activity in turn alters the global environmental status. This is why in this report we will examine not only the economic, social and cultural components of sustainable development, but also developments within Estonia's natural environment.

The Estonian National Strategy on Sustainable Development "Sustainable Estonia 21" (SE21) makes clear that a key to the sustainability of the country's growth is the preservation of ecological balance, which, in turn, is divided into three objectives: exploitation of natural resources in a manner and to an extent that ensures ecological balance; the reduction of pollution; and the preservation of biological diversity and natural areas. The objective is to achieve a situation where the environment is treated as a comprehensive ecosystem, of which humans, and their socio-economic relations, are a part.

Balanced ecosystems, the objective of the Strategy, will provide ecosystem services which are necessary for ensuring people's well-being. Therefore, we will have to make sure that human activity does not harm or impair the functioning of natural systems. Long-term economic development can only be achieved if the productivity, recovery and diversity of natural ecosystems are maintained. The protection of the natural environment should ensure both the recovery of ecosystems and the availability of the resources necessary for human life. Based on the principles of sustainability, Estonia as a comprehensive ecosystem is in balance when the quantities of natural resources consumed do not exceed their capacity for renewal; the quantities of substances added to the ecosystem by hu-

mans do not exceed the absorption capacity of the environment; and a sufficient number of natural communities and species are preserved to cushion the impact of human activity and ensure the functioning of the natural components of the system. Such a definition does not include non-renewable resources. In general, non-renewable natural resources are used only by humans and their use does not have a direct effect on the well-being of other species. However, the extraction and use of natural resources may lead to the partial or complete destruction or restructuring of natural habitats, and to the discharge of waste into the environment, which also affects the balance of ecosystems. The use of non-renewable natural resources for the benefit of humans is justified; nevertheless, in the longer term non-renewable resources will not ensure the sustainability of society. How long such non-renewable natural resources will last depends on economic decisions, yet alternatives must be found before the reserves are depleted.

Although the term ecosystem services was not yet widely used in Estonia at the time of preparing SE21, the chapter on the environment was written based on those principles. Ecosystem services may be examined from the perspective of the state of natural and semi-natural areas necessary for ecosystem functioning; of resources extracted from the environment; and of the capacity of ecosystems to absorb residue from human activity discharged into the environment. Each person perceives the direct effect of ecosystem services through personal well-being and health. At the same time, people's personal relation with nature is determined by the overall environmental consciousness of their society. ●

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3.1

Ecosystem Services and the Natural Areas Necessary to Preserve Ecological Balance

► JAANUS TERASMAA, RAIMO PAJULA

Introduction

One objective of ecological balance is the preservation of biological diversity and natural areas. The Estonian National Strategy on Sustainable Development “Sustainable Estonia 21” (SE21) proposes the following indicators for measuring the achievement of that objective: the proportion of traditional methods of land use on Estonian lands; the species diversity index; the proportion of protected areas and EU “Natura 2000” sites in Estonia (no less than 10% of the territory of Estonia); the proportion of land not used for economic purposes (by 2010 at least 5% of the territory of Estonia); the proportion of heritage landscapes; and investments in environmental protection and environmental education (% of GDP).

A number of SE21 objectives are becoming a reality in Estonian and EU legislation. For instance, the system of environmental charges and the organisation of protected areas have significantly changed after the adoption of SE21.

For ecosystems to be able to compensate for the resources extracted from the environment by humans, and to balance the waste discharged to the environment, there needs to be a sufficient number of natural communities and species. Critical for preserving ecosystem services is having an abundance of natural areas which ensure the proliferation and good status of indigenous species.

3.1.1 Ecosystem services and biological diversity

The strategy outlined in SE21 expects that Estonia will develop economically and ecologically optimal ways of using natural resources, establishing as a first step a comprehensive registry of natural resources. Today, this is becoming a reality because it is now widely recognised that ecosystem services underpin human existence and economic functioning. A clear objective of both the Estonian National Nature Conservation Development Plan 2020, and the European Union 2020 Biodiversity Strategy is to halt the decline in biodiversity, to achieve good conservation status of habitats, and to preserve an abundance and genetic diversity of species. To achieve this objective, the implementation of an ecosystem-based approach is recommended. The Millennium Ecosystem Assessment 2005 uses a simple diagram to illustrate the importance of biodiversity for humans (Figure 3.1.1).

The concept of ecosystem services links ecology and economy and is defined by an anthropocentric perspective, focusing on the benefits humans obtain from nature. The Millennium Ecosystem Assessment set out a typology of

FIGURE 3.1.1 Biodiversity and human well-being Arrows suggest a causal linkage



Source: Millennium Ecosystem Assessment 2005

ecosystem services under four broad headings (**Millennium Ecosystem Assessment 2005; Sall et al. 2012**):

- ▶ provisioning services (food, water, energy, raw material, genetic resources, etc.);
- ▶ regulating services (climate, water, air quality, pest control, purification of water, pollination, etc.);
- ▶ cultural services (recreation, aesthetic, spiritual and religious values, education, science, etc.);
- ▶ supporting services (photosynthesis, nutrient and water cycling, soil formation, etc.).

Biodiversity is a key attribute ensuring the functioning of ecosystem services and human well-being. As of the beginning of 2015, the Estonian eBiodiversity database (iris.ut.ee/elurikkus) included 29,951 species although the actual number of species found in Estonia may even exceed 40,000. The more varieties of species we have, as well as habitats that support them, the richer we are.

The ecosystems that have been affected most by human activity in Estonia are those related to water: primarily bogs and internal water bodies, but the status of the Baltic Sea ecosystem as a whole continues to be of concern (**Ministry of Finance report, 2012: Socio-economic analysis of Estonia: an overview of the state of play in policy areas**). The status of one quarter of Estonia's running water bodies and one third of the standing inland water bodies has been assessed as 'moderate' or 'bad'. In the 20th century, the majority of Estonia's mires were drained for agriculture or had become overgrown with trees; raised bogs have been affected by drainage and peat extraction. Mires are, however, important ecosystems in terms of both biodiversity and human health and well-being. Therefore, the Ministry of the Environment launched the project "Development of methods for assessment and mapping of ecosystem services of marine and inland waters" under the EEA grants programme "Integrated marine and internal water management". The objective of the project is to contribute to halting biodiversity loss in water bodies and to preventing the decline of ecosystems in the European Union by supporting the preservation and restoration of ecosystems and ecosystem services in Estonia.

In general, it is recognised in Estonia that the loss of services from natural ecosystems will require costly alternatives. Biodiversity is vital to human health and well-being, provides opportunities for recreation and relaxation, and contributes to the improvement of the standard of living (**European Commission 2009**). In calculating the worth of ecosystem services it is important to bear in mind that their worth is based on a value judgment. In a free market economy the price of a product or service is determined by how important it is considered to be by the people. While the environment and natural resources play an essential role in improving people's quality of life, what is important in the protection of ecosystems is not just the personal desires of individuals, but also public interest. One of the ways to support public interest and the shaping of values is ensuring that people have access to

environmental information and the right to be involved in decision-making (**see also Chapter 3.5**). According to a survey carried out by the Ministry of the Environment, (**The environmental awareness of Estonians 2014**), the overwhelming majority of respondents (90%) agreed that the status of the environment is directly related to quality of life and that there won't be any success or progress without protecting nature. Estonian people agree that investing in our natural capital and safeguarding the good status of ecosystems will help the Government to save money and ensure people's well-being.

Determining the monetary value of ecosystems is hampered by the fact that ecosystem services by their nature constitute public benefits that do not have a market value and are, therefore, more often than not underestimated (**Sall et al. 2012**). Determining the monetary value of ecosystem services will help people to understand that economic growth and improved living standards have been achieved to the detriment of the environment, and unless the environment is protected, ecosystem services will become increasingly costly. This will also provide an excellent opportunity to achieve a balance between competing needs and to find more sustainable solutions (**European Commission 2009**).

3.1.2 Ecosystem status assessment and measures to maintain the good status of ecosystems

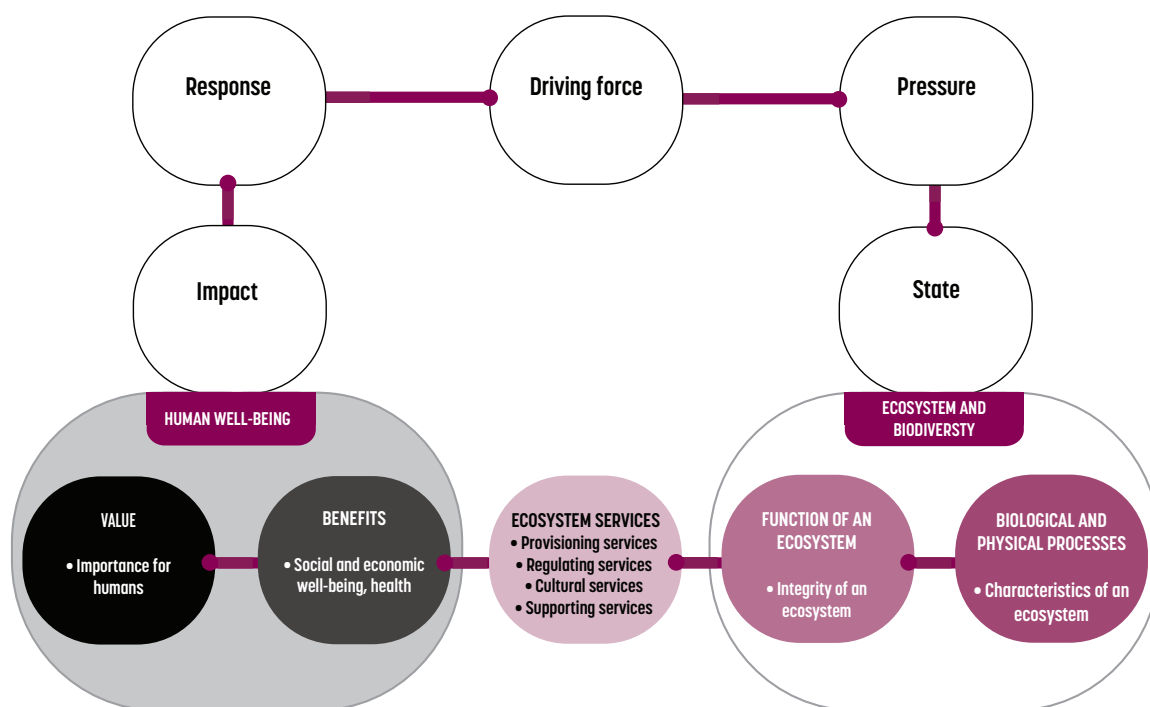
The status of an ecosystem cannot be assessed based on individual characteristics – we need a comprehensive system of environmental indicators. The Estonian environmental indicator system is based on the Driver-Pressure-State-Impact-Response (DPSIR) scheme, adopted by the European Environmental Agency (**Estonian Environmental Indicators 2014**). The DPSIR framework is an environmental indicator system consisting of five interacting components:

- ▶ Driving forces (D)
- ▶ Pressures (P)
- ▶ State (S)
- ▶ Impact (I)
- ▶ Response (R)

The relationships between these indicators are normally illustrated as a causal chain – any one event in the chain causes the next. This creates an opportunity to look at the state of the environment and its changes as a whole, albeit in a simplified manner. Merging the DPSIR framework and the concept of ecosystem services will result in a more detailed set of interrelations (**Figure 3.1.2**) (**Kandziora et al. 2013; Haines-Young, Potschin, 2010; de Groot et al. 2010**).

Driving forces (D) lead to environmental pressures (P) which in turn affect the state of the environment (S). This may cause changes in an ecosystem, affecting the processes within

FIGURE 3.1.2 DPSIR framework and ecosystem services



Source: Estonian Environmental Indicators 2014; Kandziora et al., 2013

the ecosystem, its integrity and the functions that are necessary to provide services to humans. If ecosystem services lose their value to humans, human well-being will deteriorate, which is measurable by impact indicators (I). After the changes in the state of an ecosystem and their impact have been established, response measures (R) are required to alleviate the environmental pressure caused by the initial driving forces. This cycle allows the value of ecosystem services to be recovered and the benefits from such services to increase.

A measure used in Estonia to promote the good status of ecosystems is the imposition of environmental taxes and charges. The development principles of the current tax system were formulated in the document “The bases for ecological tax reform”, and approved by the Government in 2005.

The ecological tax reform refers to the reorganisation of the tax system so that the activities detrimental to the environment are taxed at higher rates while labour taxes are reduced. However, progress has been slower than expected since the ecological tax reform has become bogged down by the process of searching for compromises. The purpose of the environmental taxes – excise duties on fuel, electricity and packaging, heavy vehicle tax and excise duty on motor vehicles – is to motivate consumers to cut down on the ‘use’ of the environment. Environmental charges differ from environmental taxes in that they are paid by producers and are therefore included in the production costs of goods and services. The purpose of environmental charges is to motivate companies to implement measures to reduce the environmental

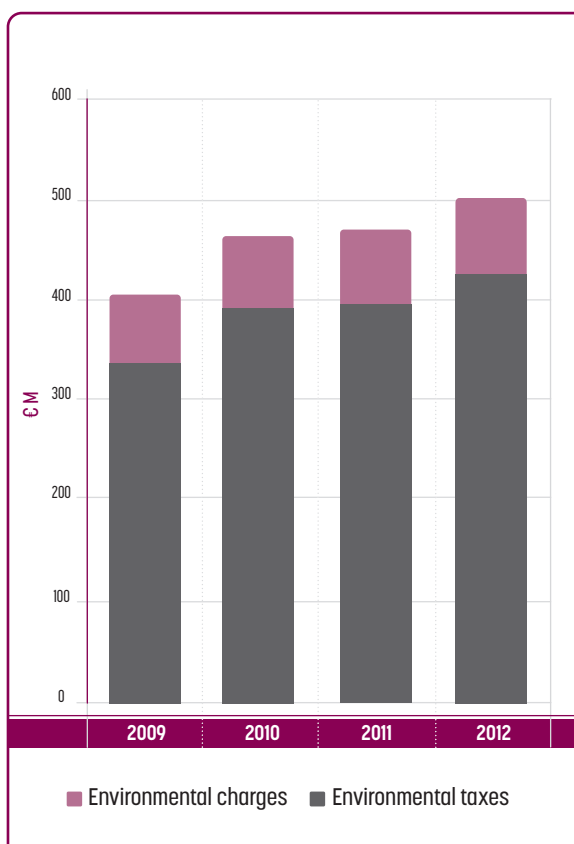
impact of production. Environmental charges are divided into natural resource charges (hereafter “resource charges”) and pollution charges (Figure 3.1.3).

An assessment of the impact of environmental charges carried out in 2012 (Lahtvee et al. 2013) found that none of the major developments in different sectors of the economy could be clearly linked to increasing environmental charges. Rather, the most important environmental aspects for businesses are general environmental requirements and emission limit values for pollutants – these determine whether a company can obtain an activity licence, and the amount of pollution penalties. Environmental charges have played an important role in raising environmental awareness because they give a clear signal to entrepreneurs (Estonian Environmental Review 2013).

According to an assessment of the impact of environmental charges (Lahtvee et al. 2013), environmental charges have had no direct impact on environment use and the quality of the environment; according to Statistics Estonia, however, a number of indicators have improved in environment-related fields and there has been progress towards ecological balance. Nevertheless, Estonia continues to be one of the EU Member States with the worst indicators in terms of ecological balance and use of resources, mainly due to the heavy environmental burden of energy production.

While the emissions of many pollutants and the use of resources have decreased over the last decades, in some sectors the use of resources is increasing or is expected to increase,

FIGURE 3.1.3 Environmental taxes and charges paid in Estonia from 2009–2012



Source: Estonian Environmental Review 2013.

whether due to a scarcity of resources (sand, clay and oil shale) or increased world market prices (e.g. phosphorite). In this respect, it is important not only to increase environmental charges, but also include natural values in economic calculations, as suggested by the concept of ecosystem services. It is essential that the state not manage its resources using different strategies and development plans in isolation and independently of each other. We need a complex national-level management system overseeing all resources, which, in addition to the known mineral resources, include essential resources such as water, soils and biota. Only then can we decide to what extent and how to use one resource or the other so that balance is maintained.

3.1.3 Natural areas

A natural area or a buffer area, in the broadest sense of the term, refers to a part of the ecosystem in which natural processes prevail and indigenous species dominate their nat-

ural environment (natural habitats). Traditionally-managed semi-natural communities, such as meadows, wooded meadows, alvars and pastures, as well as a majority of forest lands and agricultural lands not used for economic purposes, also have a significant ecological value and are counted as buffer areas. Parks, semi-wild gardens and also, to a degree, organic farm land constitute buffer areas of significant functional importance, providing a variety of habitats for natural species. In urban environments, undeveloped properties are important from the perspective of biodiversity. However, the number of undeveloped properties is decreasing as a result of the organisation of urban space. Buffer areas provide a significant number of ecosystem services and (re)produce the natural resources necessary for human well-being as well as buffer the effects of human activity on the environment. Natural areas sustain the populations of natural species, ecological links and biological communities characteristic of Estonia as a whole, ensuring at the same time a natural cycle of nutrients and energy. Such areas also ensure the resilience of the Estonian overall ecosystem.

One of the objectives of SE21 in the field of ecological balance is the “preservation of biological diversity and natural areas”. The indicators specified in the strategy are: “the areas of semi-natural communities, protected areas, mires and protected forest land”. Because most of the protected areas consist of fens, forest land and semi-natural communities, those indicators overlap and their use is not practical.

3.1.4 Protected areas

An integrated indicator reflecting the total area and preservation potential of a natural or near-natural ecosystem is the gross area of protected sites. The total area of protected sites increased exponentially after Estonia joined the European Union in 2004 and the Natura 2000 sites network was created. Protected areas are nature conservation areas, national parks, special conservation areas and species-protection sites. However, most of the protected areas belong to the Natura 2000 network. Although protected areas also include cultural landscapes and urban communities, the majority are natural or near-natural ecosystems, which provide habitats for protected and endangered species. Unlike commercial forests or cultural landscapes, the protection regime applicable to protected areas ensures the preservation of natural landscapes and allows ecosystems to recover from disturbances and develop in natural conditions. In 2014, the total area of all protected areas was, according to the environmental registry, 15,500 km² (Figure 3.1.4).

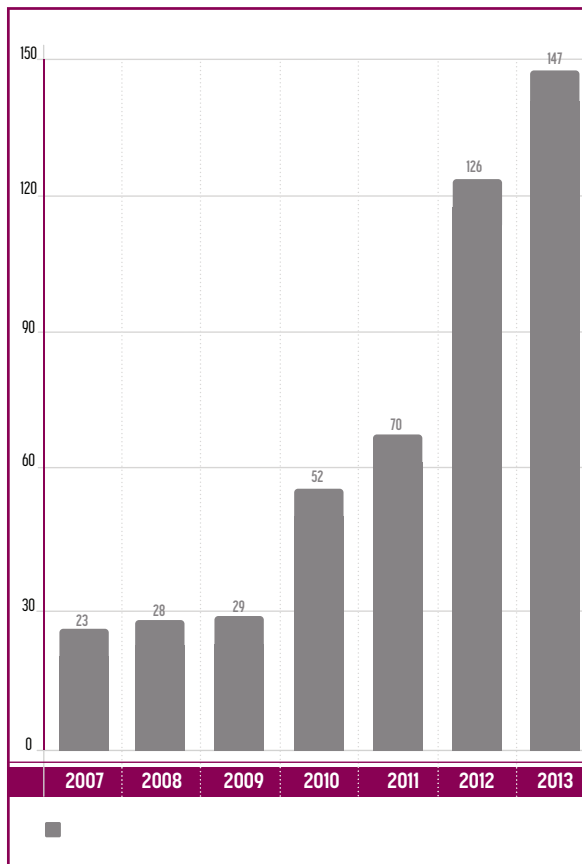
Besides the number of protected areas, the organisation of their protection is also important for natural areas and species. Many valuable habitats also need, besides passive protection, restoration and maintenance for efficient protection and to achieve a good environmental status. A large portion of mires affected by

drainage need to be restored (filling of ditches) and in meadows grass needs to be mown regularly. According to EU regulations, the organisation of protection on specific areas must be based on area-specific management plans. Only a few protected areas had a management plan in 2009 when the process of the development of management plans, funded by the European Regional Development Fund, was launched with the objective of preparing a management plan for each protected area by 2015. As a result, the number of protected areas that have a management plan in place grew exponentially (Figure 3.1.5), which provides a basis for more efficient protection and achieving a better status for habitats and species.

3.1.5 Establishment of new protected areas

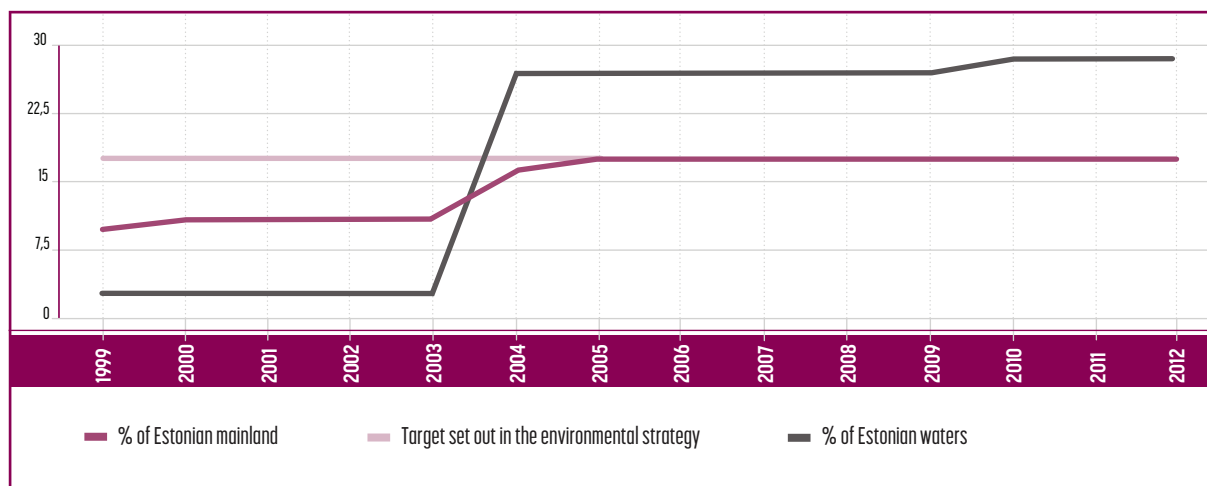
Since the sharp increase in the growth of protected areas in 2004, the total area of protected sites has remained relatively stable, and has only increased by less than one percentage point. However, a number of protected areas with temporary restrictions (up to 28 months) to economic activity are being established. The gross area of the planned protected sites, and of extensions of the existing areas entered into the Environmental Registry's data layer of planned protected areas, was 1,367 km² as of 2014 – which constitutes 8.9% of the gross area of the existing protected areas. A number of changes are being made in the boundaries of protected areas to exclude lands unsuitable for protection. This is normal because nature protection is a dynamic process in the course of which the network of protected areas is constantly redesigned based on changes in protection needs and habitats and species dynamics. With the area of protected sites increasing and their management becoming more efficient, it has to be taken into

FIGURE 3.1.5 Statistics on management plans of protected areas



Source: Estonian Environmental Review 2013.

FIGURE 3.1.4. Protected areas in Estonia in 1999–2012



Source: Environmental Registry.

account that the cost of nature protection is also increasing. Therefore, the management and maintenance of semi-natural areas is today an economic activity that is mainly based on support measures.

3.1.6 Natural habitats

The area of natural sites is best characterised by the total area of habitats protected under the EU Habitats Directive (so-called Natura habitats). This indicator covers forests, mires, meadows, water and coastal habitats – almost all natural areas of a high ecological value in Estonia. The total area of the Natura types of habitats was 7,502 km² in the first reporting year (2007) and 8,806 km² in the last reporting year (2013).

The data suggest, however, that the area of habitats is decreasing in the case of a number of community types (Figure 3.1.6). The area of bog habitats has decreased due to forestation caused by draining and also due to new peat extraction areas. The area of forest habitats has shrunk mainly due to the cutting of commercial forests and to some extent due to property development.

When examining the data on habitats it should be borne in mind that many types of habitats had not been inventoried in 2007 and therefore some data were based on expert estimations. The doubling in size of the area of coastal habitats is merely notional because only part of the coastal habitats had been mapped in 2006. An increase in the area of fresh-water habitats is also largely a result of the specification of initial estimated data and mapping of habitats.

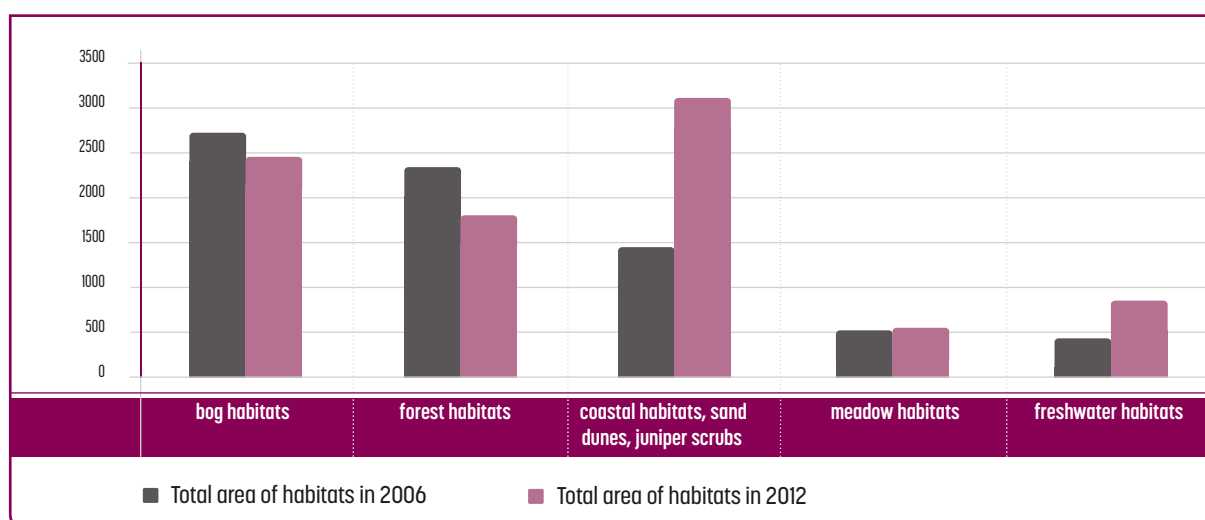
3.1.7 Status of natural habitats and species

The overall status of natural habitats has somewhat improved, based on an average of all types of habitat. The improvement has been significant in the case of freshwater habitats – by one or two status classes for all types of habitats. The status of freshwater habitats has improved mainly thanks to the measures taken to decrease pollution and improve water quality, funded by the EU (see also Chapter 3.3). To a significant degree the status of meadow habitats has improved, which is a direct result of meadow and wooded meadow restoration and recovery with the help of EU nature conservation support measures. However, the target set out for semi-natural communities in the Environmental Action Plan 2007–2013 – 30,000 ha of maintained areas – has not been achieved (for a more detailed overview of semi-natural communities see Chapter 3.2). The status of mires, forests and coastal habitats has remained more or less the same.

The status of endangered species shows the state of biodiversity which underpins the functionality of ecosystems. The nature conservation status of species of Europe-wide importance has significantly improved over the last five years. While the status of about one quarter (24%) of species was favourable in 2009, the share of such species was 54% in 2013.

The number of species that need to be studied for their status has also decreased significantly. While the status of about one third (27%) of species was unknown in 2009, the share of such species had dropped to 11% by 2013. Unfortunately, the status of more than a third of all species is still bad or inadequate, i.e. the preservation of their population in Estonia is not guaranteed (Estonian Environmental Review 2013).

FIGURE 3.1.6 Area of natural habitats (km²) in Estonia in 2006–2012



Source: Reports of the 2006 and 2012 Habitats Directive.

With the area of protected sites increasing and their management becoming more efficient, the cost of nature protection is also increasing. The semi-natural communities maintenance support and the Natura 2000 forest support constitute the largest share of the expenses related to the habitats in protected areas. Natura 2000 forest subsidies are intended to save natural forest habitats from cutting and other forestry activities and are given to forest owners to compensate for loss of income. The gross costs of subsidies both for the management of semi-natural communities and Natura 2000 forest subsidies are increasing in line with the increasing gross area of subsidized sites (Figure 3.1.7).

3.1.8 Status of the Estonian ecosystem - comparison with the rest of the world

Yale University (Yale Center for Environmental Law and Policy (YCELP)) and Columbia University (Center for International Earth Science Information Network (CIESIN)) have since 2001 been compiling a global index - Environmental Performance Index, EPI - (Hsu et al. 2014), which initially was known as the Environmental Sustainability Index, ESI. The index processes data for nine categories – from the use and management of natural resources to human health to the willingness of government and business to improve the status of the environment – using 20 indicators. The 2014 report ranks 178 countries which represent 99% of the world’s population, 98% of its landmass and 97% of the global GDP.

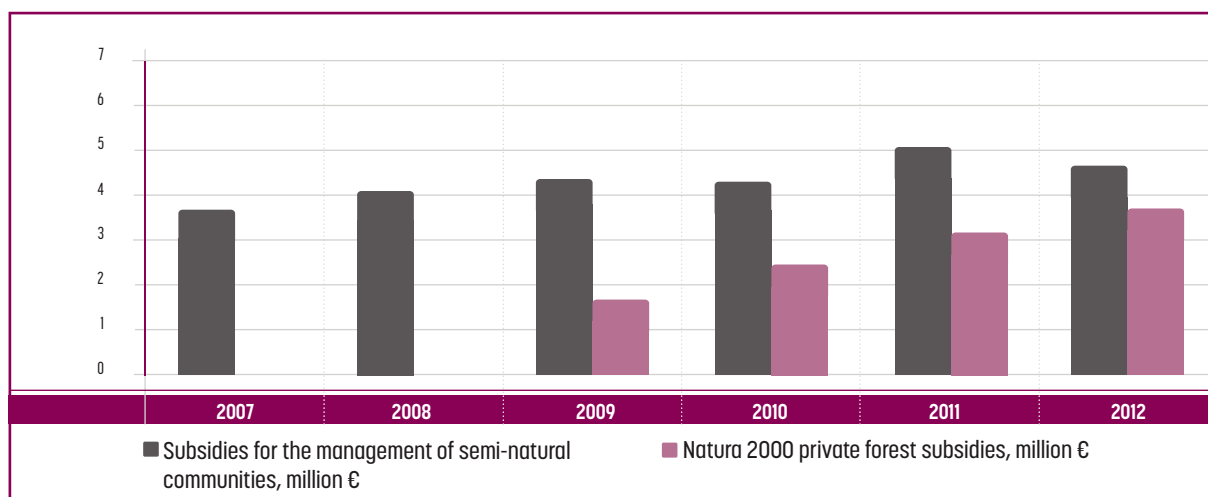
Because the methodology and primary data used for compiling the index are constantly developing and being refined,

previous rankings of countries are recalculated in order to compare the outcomes of different years. The EPI 2012 placed Estonia at a relatively low position (the 54th position among 132 states). The evaluation of Estonian development trends in environmental performance over the past decade was especially low (Estonia ranked 128th). This sparked a debate between various parties in the Estonian press and prompted an inquiry by the Minister of the Environment. The main conclusion was that the underlying reason was the environmental intensity of the oil shale industry, as well as the imperfection of the methodology used. According to the EPI 2014, Estonia has improved its position and is now in 20th place (Figure 3.1.8), outranking our neighbours who have a similar history (Latvia ranked 40th, Lithuania 49th, Russia 73rd) and catching up with the Nordic Countries (Finland ranked 19th, Sweden 9th and Norway 10th). Moreover, Estonia, together with Slovenia, has made the greatest progress in Europe (based on the average of the last 10 years) with a 16% change towards improvement. The overall ranking is topped by Switzerland, followed by Luxembourg and Australia, while very poor developing countries, such as Somalia, Mali, Haiti and Afghanistan, are at the bottom of the list.

Besides the Environmental Performance Index, Estonia has improved its position also with regard to the Ecosystem Vitality objective, and in the category ‘Biodiversity and Habitat’ (Figure 3.1.9).

For example, the Biodiversity and Habitat indicator achieved the maximum value in Estonia in 2008. This indicator is assessed on a relative scale where 100% means that 17% of the territory is placed under protection. As Estonia has exceeded that threshold, the index has not been very informative in terms of illustrating trends in the last five years. As regards this indicator, Estonia shares the 1st to 9th places in

FIGURE 3.1.7 The total amount of subsidies for the management of semi-natural communities and Natura 2000 forest subsidies paid in Estonia in 2007-2012



Source: Estonian Environmental Review 2013.

the ranking of countries. In the category of “ecosystem vitality”, Estonia also has a high, 15th place ranking (Figure 3.1.10). For the majority of indicators, the ranking is normally topped by the same countries that achieved stability already some time ago (e.g. in the case of Switzerland the change over the last 10 years has been as little as 0.8%).

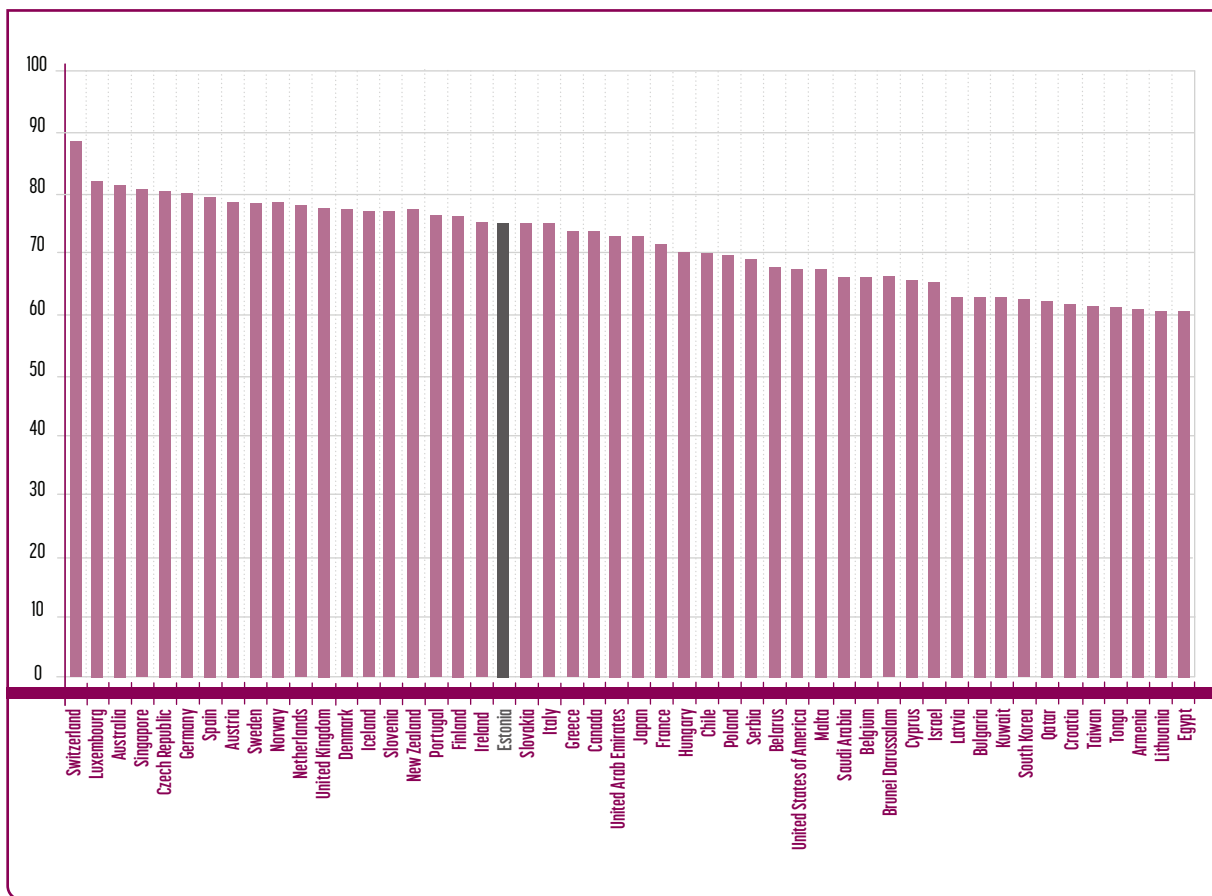
Summary

In conclusion we can say that since the adoption of SE21, significant improvements have been made in Estonian legislation, the system of environmental charges, and management of protected areas, both nationally and as compared with the rest of the world. A key factor has been the harmonisation of legislation and increased investments in the environmental sector after Estonia joined the EU, as well as the ecological tax reform initiated in 2005. Unfortunately, the implementation of the reforms has been more challenging than expected. We should not underestimate the changes in environmental awareness both at the level of the state and at the level of individuals – wealth is no longer defined by economic success,

but by new metrics of social and natural values. It is increasingly recognised that damage to natural areas and the resulting loss of ecosystem services is in the long term much more costly than possible quick profit. Besides ensuring access to natural resources, biodiversity is vital to human health and well-being, provides opportunities for recreation and relaxation and contributes to improving local living standards.

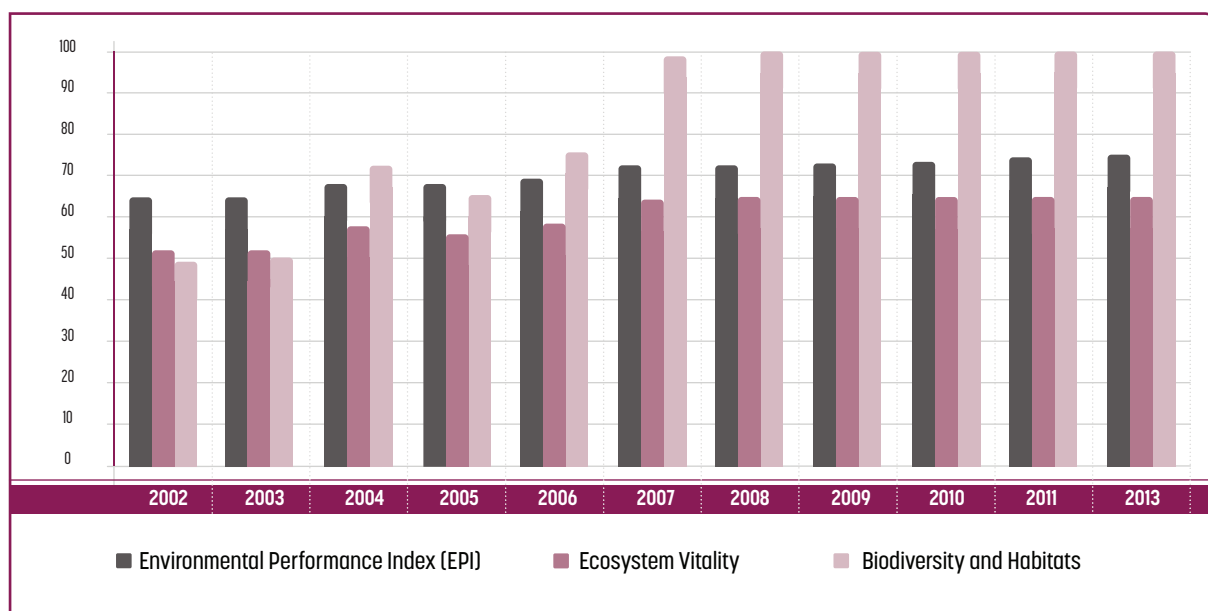
While local communities have become more active, they are more often than not hampered by the fact that the arguments of citizens’ associations are considered too weak by other parties. The determination of the value of ecosystems is what helps to achieve a balance between competing interests and needs. ●

FIGURE 3.1.8 The world’s top 50 countries according to the Environmental Performance Index



Source: Environmental Performance Index 2014.

FIGURE 3.19 Changes in Estonia's ranking in the Environmental Performance Index - 'Ecosystem Vitality', 'Biodiversity and Habitat') in 2002-2013



Source: Environmental Performance Index 2014

FIGURE 3.10 The world's top 50 countries according to the Ecosystem Vitality objective



Source: Environmental Performance Index 2014

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3.2

Use of Natural Resources

► LIISA PUUSEPP, MARGUS PENSA,
MARTIN KÜTTIM, MIHKEL KANGUR

Introduction

One of the objectives of the Sustainable Estonia 21 (SE21) strategy is to ensure that by 2030 natural resources are used in an ecologically balanced manner and volume. In most cases, natural resources are considered to be mineral resources, especially oil shale and natural resources used for construction, but they also include other raw materials that are being consumed for the purposes of national wellbeing and economic growth. However, the consumption of natural resources also causes disruptions in nature, the impact of which depends on the intensity and duration of the disturbance, as well as on the environmental situation prior to the disruption. Regardless of the duration or intensity of the change brought about by the use of the natural resources, it affects people's wellbeing and the development of the country as a whole. This article fo-

cuses on the consumption of resources in the following areas: forestry, agriculture, water use, fishing and mineral resources.

3.2.1 Forestry

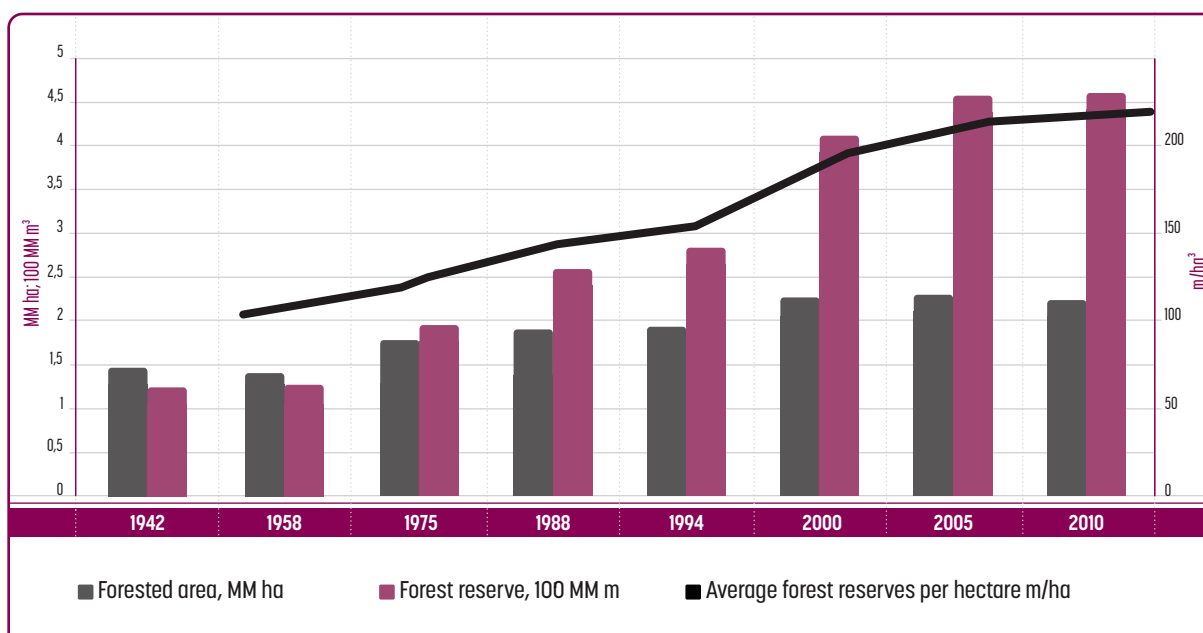
According to the UN definition of forests, a forest is a piece of land that is at least 0.5 hectares in size, has trees higher than 5 metres and has at least 10% crown cover, or trees that are capable of meeting this criteria in the future (*Global Forest Resources Assessment 2005*). The Baltic Sea region is Europe's most forested area (48% of the land is covered by forest) (*Table 3.2.1*). According to the Estonian Forestry Development Plan – 2020, sustainable forestry is the management of forests in a way and to an extent that ensures their biological diversity, productivity, reproduction capacity, viability and potential in

TABLE 3.2.1 Forest coverage in the Baltic Sea countries

	FOREST COVERAGE [%]	PROTECTED FORESTS [%]	FOREST PER CAPITA (HA)	PROPORTION OF CONIFERS [%]
Denmark	12	20,8	0,1	65
Norway	21	14,5	1,4	71
Sweden	66	12,3	2,6	91
Finland	57	7,2	3,7	92
North-western Russia	33	10,7	1,9	78
Estonia	51	25,4	1,7	64
Latvia	42	19,5	1,3	61
Lithuania	27	18,7	0,5	55
Belarus	40	29,8	0,9	52
Poland	29	37,0	0,2	48
Germany	31	36,6	0,1	11

Source: Estonian Forests 2010 (Adermann, 2012); Ministry of Forestry of the Republic of Belarus; Nordic Family Forestry; State of Environment Norway.

FIGURE 3.2.1 Forested surface area, stands of forests and change in average forest reserves per hectare



Source: Environmental Survey 2013.

the present, and will enable ecological, economic and social functioning on the local, national and global level in the future, without damaging other ecosystems.

Forests cover approximately 50% of Estonia's land area (2.2 million ha) and approximately 42% of the EU's land area (Forestry Sustainability Assessment 2009); therefore forest ecosystems are significant for both. In Estonia and in the EU as a whole, the area of forested land keeps growing – in both, forested area has increased over the last twenty years by approximately 5%, and in Estonia it reached the highest-ever rate of the last 300 years (Forestry Sustainability Assessment). By the start of the 20th century, Estonia's forested land area covered approximately 14% of its territory (Hallanaro et al. 2001) and has increased during the last century mainly at the expense of agricultural land and drained peatlands (Environmental Overview 2013, Estonian Forestry Development Plan until 2020). Amongst the Baltic Sea countries, Estonia has recorded the biggest growth in forest coverage (Statistics Estonia). Today, Estonia has a stable forested area. In terms of per unit surface area, forest resources have doubled in the last 50 years, both because of investments and forest management methods (Forestry Sustainability Assessment 2009) (Figure 3.2.1).

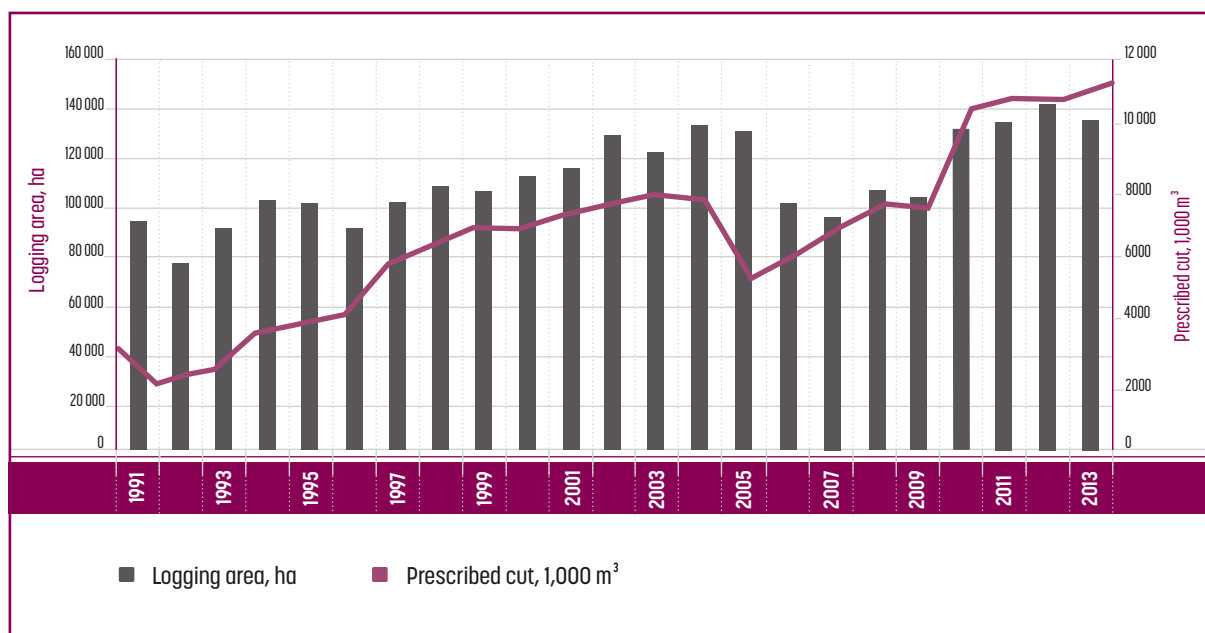
Every forest management method is a disturbance to the forest ecosystem, and has a long-term impact. Although forest management does not destroy the whole ecosystem, the total impact of forest management can be compared with the impact of the oil shale industry, in terms of the total surface area of Estonian forests. The most important human impact is harvesting, which directs the composition of forests in terms of species and age, but which also compacts the substrate due to the use of heavy forest equipment – in addition to developing drainage networks in peatland forests, which notably

change the aeration, biota, hydrological and nutrition system of the forest soil.

In Northern European forests, the composition of tree species has significantly changed during the 20th century. While the share of hardwood has been decreasing in Scandinavian countries, it has been increasing in the Baltic states. Scandinavian countries have been actively promoting and planting conifers. In the Baltic states, cutting areas and fallowed fields have been taken over by deciduous pioneer tree species. Therefore, 69% of Estonian forests that are dominated by grey alder are growing in deciduous woodland and forests that could be used for growing both economically and ecologically more valuable tree species, especially spruce and broad-leaved species (Estonian Forestry Development Plan – 2020).

In the course of the land reform that followed Estonia's restoration of independence, a large share of forest land ended up in private hands and it was followed by an intensification of forest management. As of 2010, 60% of Estonian forests are privately owned (Eurostat). Estonia's largest forest owner is the state, which owns 40% of total Estonian forests (State Audit Office). Most of the cutting and sale of state forests is managed by the State Forest Management Centre (RMK). In Estonia, RMK also has the role of balancing the wood market, protecting the forest environment and assuring everyman's right (Estonian Forestry Development Plan – 2020). After the restructuring of RKM in 2008, the enterprise started to use the type of harvesters that enable accurate measurement of wood quantity during harvesting. As a result, on average 17% more wood (which was earlier lost in the supply chain) reaches the storage area from the cutting area (State Audit Office). In spite of this, in the opinion of the State Audit Office, a lot still remains to be done to make production more efficient and

FIGURE 3.2.2 The dynamics of logging volume in Estonian forest lands 1991–2013



Source: Statistics Estonia.

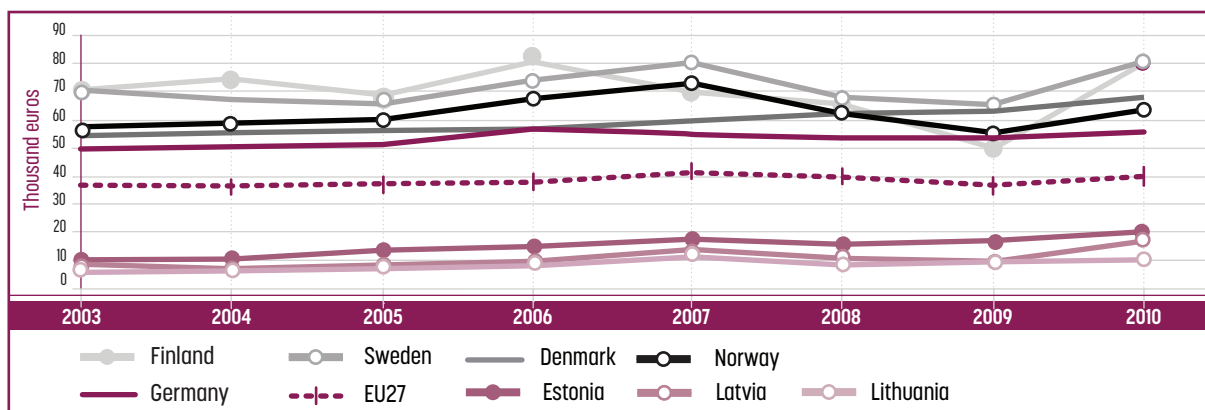
ensure higher transparency in the supply chain.

On average, only 8.4 million m³ of timber was annually harvested between 2005 and 2013 in Estonia (Figure 3.2.2) (Statistics Estonia), while according to the National Forestry Strategy the optimal volume is 12–15 million m³ (Estonian Forestry Development Plan – 2020). On the one hand, it means loss in timber quality and on the other hand, a lower contribution of the forest sector to employment and the treasury. Although the Estonian forest sector has accounted for more than 20% of the manufacturing industrial output of the last decade, and productivity has doubled in the last seven years (2003–2010), the productivity of the forest industry is still 3 to 4 times below that of Scandinavian countries (Tamm, Tiits 2012) (Figure 3.2.3).

The protected forested area in Estonia totals 562.4 thousand ha (25.4% of forested land), the highest rate among Scan-

dinavian and Baltic countries (Adermann 2012). At the same time, only 2.3% of forested land in Estonia is valuable natural forest, although the Estonian Forestry Development Plan 2020 sets the objective of leaving 10% of all forests out of management (Estonian Forestry Development Plan – 2020). Primary forest biological communities account for 43% of Estonian forest land. In addition, 12–16% of forested land complies with the habitat criteria of the Nature Directive, but Estonia’s forest landscape is very dispersed and natural forests that have been preserved are not sufficient for compensating the extinction caused by the destruction of forests in the 20th century (Kohv et al. 2009). The majority of Estonian forests are mono- or bi-cultural management forests that are used as “wood production plants”, neglecting other services of forest ecosystems. At the same time, there is considerable demand in Estonia for the services of forest ecosystems, but it is as of yet insufficiently

FIGURE 3.2.3 Labour productivity by added value in the wood, paper and furniture industry of selected countries 2003–2010 (in EUR thousand per employee)



Source: Eurostat

researched (Ehrlich 2011).

The condition of forest soil has been neglected as well, although this is important both in regard to encouraging the substrate and biodiversity. In addition, forests are one of the most important accumulators of CO₂, the major component of greenhouse gases emitted in Estonia. As forest areas have expanded, the amount of carbon accumulated in its biomass has also increased. Forest soils in Estonia contain approximately 52% or 308.8 Tg of the total organic carbon stock of Estonian soils (Environmental Overview 2013). Since the amount of carbon accumulated by forests is almost equal to forest growth, it is important to keep forest productivity at the maximum level (Estonian Forestry Development Plan – 2020).

3.2.2 Agriculture

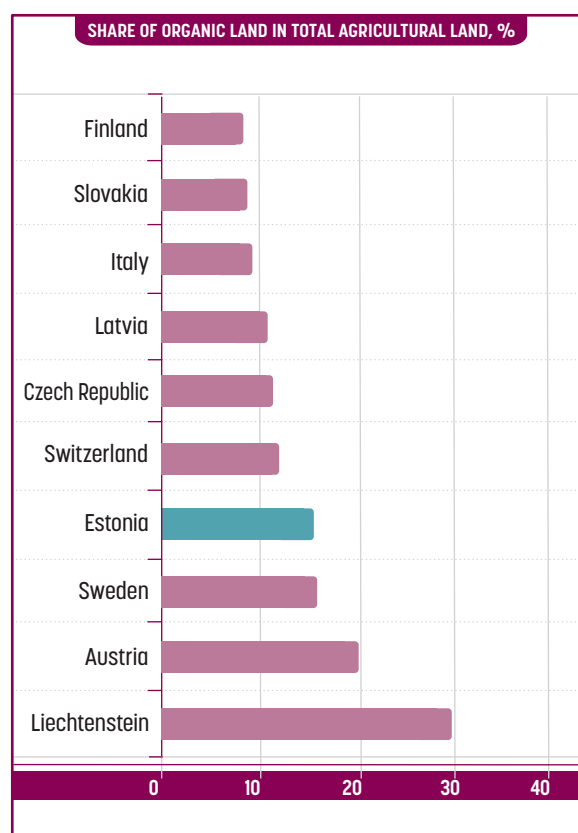
Agriculture has been an important sphere of activity for the Estonian population. Estonia's agricultural exports exceed imports (Agriculture in Figures 2013) and Estonia has one of the highest shares of agricultural land per resident (0.7 ha) in Europe (Eurostat).

The term agricultural land represents all land that is being used for agricultural purposes - is grazed or under harvesting, including fallow land, as well as grassland. This also includes organic agricultural land which is agricultural land that is certified and used for ecologically pure production that is based on the principles of natural circulation of substances, and balance. Such a system should be able to itself replenish the nutrients of used soil (Estonian Organic Agriculture Development Plan 2014–2020). The surface area under organic agriculture is considered one of the indicators in comparing the sustainability of countries.

In Europe, in 2006–2012 the share of organic agricultural land increased 1.54 times and in 2012 organic land area totalled 11.2 million ha (The World of Organic Agriculture. Statistics & Emerging Trends 2014). In 2013, in Estonia, 965,907 ha of land had been registered as agricultural land (in 2005 it was 833,891 ha) (Agriculture in Figures 2007–2013). In terms of the proportion of organic agricultural land in relation to the total agricultural land, and by organic agricultural indicators, Estonia is clearly a progressive country in Europe (Figure 3.2.4) – according to 2013 data, organic agricultural land amounted to more than 16% of the total agricultural land (Figure 3.2.5) (Organic Agriculture in Estonia 2013). The EU's average indicator was 5.4% (The World of Organic Agriculture. Statistics & Emerging Trends 2014).

The principles of organic agriculture include adding organic substances to the soil (erroneously not spoken of as a non-renewable resource) for preserving and increasing soil fertility (through nitrogen fixing by leguminous plants and organic fertilizers); increasing the biological activity of soils; and appropriate and timely cultivation and prevention of loss of nutrients. Instead of mineral nitrogen fertilizers, mostly preventive natural methods in eradication of weeds and vermin are used (Organic Agriculture in Estonia 2013). However,

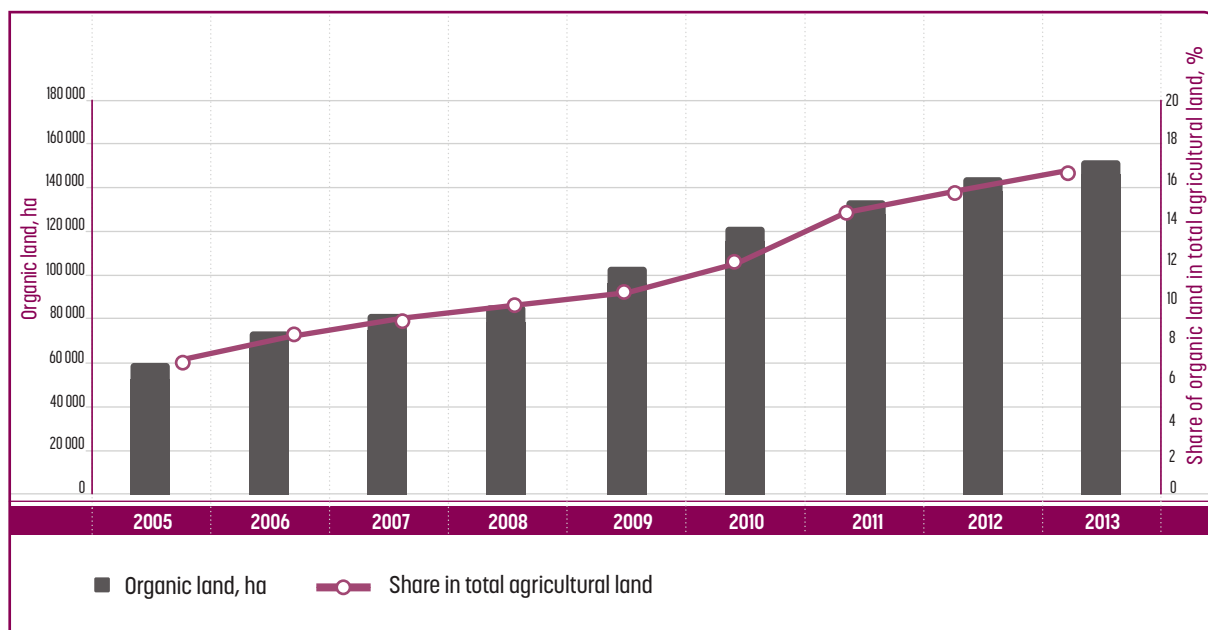
FIGURE 3.2.4 European countries with the biggest share of organic agricultural land in total agricultural land in 2012



Source: The World of Organic Agriculture. Statistics & Emerging Trends 2014.

in some cases, using only the principles and methods of organic agriculture will not be sustainable. While the share of agricultural land has increased in Estonia 1.16 times in the last ten years, the use of mineral fertilizers has increased notably more, totalling 78 kg/ha in 2005 and as much as 135 kg/ha in 2013 (Agriculture in Figures 2007; 2010; 2013). In the same period there was a notable increase in the use of organic fertilizers, the use of which has grown mainly because of more agricultural land being used for organic farming – the amount of organic fertilizer used per surface area unit is the same (28 kg/ha), but total organic fertilizer use has increased in Estonia from 2 million tons to 2.5 million tons (Agriculture in Figures 2007; 2010; 2013). Studies show that one of the biggest obstacles to developing organic agriculture in Estonia is insufficient development of organic processing and marketing, as well as low investments in technology that would help to increase yields (Organic Agriculture in Estonia 2013). Moreover, support paid to producers today is much lower than in many other countries and is mainly focused on large producers, which makes it difficult to compete with the production of other countries. According to the vision of the Estonian Environmental Strategy 2030, in 2030 Estonian agriculture will be dominated by organic agriculture and farmhouse tourism.

FIGURE 3.2.5 Land used for organic agriculture (ha) and its share of total agricultural land in Estonia in 2005–2012



Source: Organic Agriculture in Estonia 2013; Research Institute of Organic Agriculture

3.2.3 Semi-natural communities

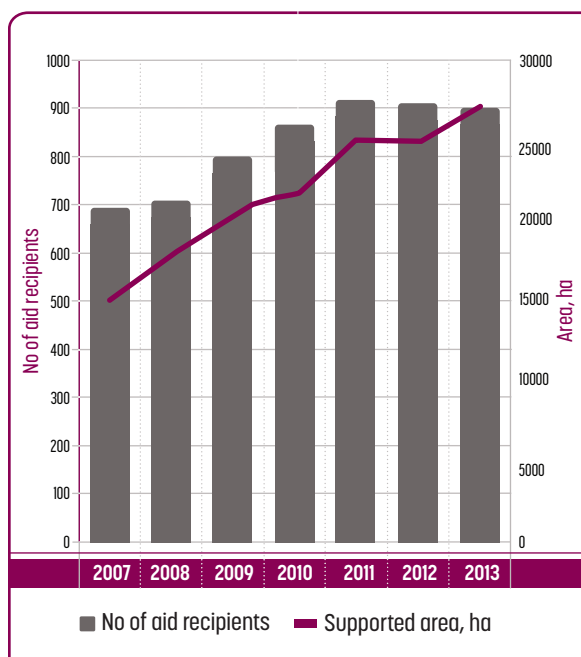
Estonia has one of the world’s richest semi-natural communities, which have been constantly used for grazing and as meadows, and have been shaped by the harvesting of wood. For preserving these biological communities it is important to continue moderate human activity. The surface area of wooded meadows and other natural grasslands in Estonia was at the maximum level at the end of the 19th century (approximately 1/3 of the land area), and the situation was similar until the 1940s (Talvi, Talvi 2012). The loss of such land intensified in the middle of the 20th century. In the last decade, attempts are being made with the support of the state and the EU to restore and to bring these semi-natural communities into re-use. Together with the increase of the area of protected natural sites, this can be considered as Estonia’s contribution to protecting and preserving biodiversity (Ministry of Agriculture Yearbook 2013).

Aid programmes for land maintenance that help to compensate additional costs related to the management of semi-natural communities and the loss of income due to the ending of intensive production have been implemented since the 1990s. Starting from 2007, in the framework of the agricultural environment as a part of the Rural Development Plan, and with the coordination of the Ministry of Agriculture, aid has been provided to support work such as grass-cutting, grazing, and preservation of the condition and composition of the species of semi-natural communities (Ministry of Agriculture Yearbook 2013). While in the first years of the support programme, the surface area of areas that received aid was 15,000

ha, the area that has received support has been increasing every year and in 2013, more than 26,000 ha have already received support (Figure 3.2.6). The Environmental Action Plan 2007–2013 set the objective to maintain 30,000 ha of semi-natural communities every year, but this objective has not been achieved. The new plan (Action Plan for Semi-Natural Communities 2014–2020) aims to have 45,000 ha of maintained areas by 2020 and 60,000 ha by 2030 (Ministry of Agriculture Yearbook 2013).

Increase in the surface area of heritage communities requires even higher investments for developing infrastructure. There is not enough labour nor means for maintenance work and for access to areas. Local people have no interest or knowledge about right work methods and requirements. Although various support schemes have been created for restoration, maintenance and investment, they are considered too complicated. Restoration by conservation takes place on the basis of one-year contracts that do not ensure the sustainability of restoration work. The support system has not been developed sustainably since support rates in 2007–2013 were based on the price level of 2006. The Action Plan for Semi-Natural Communities 2014–2020 stated that areas that are extremely important publicly in terms of sustainability lack a national maintenance plan and, therefore, maintenance needs of some types of meadows (especially alvars and wooded meadows) have been neglected. Because land ownership is spatially decentralised and has a different purpose for landowners, former large homogenous grazing areas are replaced by smaller separated areas. Decentralisation accompanies the increasing negative impact of marginalisation and reduces the cohesion of meadows. Over time, these changes will bring about

FIGURE 3.2.6 Surface area of semi-natural communities that have received aid and number of aid recipients



Source: Ministry of Agriculture Yearbook 2013.

changes in the biological community and a decrease in biodiversity.

The condition of semi-natural communities is monitored mainly through changes in the condition of species related to these habitats. Monitoring is focused only on the most important habitat types and there are relatively few monitoring areas, and the monitoring interval is too long (6 years). In addition, monitoring areas do not overlap with semi-natural areas that have received support. Therefore, it is complicated to assess the results of maintenance. According to the condition monitoring carried out in 2013, the condition of several areas has deteriorated or remains in an unsatisfactory condition. Therefore it is important to contribute to the restoration of communities (both awareness and financing possibilities), to monitor links with other (maintained) areas and to consider improving the planning of state environmental monitoring by the Ministry of the Environment. One possibility is to promote grazing in these areas as planned in the Rural Development Plan 2014–2020, which aims to pay higher support to producers who maintain areas with grazing.

3.2.4 Fishing

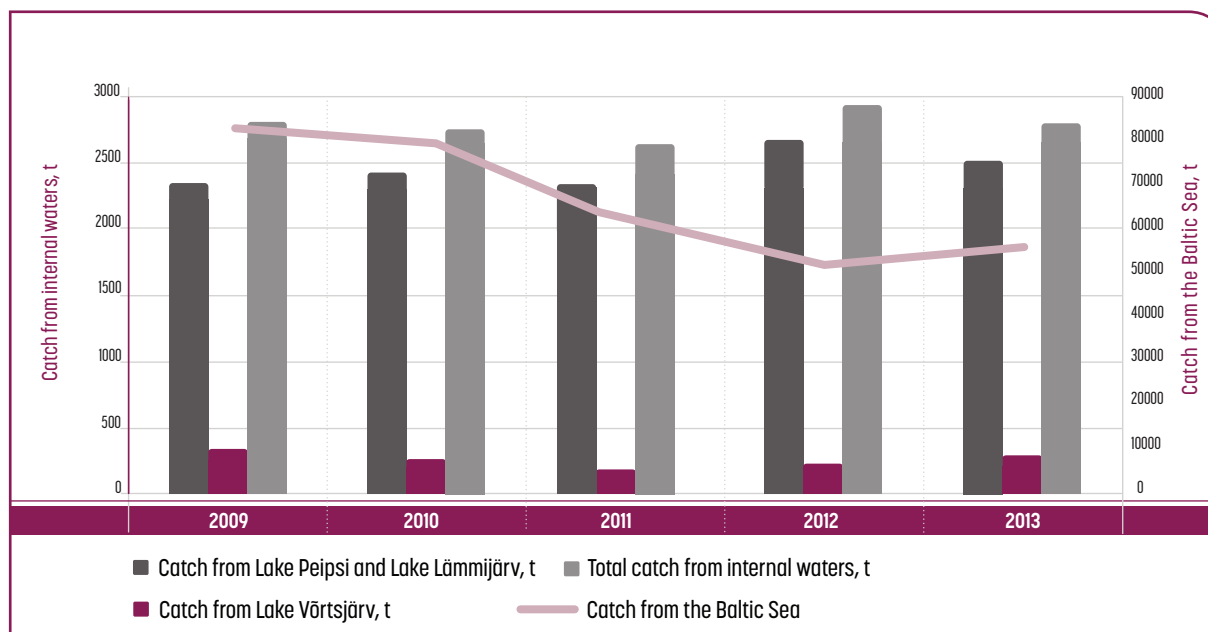
Fish populations are considered to be in a good situation if the fish stock can naturally reproduce itself in spite of the pressure of industrial fishing. Fishing affects the ecosystem if it includes catching of undersized fish, damages fish habitats, disturbs spawning and if marine mammals and birds get tangled in nets and die. According to the Estonian Environmental Strategy 2030, the strategic objective of fishing is to ensure the good condition of fish populations, diversity of fish species and to prevent the negative influence of fishing on the ecosystem.

Estonia's most important fish stocks are located in the Baltic Sea. At the same time the ecological situation of the Baltic Sea has been considered very poor already for years. Marine habitats are being threatened by the high level of agricultural nutrients and direct pollution, intensive ship traffic and marine development. Although because of the decrease in agriculture, the inflow of nutrients into the Baltic Sea has decreased more than two-fold in comparison with 1980s, the situation is not improving (*Estonian Fishing Strategy 2014–2020*). Because of the level of disturbance to the ecosystem, it is surprising that the stocks of the economically most important fish species (Baltic herring and sprat) are considered to be so good in the Estonian economic zone. At the same time, the condition of fish stocks in various coastal waters of the Baltic Sea is considered poor or very poor. This is caused, in addition to the above factors, by higher than optimal fishing intensity in some regions and for certain fish species at the start and in the middle of the 1990s. For instance, stocks of fish species near Estonia's coast (sea basses, sea trouts, etc.) are limited and their population is decreasing (*Estonian Fishing Strategy 2014–2020*).

Fishing in Estonia as a whole has decreased mainly because of the decline in Baltic Sea fishing – while 83,575 tons of fish was caught in the Baltic Sea in 2008, the figure in 2013 was 54,558 tons (*Figure 3.2.7*) (*Statistics Estonia Yearbook 2014*). The intensity of the exploitation of the Baltic herring stock in the open part of the Baltic Sea in recent years cannot be considered sustainable, mainly because of the high mortality caused by fishing. This trend has started to decline. While the sprat stock in the Estonian economic zone can be considered good, the biomass has been decreasing in recent years in the southern part of the Baltic Sea. The condition of natural populations of salmon in the Gulf of Finland has improved, but most of them are still in a poor state (*Estonian Fishing Strategy 2014–2020*).

Baltic herring, sprat, cod and also salmon are internationally regulated species of fish that are caught according to quotas that are established by EU regulations. The negotiations with the European Commission on Baltic Sea fishing at the end of 2014 reached an agreement that in 2015 Estonia's quota for Baltic herring will be notably increased (*Estonian Ministry of Environmental Affairs*). The sprat quota was reduced by 11% and the salmon quota for the open part of the Baltic Sea was cut by 10%. Also quotas for cod were reduced. Such

FIGURE 3.2.7 Quantities of fish catch in the Baltic Sea and Estonian inland water bodies in 2009–2013



Source: Statistics Estonia Yearbook 2014; Surveys of fish resources in Lake Peipsi s.s., Lake Lämmijärv and Lake Pihkva; State of fish stocks in Võrtsjärv and Analysis of the Estonian Eel Management Plan

adjustment of quotas enables the restoration of fish stock and improves the functioning of the ecosystem. An important objective is decreasing the inflow of nutrients into the Baltic Sea. The total catch in inland waters was 2,968 tons in 2012 and 2,850 tons in 2013 (*Estonian Statistics Yearbook 2014*). Perch represented 32% of the total catch, followed by bream with 24% and zander with 23%. Most of the fish was caught in Lake Peipsi s.s., Lake Pihkva and Lake Lämmijärv, totalling 87% of the total inland water catch (*Figure 3.2.7*), but the fish stocks in lakes have been decreasing (Surveys of fish resources in Lake Peipsi s.s., Lake Lämmijärv and Lake Pihkva). Stocks of natural fish species found in Lake Võrtsjärv such as giant perch, pike, bream, etc. are relatively good, but the total catch in the lake has decreased in recent years *State of fish stocks in Võrts järv and Analysis of the Estonian Eel Management Plan 2014*.

According to the Estonian Environmental Strategy 2030, the strategic objective of fishing is to ensure the good condition of the fish population, diversity of fish species and to prevent the negative influence of fishing on the ecosystem. Use of several fish stocks has been assessed as unsound. Damage is also caused by the catching of undersized fish as part of commercial fishing, whether because of unawareness; by deliberately using smaller mesh size; over-catching of several fish species; as well as unsuitable spawning conditions. In order to improve the situation in both coastal waters and inland water bodies, it would be necessary to devote more attention to, and separate resources on restoration of spawning sites, liquidation of migratory barriers, development of fish access paths and knowledge-based use of fish stocks, including optimisation of fishing burden in coastal fishing. In addition, reintroduction of

fish in water bodies enables enrichment and restoration of fish communities in water bodies. At the same time, without reducing the inflow of nutrients and pollution flows into water bodies, one cannot expect the situation regarding the fish stock to improve. Among other things, the objective of the environmental strategy is to ensure that foreign species introduced as a result of human activities must remain at the level that does not affect the ecosystem.

3.2.5 Water use

Because of climatic conditions and a small population, Estonia has a sufficient amount of fresh water resources, and fresh water is contained in ground water layers and surface water bodies. But there are also areas that have water shortages and water quality problems, especially in areas of intensive industrial and agricultural activities which are suffering either from pollution (*see Chapter 3.3*) and/or inadequate water consumption.

The water demand of most Estonian consumers is covered by ground water. Tallinn and Narva, as well as some industrial enterprises, mainly use surface water. Water extraction (excluding mining water, cooling water used in thermal and power plants and water for fish farms) from ground water deposits and surface water bodies started to decrease in Estonia at the start of the 1990s, and in 2012 amounted to approximately 1/3 of the volume recorded in 1992. In recent years (2008–2012), average water extraction has been 46.4 million cbm for groundwater and 53.8 million cbm for surface water

(Environmental Agency). Water consumption has decreased partly because of the economic recession at the start of the 1990s and partly because of economic-political measures that promote more sustainable use of water. The changed economic-political situation in turn brought about more accurate measuring of water use and the renovation of pipelines as well as improved sanitation technology. In comparison with the rest of the European countries, Estonia's average water extraction is 77 cbm per resident per year (Figure 3.2.8). If mining water and cooling water used by thermal and electrical power plants are added, Estonia is among Europe's largest users of water per resident.

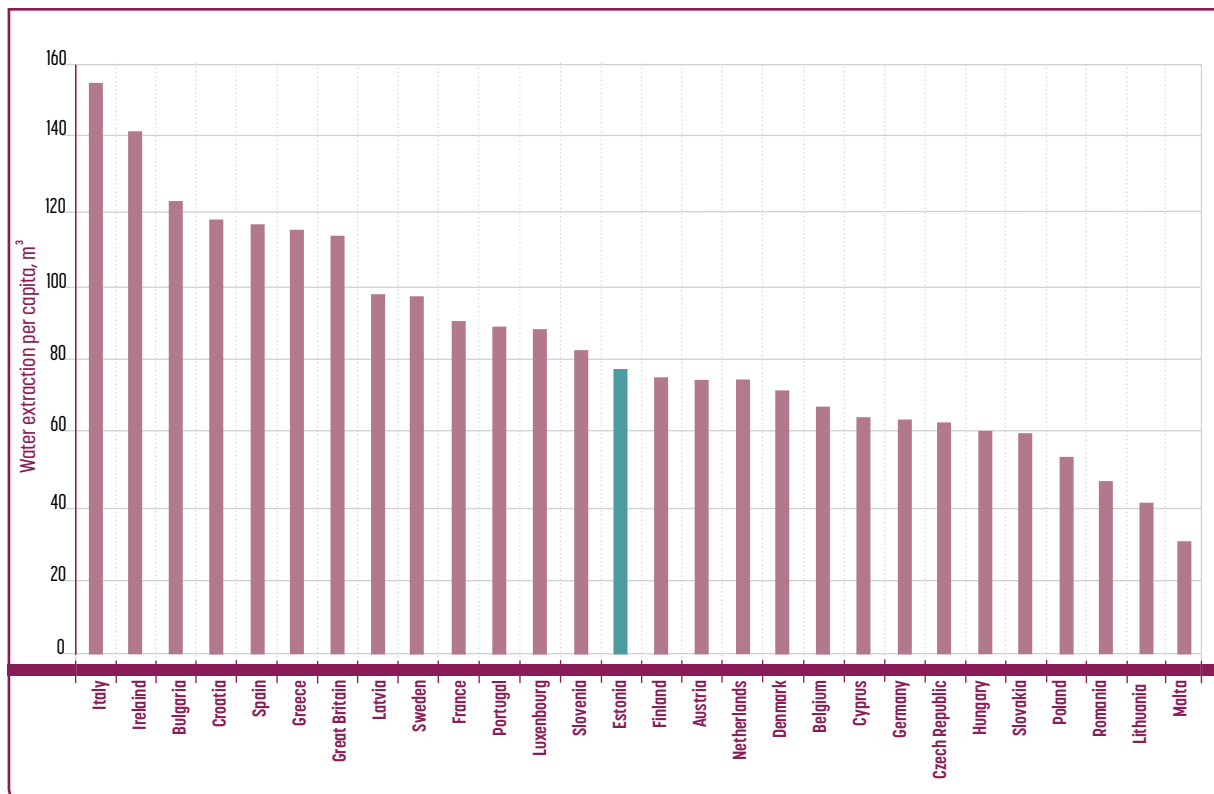
Water use falls within four main domains: domestic, industrial, agricultural, and energy sector usage. Generally, the amount of water used by households and industries remains relatively small. While in 1992, an average of 188 litres of domestic water was used per capita, the figure fell to 83 litres in 2003 (Environmental Overview 2013) and to 82 litres in 2012 (Statistics Estonia). The amount of water used in industry has fluctuated in recent years, being in excess of 40 million cubic metres in 2005 and less than 30 million cubic metres since 2009 (Figure 3.2.9). The decrease in industrial use of water in 2008–2010 is probably due to the impact of the economic recession. Industries use less water than domestic households, if water used in the energy sector is not considered. The Baltic and Estonian stations of the Narva Power Plants take their cooling water from the Narva River or from the water reservoir, without changing its chemical composition. Power plants

are located one after another on the river which means that they are essentially re-using the same water. The volume of mining water collected in mines and quarries which needs to be pumped out mainly depends on precipitation and has decreased due to the closure of mines. The interdependence between water levels in borewells and the volume of mining water is complicated and because of drainage many wells in certain areas have become dry (Environmental Agency).

By 2013 data, 3.9 million m³ was used in agriculture, which makes up 4–5% of Estonia's water use. The largest water users in agriculture are greenhouses, vegetable producers and animal farms, especially pig farms and poultry farms. As of 2013, irrigated land covered 326 ha, which accounts for only 0.03% of the total agricultural land in use (Estonian Rural Action Plan 2014–2020). Increasingly, two-way regulation of water is being used, i.e. the construction of regulating drainage systems that enable sufficient watering of plants in dry periods (Estonian Rural Action Plan 2014–2020).

In order to describe how sustainably a country uses its water resources, the water quantity taken within a year is compared with the long-term annual average discharge. On the basis of this data, the water use index is calculated (%) (Environmental Agency). Also the water use by residents and manufacturing is considered as well as water pumped out of quarries and mines, excluding cooling water used by Narva Power Stations. The index of water use describes the pressure put on the water resources by human water consumption. The Estonian index of water use is small (<4%) and remains under

FIGURE 3.2.8 Water extraction per resident in European countries in 2011



Source: Eurostat.

the critical level of water resources (**Environmental Overview 2013**). Therefore, one can say that Estonian households and industry use water rationally. However, environmental issues in the energy sector, especially in connection with the water use in oil shale mining in NE Estonia, are not properly analysed as the most recent complex studies in this region were made in 1980s.

3.2.6 Mining of mineral resources

Mineral resources are organic or mineral substances located in the earth's crust, whose qualities have been identified and for which there are need and possibilities (**Reinsalu 2011**). The legal basis for the mining and use of mineral resources are laid down in the Earth's Crust Act and in the Mining Act. An accumulation of a mineral resource that has been registered in the environmental registry is known as a mineral deposit. Mineral deposits are delimited by general geological research or the findings of a geological survey.

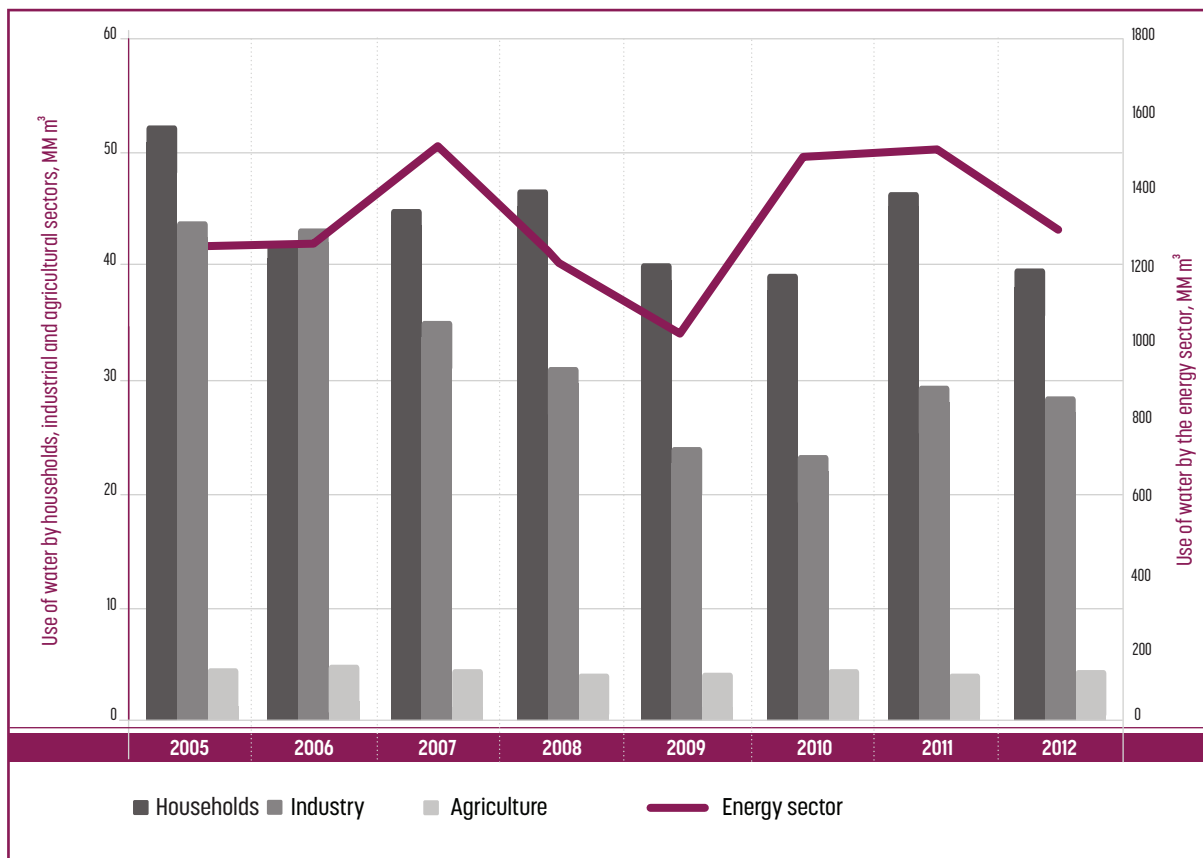
In 2014, the Estonian Registry of Mineral Resources lists 12 massifs of mineral resources as mineral deposits with a total surface area of 603,693 ha. The biggest surface area is comprised of peat fields, followed by oil shale and phosphate rock

deposits (**Table 3.2.2**). More compact mines are located in the country's north-eastern part where oil shale and phosphate rock are found, while peat deposits are evenly distributed around the whole country. Mining permits have been issued for mining nine mineral deposits and the surface area of mining claims¹ totals 81,427 ha. The majority of Estonian mineral resources are mined mainly in quarries, with the exception of lake mud and sea mud, which are extracted under water, and oil shale extracted in underground mines. The mining claims covering the largest surface areas are located in the major oilshale deposit region, where 17,379 ha is mined from quarries and 15,857 ha is given over to underground mining. In the case of other mineral resources, the surface areas of mining claims are significantly lower (**Table 3.2.2**).

From 2000 until 2012, the biggest growth was posted in the annual mining volume of oil shale. The mining volume of dolomite has also increased. Mining volumes of other mineral resources have decreased notably after the economic crisis in 2008 (**Figure 3.2.10**). Since mining volumes of oil shale are notably higher than mining volumes of other minerals, one can say that the mining of mineral resources has generally intensified over the last 12 years.

¹ Mining claim is part of earth's crust that is designated for mining of mineral resources by a mining permit

FIGURE 3.2.9 Use of water by household, industrial, agricultural and energy sectors in 2005–2012



Source: Statistics Estonia.

TABLE 3.2.2 Surface areas of Estonian mineral deposits in 2014, mineral reserves at the end of 2013 and surface areas of mining claims and mining volumes in 2013 separated by an extraction permit

Mineral deposit	Surface area of mineral deposit (ha)	Deposits at the end of 2013	Surface area of mineral claim (ha)	Mining volume in 2013
Oil shale	164 747.09	4 750 412.00 th T	53 934.42	19 169.9 th T
Phosphate rock	37 469.44	2 935 735.00 th T	-	-
Limestone	10 998.55	963 768.2 th m ³	1356.72	2271.9 th m ³
Dolomite stone	3844.69	368 189.3 th m ³	448.43	668.5 th m ³
Gravel	4480.53	149 579.4 th m ³	1797.04	1580.6 th m ³
Sand	13 060.11	945 187.8 th m ³	3869.37	4366 th m ³
Peat	358 592.1	1 605 089.5 th T	21 077.49	994.1 th T
Clay	8074.30	297 643.3 th m ³	119.46	303 th m ³
Crystalline construction stone	1915.48	2 968 994.0 th m ³	-	-
Sea-mud	280.08	3021.1 th T	32.46	0.2 th T
Lake mud	157.8	2661.7 th T	25.96	0.5 th T
Lake lime	72.86	10 708 th T	-	-

Source: Land Board and aggregated balance sheet of mineral resources.

In accordance with the increase in the growth in annual mining volume of mineral resources, the surface area of mining land² has also increased, totalling 35,000 ha in 2002 and 43,000 ha in 2013 (Statistics Estonia).

The restructuring of mining land takes place in accordance with the decrease of mineral resources. As a result, the designation of land use is changed, mainly to profit-yielding land. Mining land is restructured with the aim of restoring the use of land and to extensively restructure areas of former quarries. In the case of underground mines, the mining land can be restructured mainly by liquidating mining facilities (buildings) or by finding them some other purpose.

While in earlier times, former mining land was used mainly as forest land, in recent years there have been examples also of other types of use, such as the development of wind farms, a water sports centre in Aidu in the former oil shale quarry, and a military training ground in the closed part of the Sirgala oil shale quarry. In the national statistics registry there is no data about the volume of mining land that is reclaimed every year.

Principles of ecological restoration (e.g., considering the biodiversity of pre-mining communities and its restoration; see also Society for Ecological Restoration 2004) are not implemented in the reclaiming of mining land in Estonia. This is not needed because the surface area of most mining area is small. Only in the case of oil shale quarries, which entirely destroy the initial biological community, restoration of the biodiversity of habitats should receive more attention. An example could be implementing, on a test basis, principles of ecological restoration in restructuring some exhausted peat

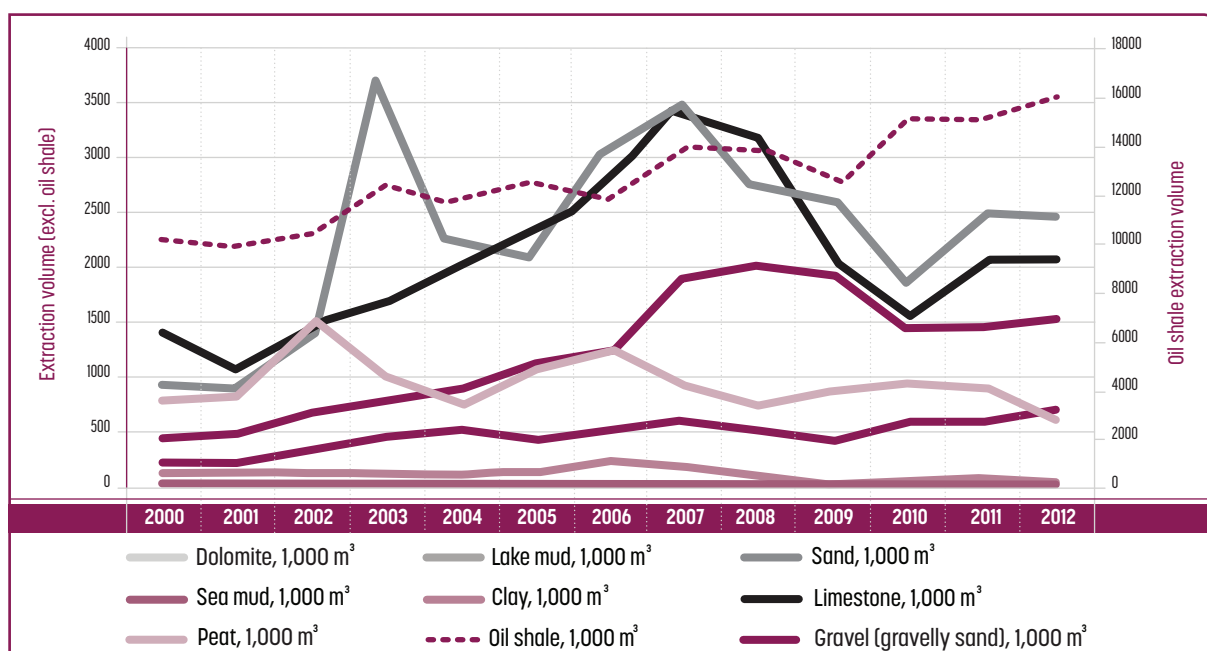
fields with the objective of reducing the amount of CO₂ produced by draining peat fields (Ilomets 2011). At the same time any land parcels in Estonia, where human activities stop, will become forested by natural means. Therefore, forest communities in former mining lands will be restored during a longer or shorter period anyway, regardless of restructuring (Sepp and Pensa 2007). Therefore it cannot be claimed that the increase in the surface area of land used for mining would definitely decrease Estonia's sustainability or worsen ecological balance. It is more important to monitor the relation of the mining of mineral resources with biodiversity and people's wellbeing, and whether society is capable of using income earned from mining for creating new value.

Scientific research on the impact of mining on biodiversity lists, as the main risk factors, the destruction of habitats and environmental pollution (Secretariat of the Convention on Biological Diversity 2010). In Estonia, generally, mining of mineral resources is not considered a major risk to biodiversity (Eek 2008), but, locally, Estonia may develop an acute conflict between environmental objectives and mining of mineral resources, as, for instance, in the Nabala – Tuhala area (Sepp and Tartes 2014).

The factors caused by oil shale mining that may affect biodiversity have been studied in Estonia more specifically, but very superficially (Pensa 2013). Since oil shale mining takes place both above- and under-ground, factors related to oil shale mining are acute also with other mined mineral

² "Mining land" means any land under mines, quarries and peat extraction areas, as well as the service area adjacent thereto.

FIGURE 3.2.10 Annual mining volume of mineral resources in 2000–2012



Source: Statistics Estonia.

resources (although their significance is lower in comparison with oil shale mining). Since surface areas of open quarries in Estonia are small (except for oil shale quarries), one can assume that their effect on shaping the area's living nature remains modest in comparison with intensive management of agriculture or forests. At the same time, the duration of the impact of above-ground mining (i.e. time between the start of mining until a new biological community can start developing) depends on the mineral resource that is being mined. In the case of oil shale that uses the so-called swathe method, the work front moves horizontally forward relatively rapidly and a new biological community is born already a few years after mining (Pensa et al. 2005). In the case of peat, sand and gravel, mining can take decades and such mining land can remain unsuitable for the biological community for a long time.

In the case of underground mining, the direct destruction of habitats takes place only when building the above-ground mining infrastructure and its impact on nature depends on the character of the habitats. In essence, this is about developing structures and there is not much difference, in terms of original biodiversity, whether the land is used for developing a mining-related or some other structure (e.g., a new residential area or a road).

Mineral deposits used as energy resources can be considered vital for satisfying the primary needs of modern people. Being poor in mineral resources, we are extremely dependent on their use as more than 80% of electrical energy consumed in Estonia is generated from oil shale. This is making the coun-

try independent in energy, but also reduces the nation's sustainability since a large share of the economic activity is based on non-renewable resources. The majority of Estonian mineral resources can be mined almost without losses and create almost no mining waste (examples of mineral resources that can be extracted without losses include peat, sand and gravel). Again, oil shale is a big exception which cannot be extracted in underground mines without losses, and whose enrichment generates almost 4 million tons of unused waste a year (Environmental Registry). Essentially, this is limestone for which there is no reasonable application.

For preventing depression of open land, oil shale is mined underground with the room and pillar mining method which means that about 40% of the oil shale reserve that is being mined must remain underground. Unfortunately, this also does not provide a total guarantee regarding the stability of the land, which is why land use above underground oil shale mines is limited. Since the mining company has the obligation to repair damages caused by mining up to 10 years from the end of mining, in areas where mining took place decades ago, it is the responsibility of the state. At present, the resolution of so-called heritage problems related to mining of mineral resources is the responsibility of a landowner or local government.

Understandably, mining of mineral resources also has other negative impacts on people's wellbeing. In the case of noise and pollution, this impact can be regulated by setting environmental requirements. Inconvenience related to other changes in life organisation should be offset by the local income earned from mining activities, especially resources fees.

Miners need to consider that meeting public requirements related to mining may not be enough to achieve the positive opinion of the local community towards mining. In the interest of mutual understanding and social approval, it is important that local people are increasingly involved in the decision-making process (Prno 2013).

Summary

Use of natural resources often includes nature-changing disturbances. For instance, the impact of oil shale mining has been relatively short-term, but its impact has been extremely intensive. At the same time, at the conclusion of a mining project, earlier biological communities and soil fertility are restored as a result of natural processes. Mono-cultural and intensively fertilised field masses influence natural systems over a much longer time, reducing biological diversity and soil fertility. The more balanced and regulated the organic and in-

tensive farming methods are and the more allowable cuts are balanced with forest growth increments, the more sustainable are the activities. In this respect, Estonia is developing relatively strongly towards sustainable management. While there are shortcomings in terms of fish resources, where intensive catch is being seen as a problem, there has been much less talk about water than as natural resource. Although in Estonia the index of water use is below 4%, which indicates nationally sustainable water consumption, the issues of water use related to the mining of oil shale are largely unanalyzed. One should emphasise that not all disturbances caused by the activities of humans are negative. As a result of the impact of several long-term factors on the natural environment, some ecological systems have developed a unique state of balance that ensures biodiversity – for instance, constant mowing and/or grazing has developed semi-natural communities rich in species. To preserve them, one must now continue by maintaining these areas. ●

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3.3

Residues

► TIIT VAASMA, EGERT VANDEL, MARGUS VETSA

Introduction

The residues that are thrown into our ecosystems can be divided into two groups: those that are visible to the eye (e.g. wastes) and those that are invisible (e.g. exhaust emissions). The former may be a directly perceivable problem, but the latter can have a more indirect and more sweeping negative impact. They are also differentiated by their impact area – if waste is local and water pollution is regional, then the emission of gasses has a global impact. Therefore, the solutions for these problems must also differ somewhat. Local and regional problems can be managed domestically, but international cooperation is important for dealing with air pollution.

One indicator of ecological balance highlighted by the SE21 is the relationship between the emission and the fixation of greenhouse gases. In addition to the reduction of emissions, the greenhouse gas fixation capacity of the ecosystem is also essential and must increase proportionally. The indicators for air pollution include the emission quantities of certain toxic substances along with the harm caused by noise to the living environment. In addition, in the SE21, the level of waste management (the level of waste sorting and utilization [at least 75% of wastes]) has also been defined as an indicator for the reduction of pollution, as well as the following factors: the percentage that the packaging tax comprises in the cost of the product; the proportion of residue in the product; the percentage of recyclable raw materials in the product; the environmental impact over the product's entire life cycle, etc.

The level of Estonian waste management and the speed of its change depend primarily on the European Union's waste policies. When Estonia joined the European Union in 2004, we accepted the waste management goals that had already been established.

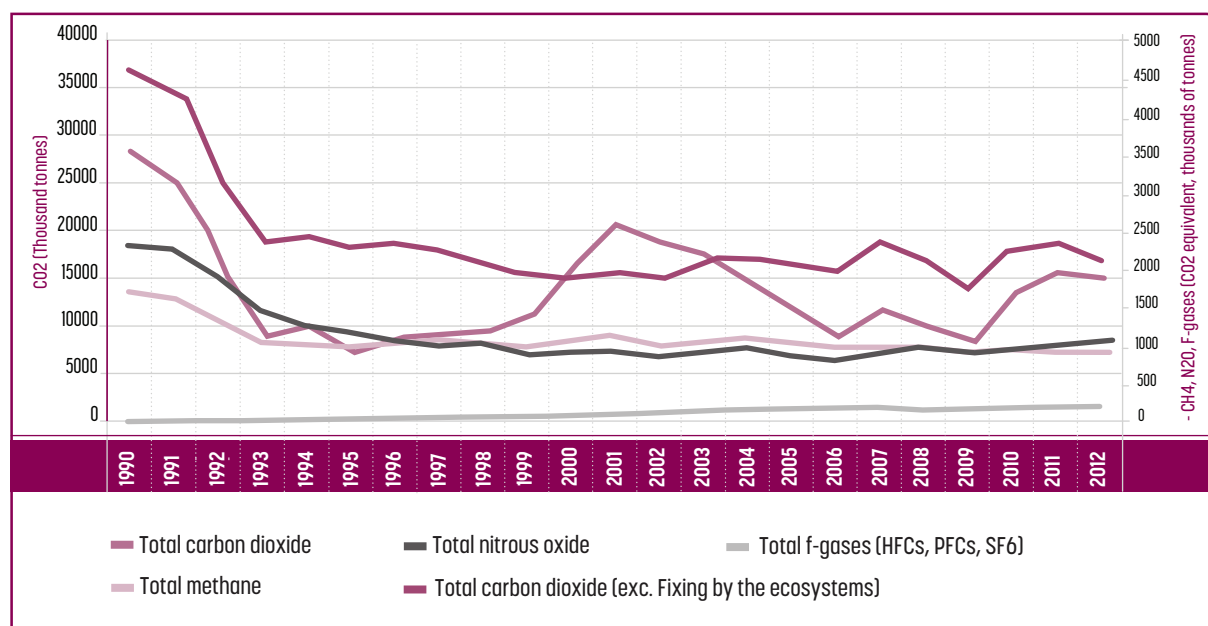
3.3.1 Greenhouse gasses

Estonia is located in an area where the average air temperature has risen by 1.0–1.7 °C in the past few decades (Jaagus 2006), which has resulted primarily from warmer temperatures from January to May. The number of stormy days during the winter has also increased, the duration of the ice cover has decreased and the average barometric pressure during the winter has decreased (Kont et al. 2011). This can result in more frequent and larger scale flooding in the coastal areas, while the impact on agricultural productivity is less direct.

The climate changes are primarily caused by natural changes in the solar energy that reach the Earth, but a large role is also played by greenhouse gases in the atmosphere. A continuously increasing concentration of greenhouse gases in the atmosphere is caused by both natural and anthropogenic emissions that exceed the fixation capacity of greenhouse gases. The main greenhouse gas in Estonia is carbon dioxide (CO₂), which comprises almost 90% of the total emission of greenhouse gases (Figure 3.3.1).

The next largest contribution – approximately 5% - is made by methane. Although globally, the emissions of methane are many times smaller than the emissions of carbon dioxide, methane still plays an important role (it is credited with approximately 20% of the greenhouse effect). Since different greenhouse gases have different global warming potential, their quantity is measured in CO₂ equivalent tonnes. In the case of methane, this is 21, i.e. one tonne of methane produces a greenhouse effect equivalent to 21 tonnes of CO₂ (Ministry of the Environment 2014). The main anthropogenic sources of methane are considered to be agriculture, domestic

FIGURE 3.3.1 The emission of greenhouse gases by type, 1990–2012



Source: Statistics Estonia 2014.

waste landfills, and the production of natural gas and effluent.

The percentage of nitrous oxide (N₂O) in Estonian greenhouse gas emissions is also ~5%. Although the emissions are low, they have a great potential for creating the greenhouse effect, one that is 310 times higher than carbon dioxide (Ministry of the Environment 2014). The main sources of N₂O related to human activity are considered to be agriculture, along with the transport sector with its burning of fossil fuels, and the industrial sector.

Although their emissions in Estonia are very small, f-gases also play an important role. With their extremely high global warming potential (23,900), today they comprise approximately 1% of Estonian greenhouse gas emissions. The release of f-gases results primarily from the use of refrigeration equipment, aerosols and air conditioners. The percentage of f-gases in Estonia has increased constantly, since f-gases have to a great extent replaced compounds like CFCs, HCFCs and halons, which deplete the ozone layer (in air conditioning and climate-control equipment). F-gases are made dangerous due their inertia. (Ministry of the Environment 2014)

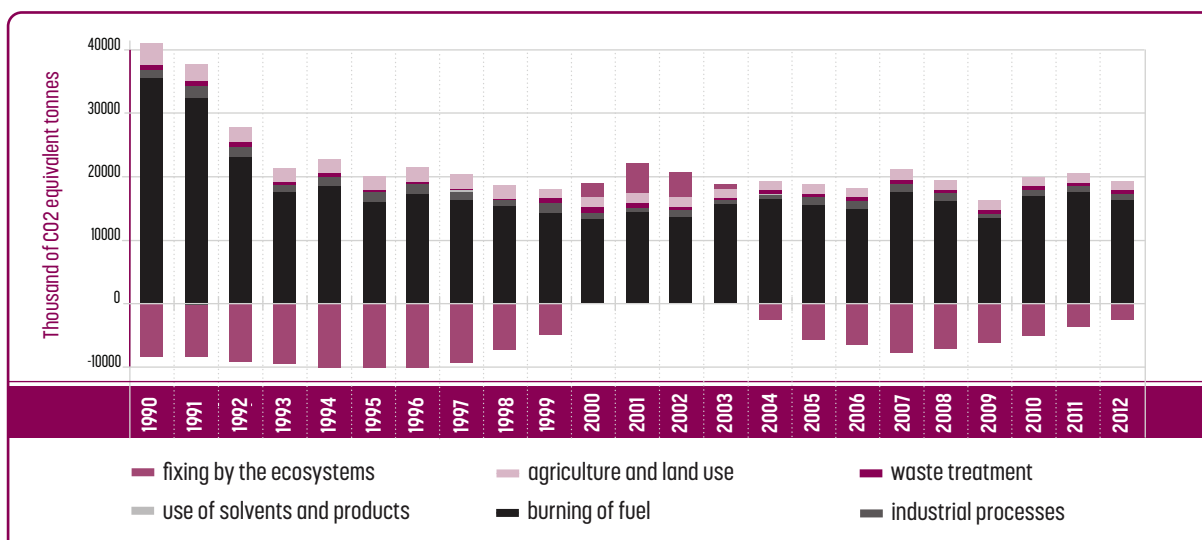
Since climate change is a global problem and greenhouse gas emissions do not honour state borders, agreements are required to inhibit greenhouse gas emissions. Estonia signed the United Nations Framework Convention on Climate Change in 1992 and the joined the Kyoto Protocol in 1998. In this connection, Estonia accepted the obligation to reduce the emission of greenhouse gases by 8% compared to 1990. The total emissions of greenhouse gases was very high in 1990, reaching 40.8 million CO₂ equivalent tonnes (Antso, Hermet 2012) and this was caused mostly by the conditions prevalent in the Soviet Union. It was not difficult for Estonia to fulfil its promise and reduce

it greenhouse gas emissions by 8% since the transfer from a planned economy to a market economy after the collapse of the Soviet Union resulted in an abrupt decline in industry and greenhouse gas emissions. The lowest level was in 1995 when emissions comprised only 30% of the total from 1990 (Figure 3.3.1).

From 1995 to 2012, the total emissions of CH₄ and N₂O have been relatively stable (Figure 3.3.1). The methane emissions in waste treatment started to decline (Statistics Estonia 2014) in connection with the closing of small non-hazardous waste landfills (reduced from 157 to 59), which continued until 2009 (Figure 3.3.8). At the same time, an increase in emissions occurred in the agricultural sector. Some fluctuations in N₂O are primarily related to the emissions in the agricultural sector, which comprise 80% to 90% of the total emissions of this greenhouse gas (Statistics Estonia 2014). F-gas emissions, which are increasingly replacing the compounds used in industry that deplete the ozone layer, have been rising constantly.

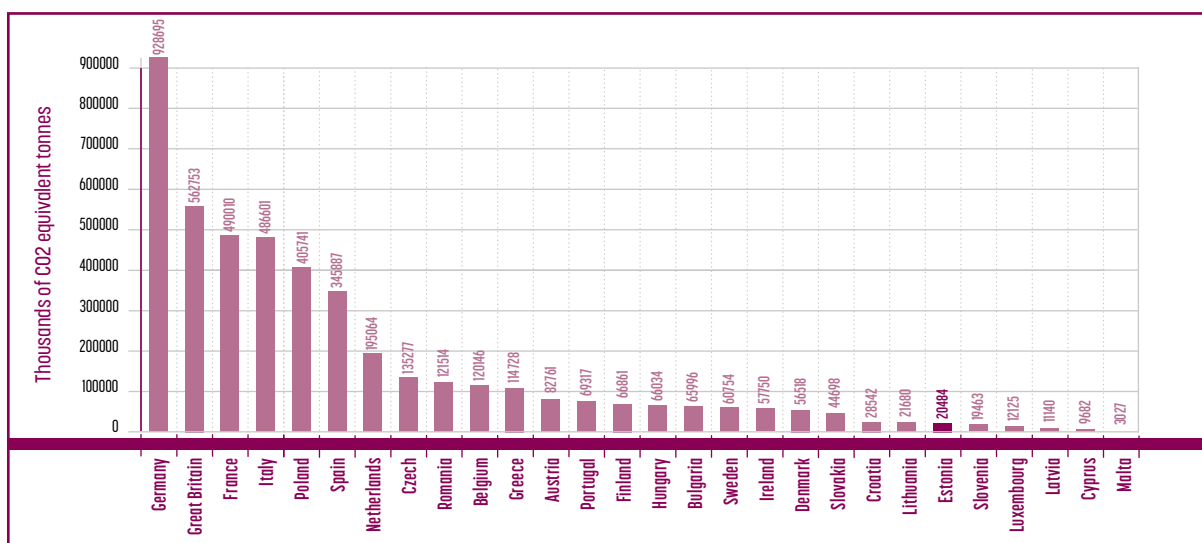
The percentage of CO₂ in greenhouse gas emissions has always been the highest (Figure 3.3.1), and this has been caused by Estonia's energy industry, where most of the electrical power is produced from oil shale. The sharp decline in CO₂ emissions was caused by the abrupt decline in industrial energy needs in the early 1990s. At the start of the new millennium, CO₂ emissions started to increase, reaching over 20 million tonnes in 2001. This increase was caused by a reduction in the CO₂ fixation amounts. If we look at the greenhouse gas emissions by sector (Figure 3.3.2), we see that until 2000, the ecosystems were able to fix various amounts (up to 10,000 tonnes) of CO₂. However, thereafter, the trend

FIGURE 3.3.2 The emissions and fixation of greenhouse gases by sector, 1990–2012



Source: Statistics Estonia 2014.

FIGURE 3.3.3 The total greenhouse gas emissions of the European Union Member States in 2011



Source: Eurostat 2014.

reversed in connection with the large annual yields in forestry, which exceeded the estimated natural CO₂ fixation capacity (Antso, Hermet 2012). The subsequent fluctuations in CO₂ emissions have been caused primarily by changes in the fixation of CO₂ by the ecosystems (Figure 3.3.2). If immediately after the industrial decline in the early 1990s, the ecosystems in Estonia fixed up to 50% of the total greenhouse gases, then due to the intensity of logging this has decreased, and in the last few years (2011–2012) the fixation amount is slightly over 10% (Statistics Estonia 2014).

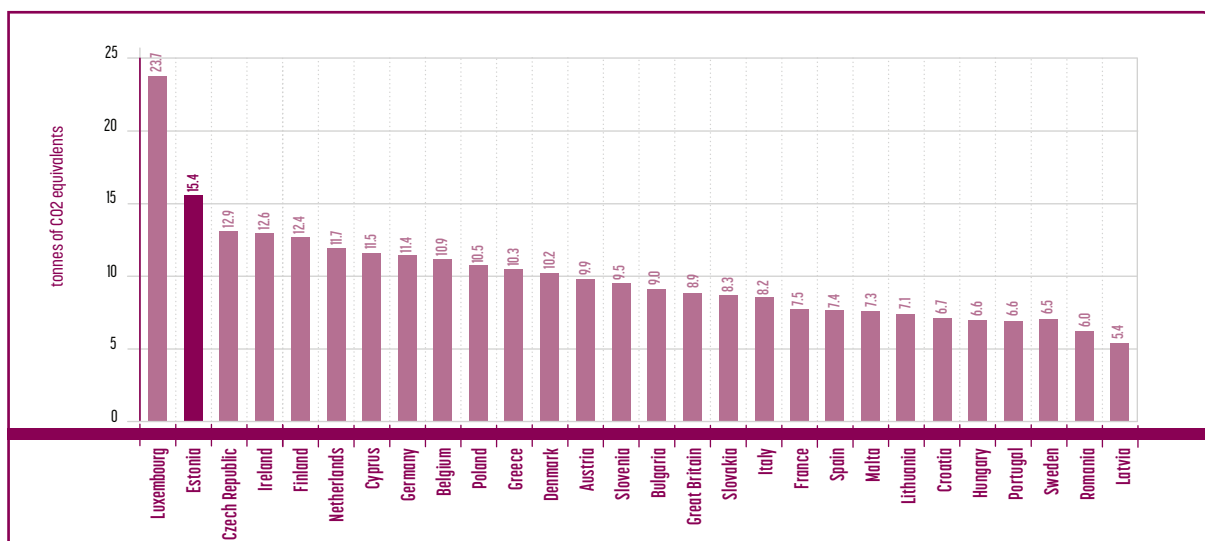
The greatest contribution to greenhouse gases is caused by the burning of fuel (Figure 3.3.2), i.e. primarily the oil-shale-based energy sector, which contributed 88% of total emissions in 2012. As of the same year, the total emissions of

greenhouse gasses comprised only 53% of total emissions in 1990; in other words, Estonia has fulfilled its international obligations in this regard.

Estonia's greenhouse gas emissions are barely noticeable when compared to the other European Union Member States (Figure 3.3.3), being eight times lower than the European Union average, which is due to the country's small area and population.

If we look at the per capita emissions of the EU Member States (Figure 3.3.4), the situation is not as positive. In this comparison, Estonia is in second place with 15.4 CO₂ equivalent tonnes of emissions per capita, which is 1.6 times higher than the EU average. Only Luxembourg is ahead of us. The reason is our energy engineering, which is based primarily on

FIGURE 3.3.4 Greenhouse gases per capita in the European Union Members States in 2011



Source: Eurostat 2014

the burning of oil shale. Oil shale is a strategic natural resource for Estonia, which allows for large-scale energy production and ensures energy independence, but it is a fossil fuel with relatively low calorific value, the utilisation of which creates a large amount of solid and gaseous emissions.

When mitigating climate change, one of the main objectives is the reduction of greenhouse gas emissions. In the longer term, the objective is to reach a emission of CO₂, i.e. the amount of carbon dioxide should not exceed the amount fixed by the ecosystems. In connection with energy production, emissions can be reduced by bringing the existing production facilities into compliance with environmental requirements and by implementing the use of renewable and other alternative-energy sources (Saul, Antso 2014).

In Estonia, the percentage of renewable energy sources has increased significantly during the last decade. For example, if in 2003 the total consumption of electricity produced in these ways was only 0.6% then in 2013 it was 13.2% (Statistics Estonia 2014). The production of water and wind energy has increased dramatically. In the early 1990s it was ~0, but by 2013 it already reached approximately 2,000 terajoules (TJ) (Statistics Estonia 2014). The relative importance of renewable energy has increased in the total consumption of energy (to 15.3% as of 2013) and in the production of primary energy (22.1% as of 2013) (Statistics Estonia 2014). Most of Estonia's renewable energy is derived from the production of electrical power from waste, biomass and biogas (Antso, Hermet 2014).

The production of renewable energy has been supported by renewable energy grants at a rate of € 0.0537/kWh as of 2014 (Elektrituruseadus 2003). At the same time, it must be understood that by using renewable energy sources such as firewood (which comprises a large part of the biomass used for the production of renewable energy) annual logging yields may increase and thereby reduce the amount of greenhouse gasses that are fixed by nature. Although Estonia currently

fulfils all the obligations that it has accepted under international agreements, we should still move toward the further reduction of emissions. The EU 2030 Framework for Climate and Energy Policies passed in 2014 has established the goal of reducing greenhouse gas emissions by 40% compared to the situation in 1990. Estonia has already fulfilled this objective, however not thanks to a systematic reduction of emissions but to the extremely high base-year emissions.

3.3.2 Air pollution

Just like climate change, air pollution is also a transnational concern. A decline in air quality plays an important role in the eutrophication of the aquatic environment, the deposition of acidic compounds in the soil, etc. Air pollution will also have a significant impact on the health of residents (WHO 2013).

Improving the standard of living increases industrial activity and energy consumption, which in turn causes increased production of primary energy. Economic growth is accompanied by increased investments, including into environmentally sustainable measures that help to reduce pollution. Theoretically, pollution charges should also be a motivation for reducing and preventing environmental pollution. However, after 2006, when most of the air pollution charges were doubled (Figure 3.3.5), the rates for SO₂ have increased by 20% annually, and since 2010 even more.

Important sources of air pollution are various industrial processes, which are the main causes of air pollution problems in the areas with chemical, metal and paper industries, and other businesses but also in city centres due to traffic. Since 1990, general air pollution in Estonia has decreased significantly (Figure 3.3.5). The oil pollution related to energy

production depends primarily on the fuel and combustion technology being used, as well as the efficiency of the measures used to limit the emissions. Almost 90% of the air pollution originates from stationary sources of pollution, such as electrical power production, industry, etc. (Kohv et al. 2014).

The greatest pollution of the environment is caused by the production of energy from fossil fuels, which are the main source of SO₂ and NO_x emissions of an anthropogenic origin, as well as of particulate matter. The incomplete combustion of fuel creates CO, volatile organic compounds (VOC) and polycyclic aromatic hydrocarbon (PAH) (Liblik, Karu 2004).

Between 1990 and 2012, the emissions of sulphur dioxide have decreased by about 85.2%, largely caused by a decrease in power production (the consumption of oil shale as a primary fuel declined in Estonia from 231 PJ in 1990 to 156 PJ in 2012).

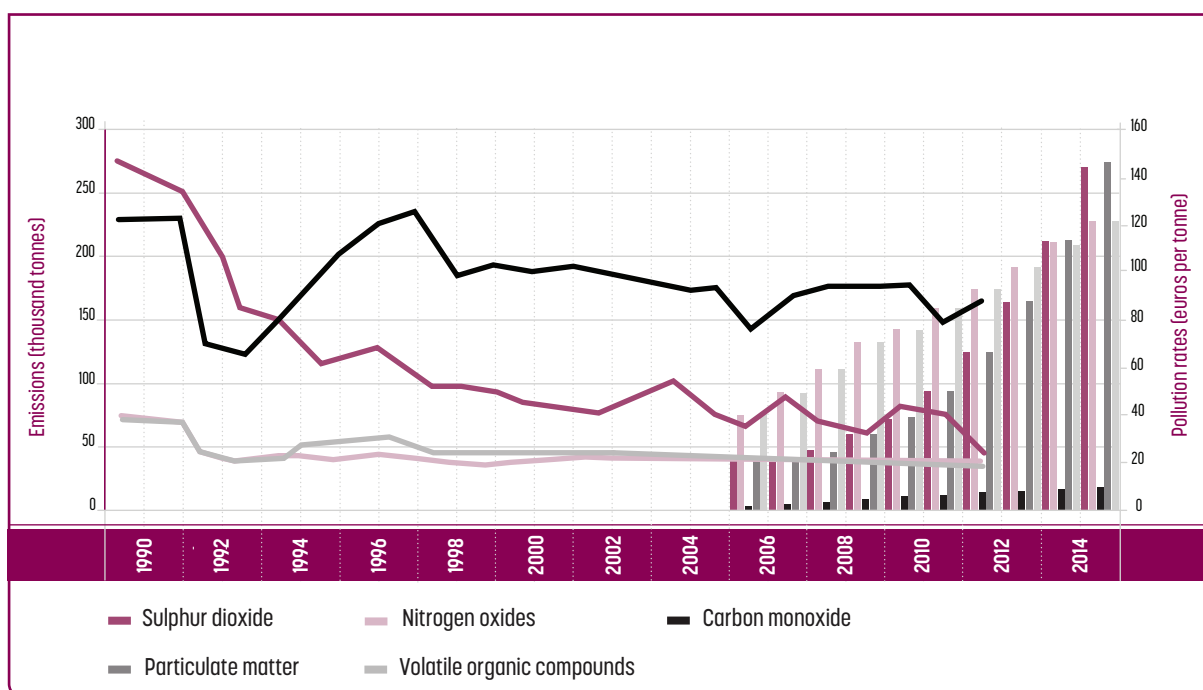
This was caused in turn by economic reconstruction. The utilisation of local fuels (including timber and shale oil) and natural gas as a source of thermal energy has increased steadily since 1993, while the use of heavy fuel oil has decreased. The use of fuels with lower sulphur content is also a reason for the reduction in SO₂ emissions (Kohv et al. 2014). During the last few years, Estonian and Baltic power plants have renovated some of their energy blocks, switching from pulverised fuel combustion to fluidised bed combustion, whereby the amount of consumed oil shale was reduced and SO₂ emissions also decreased markedly (Antso, Hermet 2012). Nevertheless, in the context of the EU, we are large per capita air polluters (Figure 3.3.6 (Eurostat 2014)).

Of the nitrogen oxides (NO_x), NO and NO₂ are the most

important in regard to air pollution. Nitrogen oxides usually develop from combustion; their main anthropogenic sources are energy production and traffic. Based thereon, our emissions per capita are quite high (37 kg in 2012 (Eurostat 2014)). In the atmosphere, the nitrogen oxides acidify into nitric acid (HNO₃), which in turn causes acid rain. Nitrogen oxides cause the formation of photochemical smog and ozone at the ground level. From a health viewpoint, NO_x is harmful to humans since it reduces the body's ability to resist respiratory tract infections (such as flu and pneumonia). Nitrogen oxides can also cause damage to other biota by restricting plant growth and causing damage to leaves (Liblik, Karu 2004).

The amount of ammonia (NH₃) emissions has declined by 56.3% compared to 1990. This was primarily due to a reduction in the number of animals and in the use of fertilisers (Kohv et al. 2014). Among the EU countries, our emissions are close to the average (Figure 3.3.6). Highway transport comprises 1.8% of all NH₃ emissions, but it has increased during the last few years thanks to the increase in the number of passenger cars. Approximately 2% of these emissions are volatilised from solid fuels (open-pit mining and blasting). Industry and waste treatment comprise about 1.3% of all ammonia emissions (Kohv et al. 2014). In the air, NH₃ acts as an acid (an HNO₃ and H₂SO₄) neutraliser, but when it settles on the ground it is a potential acidifier. The excess deposit of nitrogen compounds can also cause eutrophication, which mostly causes the increased production of phytoplankton as well as faster-growing, higher vegetation, and is often accompanied by a deficiency of oxygen and a worsening of water quality. On land, it can cause a

FIGURE 3.3.5 The amount of air pollutant emissions in Estonia and their pollution charges starting in 2006



Source: Statistics Estonia, 2014 and the Environmental Charges Act, 2005

reduction in the richness in the communities that have developed in very nutrient-poor conditions, (e.g. bogs), which in turn may also mean the disappearance of host and food plants (Liblik, Karu 2004).

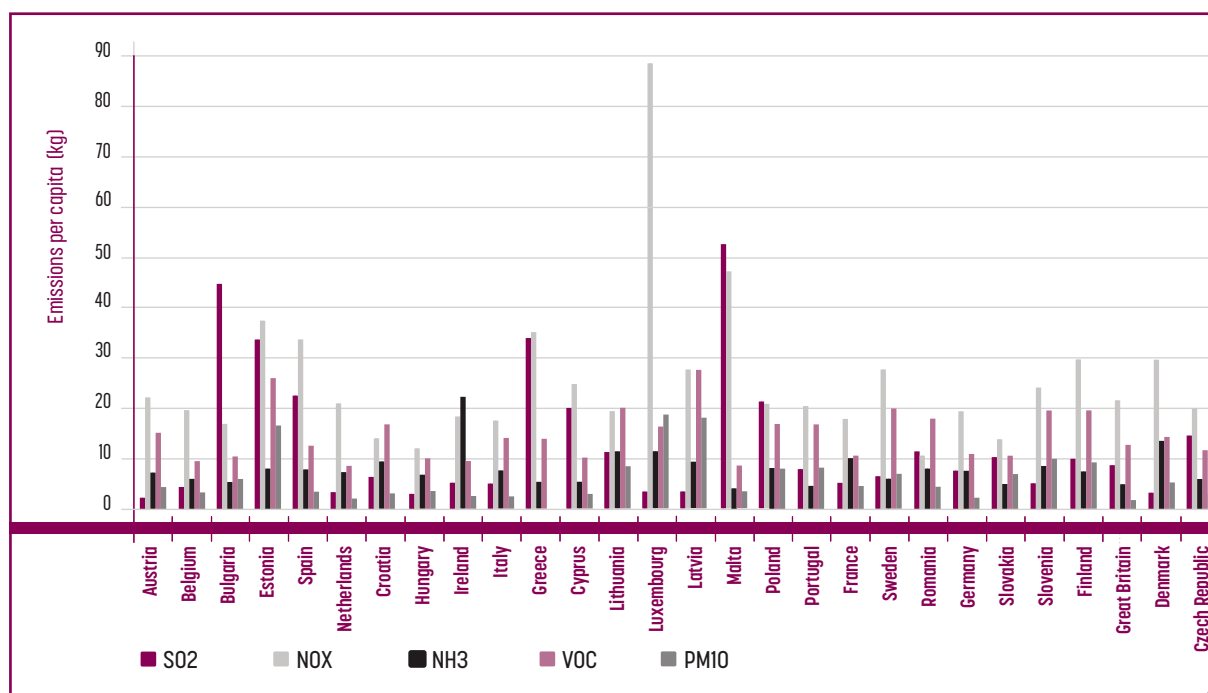
Transport causes air pollution and noise, both of which impact the environment. The solution for this is the development of public transportation as well as cycling and pedestrian paths. The number of people using public transportation has increased during the last two years. However, at the same time, the number of passenger cars continues to increase (493,800 registered passenger cars in 2005 vs. 628,500 in 2013). The transport sector contributes over 40% of the total NOx emissions and also CO and VOC (Statistics Estonia 2014). Road transport is also the cause of the high content of particulate matter (PM10) in the ambient air of cities. An important source of PM10 is also the so-called dusty industries, and local heating. Almost a third of the EU's urban population is at risk of an excessive concentration of particulate matter in the air (European Commission 2012). Also in the bigger cities of Estonia the high concentration of PM10 is a problem, despite the fact that in the years 2000 to 2012 emissions of particulate matter were reduced by more than 50% (Figure 3.3.5 [Statistics Estonia 2014]).

Volatile organic compounds promote the development of ozone at the ground level and are also a source of photochemical smog. These compounds, which are mostly carried into the body through the respiratory tract, cause various health problems. If we compare the per capita VOC emissions, we are unfortunately in second place among the European Union

countries (Figure 3.3.6). Various heavy metals end up in the air (cadmium, mercury, nickel, vanadium, arsenic, etc.) as the result of energy production. Heavy metals end up in living organisms throughout the air, water, soil and food and since they accumulate in organisms, their concentration is especially high at the top of the food chain. (Liblik, Karu 2004).

Although many of the ozone-depleting substances have been eliminated from use throughout the world, they still create problems due to their longevity. The greatest threats to the ozone layer are considered to be Freon (totally-halogenated chlorofluorocarbons [CFCs] and partially-halogenated hydrochlorofluorocarbons [HCFCs]) and halons. HCFCs have been replaced with hydrofluorocarbons (HFCs), which are harmless to the ozone layer, but have a huge potential to create the greenhouse effect. On 1 January 2010, a ban came into force in the European Union on the use of virgin HCFCs in the production or servicing of products or equipment, and primarily in replenishment. From 1 January 2010 to 1 January 2015, virgin HCFCs can be used only to service equipment. As of 1 January 2015, adding any HCFCs when servicing equipment is prohibited (Ministry of the Environment 2014).

FIGURE 3.3.6 Per capita air pollution emissions in the European Union Member States in 2012



Source: Eurostat 2014.

3.3.3 Wastewater

Thanks to its climatic conditions and geographical location Estonia has large freshwater reserves. Although the state of the bodies of freshwater can change over time for natural reasons, during the last century this has been primarily caused by human activity. The most important substances causing an increase of nutrients have been phosphorus and nitrogen. An important indicator is also biochemical oxygen demand, i.e. how much dissolved oxygen is needed to break down the organic compounds that are present in the water. All three of these indicators have been monitored in bodies of water for over twenty years (Figure 3.3.7). Compared to 1992, the situation has improved markedly. The density of waste substances in the early 1990s was very high and the greatest decrease occurred during the few years when the total load of phosphorus, petroleum as well as BHT7 declined by approximately 50%. The initial improvement in the situation was related to the abrupt decrease in industrial production after the collapse of the Soviet Union. Subsequently, the level of pollution has declined constantly, and this is related more to the large investments that have been made in Estonia's water management. The undertaking of investments has undoubtedly been strongly influenced by exponentially-increasing environmental charges (as per the Environmental Charges Act 2005). Practically all the wastewater treatment plants in the largest cities and most of the smaller purifiers have been reconstructed or new modern purifiers have been built (Antso, Hermet 2012). The latest data from 2013 shows that, compared

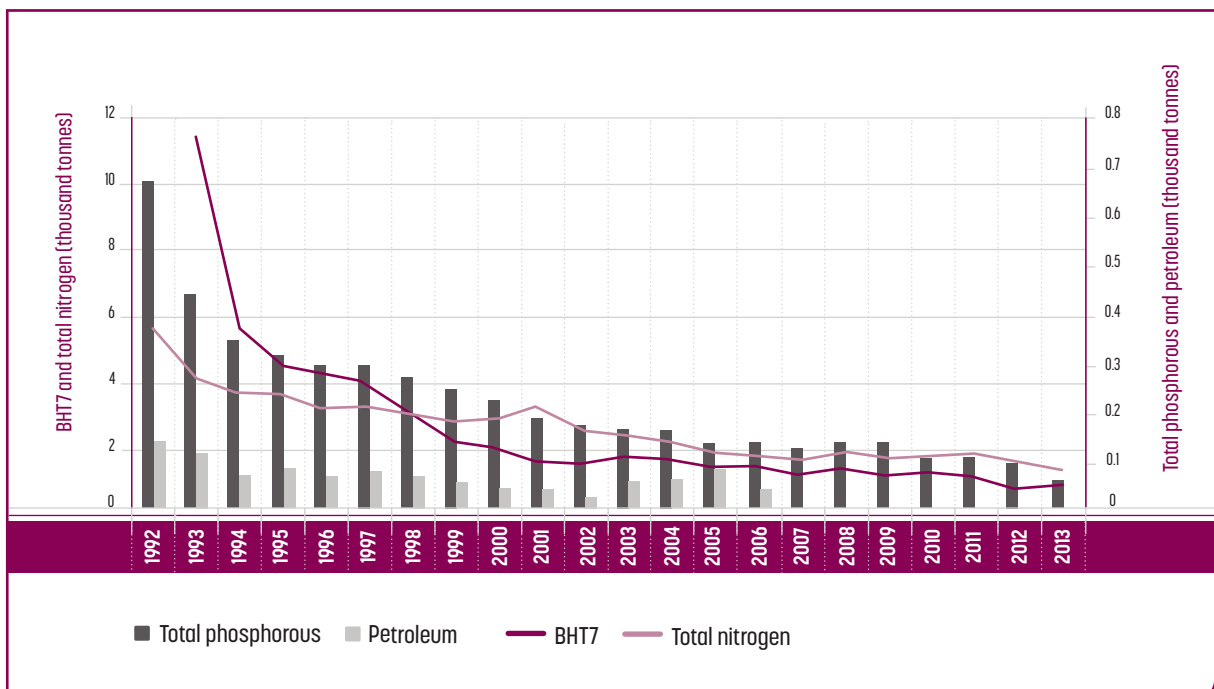
to 1992, the BHT7 pollution load has declined by 92.8%, total phosphorous by 90.1% and total nitrogen by 78.2%. The amounts of petroleum products fluctuate most but the data for the last few years is lacking.

The increase in the quality and quantity of the purification of sewage is demonstrated by the relationship between the quantity of purified water and the amount of water requiring purification. In 1994, 95% of the water requiring purification was treated, and in 2013, the corresponding indicator was 99.6%. The percentage of insufficiently purified sewage, which comprised 7.8% of the water requiring purification in 1994, has also decreased. By 2005 this was 1.5% (Statistics Estonia 2014).

Nutrients can also end up in the aquatic environment due to the fertilisers used in agriculture. Even though fertilisers had begun to be used more sparingly in the beginning of the 90s (Statistics Estonia 2014), during last decade the amount of mineral fertilisers used per hectare has been constantly rising – 78 kg/ha in 2005, but already 135 kg/ha in 2013 (Põllumajandus arvudes 2007; 2010; 2013).

Approximately 167 million m3 of mining water is drawn annually (Statistics Estonia 2014), which is directed into bodies of surface water. The water pumped out of water-free quarries can significantly affect the hydrological and hydrochemical indicators of artificial recipients, as well as groundwater levels and thereby the water levels of bodies of surface water and their ecological status. An example is the impact of the Ida-Viru county oil shale mines, where the water of the Estonia mine, and the now closed Viru mine, has been

FIGURE 3.3.7 The pollution load of the water requiring purification that is directed into bodies of surface water, by pollutant



Source: Statistics Estonia 2014.

directed through several lakes in the Kurtna lake system, causing changes in the environmental status of these lakes (Terasmaa et al. 2014). In this same area, the drop in the water level of the lakes caused by drawing groundwater has caused changes in the ecological status and the disappearance of rare aquatic plants (Vandel et al. 2014).

It could be said that the state of most of Estonia's bodies of groundwater is good. The only exception is the body of groundwater in the Ordovician oil shale basin Ida-Viru county with its high sulphate and mineral content, hardness and hazardous substances (phenols and petroleum). Limited groundwater pollution exists in the unprotected groundwater in the Ordovician–Silurian bodies of groundwater, as well as the Quarterian bodies of groundwater throughout Estonia. Starting in 2006, the nitrate content of the Pandivere and Adavere-Põltsamaa nitrate-sensitive areas has increased due to intensive agricultural production, depending on the year and climatic conditions.

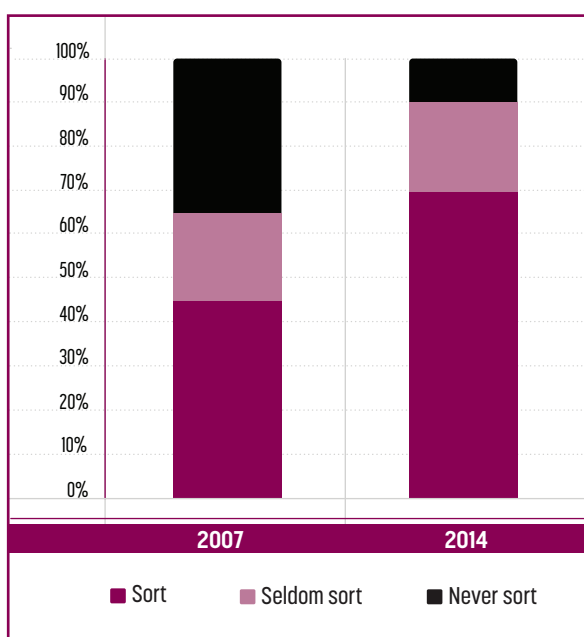
Based on studies, the state of Estonia's coastal sea has been assessed as predominantly average, and considering the slow water exchange any rapid improvement cannot be expected (Antso, Hermet, 2012). The coastal water of the Baltic Sea is heavily eutrophic, which is caused by the nutrient load originating from Estonia and the neighbouring countries, as well as the pollution that has been deposited in the Baltic Sea over decades. The addition of nitrogen and phosphorus to the marine environment depends on the quantity of precipitation and the environmental friendliness of the economic activities in the catchment area.

Approximately 19% of the significant watercourses in Estonia are strongly influenced by human activity (Lode et al. 2011). Most of the watercourses are in either good or excellent condition (Antso, Hermet, 2012). However, based on their ecological state, few water courses are in excellent condition (the Peetri, Kaave, Punapea and Rõngu Rivers and the lower reaches of the Valge River). During the last few years, the water quality of Estonia's rivers has improved primarily due to the newly built or reconstructed canalisation systems for wastewater. However, some increase in nitrogen content has occurred in the rivers in areas where there is intensive agricultural activity.

Of the small Estonian rivers that were monitored, approximately 1 are either in good or excellent ecological condition. Based primarily on excess nutrient content, a third of the small lakes are in average condition; and the state of Lake Peipus-Pihkva is poor, due to abundant nutrients. A large part of the nutrients are carried into Lake Pihkva by the Velikaja River, which in turn affects the greater Lake Peipus. At the same time a more important role in the direct burden is played by the freed phosphorus from the bottom sediments, the amount of which, compared to the inflow, is several times greater (Antso, Hermet 2012).

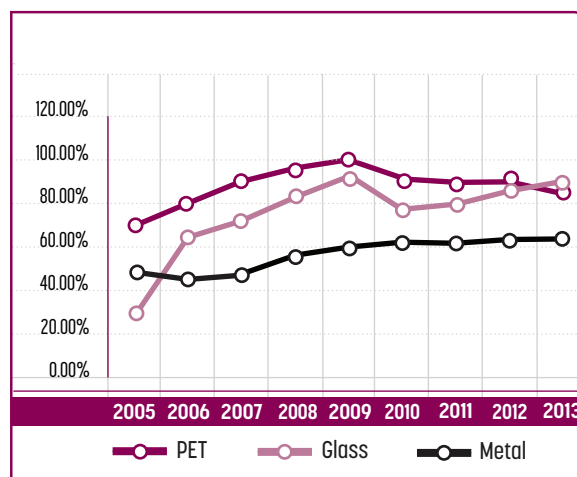
Although the situation could be better, compared to the other European countries, the state of Estonia's bodies of water ranks among the top ten (Saul, Antso 2014).

FIGURE 3.3.9 Waste-management behaviour of the population in 2007 and 2014



Source: SEI 2008 and Nature Awareness of the Population 2014.

FIGURE 3.3.10 The rate of return for packaging by type



Source: Eesti Pandipakend.

3.3.4 Waste

The SE21 strategy declares that the level of waste management must be significantly improved by increasing sorting and recycling. At the same time, the status recommended for 2030 seems not to be ambitious enough.

The Waste Management Plan that was completed in 2014 refers to the Estonian Environmental Strategy 2030, and the SE21 strategy that it was based on, as guiding documents. In the Waste Management Plan, Estonia's environmental strategy is criticised as follows: considering the rapid development of Europe's waste policies toward more efficient resource utilisation, prevention and recovery of waste, including through recycling, and Estonia's expanded treatment possibilities (the incineration of domestic waste and mechanical-biological treatment), the future objectives established by the environmental strategy seem modest

The level of Estonia's waste management and the speed at which it changes depends primarily on European Union waste policies and the guidelines based thereon. In the Strategy on the Prevention and Recycling of Waste passed by the European Union in 2005, the long-term objective was to become a recycling society, by preventing the generation of waste and using it as a resource (Report from the Commission to the European Parliament 2011). Starting in 2005, the EU has made significant progress in becoming a resource-saving "recycling society". A recent report on this strategy notes that the general rates of recycling have improved, the amount of waste taken to landfills has decreased and the use of hazardous substances, especially in electrical and electronic equipment, has also decreased. A considerable number of landfills and

waste incineration facilities that do not meet requirements have been closed or converted to meet European standards.

What are the real improvements of Estonian waste management from the past decade, since the approval of SE21? There is no doubt that extensive closedowns of inadequate landfill sites and the exit from landfill-oriented waste management constitute one of these significant improvements. Also efforts and successes in the area of developing a system for the separate collection and recovery of wastes should be highlighted.

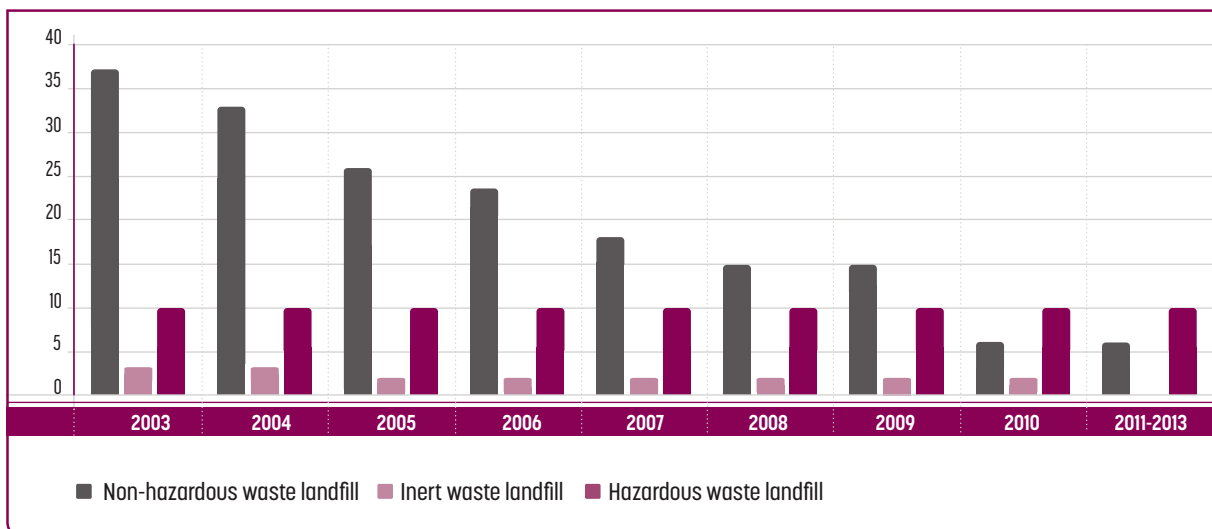
The closing of small non-hazardous waste landfills that started in 2001 and 2002 (from 157 down to 59) continued until 2009 (Figure 3.3.8). It should be noted that in 2005 slightly more than 300,000 tonnes of CO₂-ekv was dispersed into the atmosphere from landfills, but by 2015 this should have decreased by an estimated 60%, and be down to approximately 135,000 CO₂-ekv (Ministry of the Environment 2013). An important factor in the reduction of emissions is also the commissioning of the Iru Power Plant's waste-to-energy block in 2013.

The changes in environmental charges in 2005 and 2009 have provided certainty for the investments in waste incineration and waste-fuel facilities. Without these changes, Estonia would probably not have fulfilled the requirements applied by the EU.

Contacts of Estonian citizens with waste treatment facilities and the impacts caused by these may be rather indirect, but waste from daily activities and topics connected with such waste are included in people's daily agendas. Still there is room for explanations as to why the pre-sorting of waste and recycling of materials are important.

Based on studies, the waste collection habits of Estonians

FIGURE 3.3.8 Change in the number of landfills, 2003-2013



Source: National Waste Management Plan 2014-2020.

have improved – 70% of respondents confirm that they often take their hazardous wastes to the designated collection points and sort their waste; 20% do this seldom, and only <10% have never done it. (**The Nature Awareness of the Population 2014**). Based on 2007 data, 25% to 50% did not sort their waste daily and 20% to 25% sorted sometimes (**Figure 3.3.9**).

The success factor in the separate collection of domestic waste is the existence of a large-scale and visible take-back solution which is centrally coordinated and financed. One great example is a well-functioning take-back system of deposit packaging launched here in Estonia and its excellent performance in take-back amounts and recovery (**Figure 3.3.10**).

Along the lines of the packaging deposit system, the principle of producer responsibility, often termed extended producer responsibility (EPR) is applied to other types of waste (electrical and electronic equipment, car tyres, end of life vehicles, other packaging, batteries etc.), whereby the producer is responsible for the product from its production until the moment when the waste generated from the product has ceased to be waste. Above all, this means that the producer is responsible for the collection of the end-of-life product and its recycling, and bears the relevant costs. In this way, consumers can get rid of such waste without paying for it and this has considerably increased the recycling of materials.

A report from the **National Audit Office (2014)** shows that the objective established in the national development plan to reduce the environmental impact of mining and the utilisation of oil shale, and to increase the efficiency of the mining and oil-shale utilisation process has not succeeded. The waste caused by the mining and processing of oil shale comprises about 70% of non-hazardous and more than 82% of hazardous wastes. Thus, in the oil shale sector in 2012, as compared to 2007, the absolute amounts increased: bottom ash (by 12%), fly ash (8%), semicoke (2%), and mine waste (41%). Recycling opportunities that could be implemented successfully have yet to be found for these large quantities of waste. The environmental charges have not sufficiently motivated businesses to pollute less or use natural resources more sustainably. The changes to be made in the energy sector, including oil shale, must be fundamental and substantive, so that Estonia can actually move toward the development of an economic structure that is more energy efficient, pollutes the environment less and places greater value on resources. And when the new development plan is drawn up, the state must comprehensively assess the utilisation of new oil shale reserves against the external costs.

Summary

Greenhouse gas emissions have significantly decreased in Estonia compared to the base years established in international agreements. During the last ten years, the emission volumes have fluctuated primarily due to the changes in the amounts fixed by the ecosystems. At the same time, during the last decade, the production and consumption of renewable energies have increased considerably, which is also one of the important goals of SE21 for the achievement of ecological balance. As with greenhouse gases, the amounts of emissions that worsen air quality have also decreased markedly since 1990. In regard to water pollution, the improvements have been impressive – many sewage treatment plants have been built and reconstructed and as a result diffuse pollution has decreased. From a water supply standpoint, one can say that the status of most of Estonia's bodies of groundwater is good, with the exception of some problematic areas. The state of the internal bodies of water is generally good, but the poor status of Lake Peipus is a cause for concern. As with Lake Peipus, the status of the coastal sea is affected by decades of pollution that is slow to disappear. Feasible recovery opportunities for large quantities of industrial waste have yet to be found. The environmental charges have not sufficiently motivated businesses to reduce their polluting or to use natural resources sustainably. Another positive development is that domestic waste generation per capita has declined in recent years. The collection of domestic waste by type reduces disposal at landfills and increases recovery. Waste management is no longer only the organisation of waste as a by-product of human activity, but more like a well-planned and skilled management of cradle to grave solutions for life's problems. ●

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3.4

The Environment, Health and Well-being

► KATI ORRU, ANTTI ROOSE, MARE AINSAAR,
RONALD GUTMANN, MARTIN GAUK, HANS ORRU

Introduction

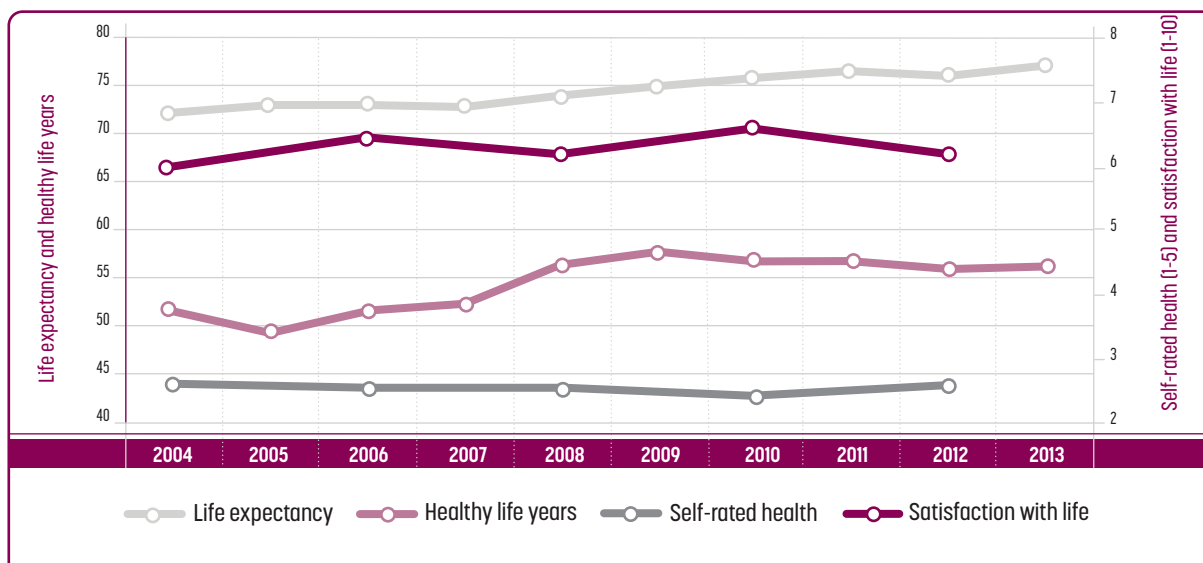
The Estonian National Strategy on Sustainable Development – “Sustainable Estonia 21” (SE21) defines well-being as the satisfaction of the material, social and cultural needs and wants of people. As the strategy admits, increasing well-being could cause increased pressure on the quality of the environment which, in turn, will affect human health. The health and well-being of people can be affected by the physical and chemical qualities of their neighbourhood, including toxic waste, air pollution and noise. Well-being is traditionally associated with the socio-economic, health and employment status of people, and also with their satisfaction with the functioning of their government and democracy (Dolan et al. 2008; Graham 2009). Surveys conducted in Estonia also suggest that satisfaction with life is associated with both personal indicators and those related to the living environment (Ainsaar 2011). The satisfaction of the Estonian people with their lives has significantly improved compared with 2004, in line with the general trends in economic development (Figure 3.4.1). Next to the economic situation, health is another important indicator of satisfaction with life. The average life expectancy of Estonians – one of the objective health indicators – has increased by more than five years over the last decade. The SE21 objective of increasing the average life expectancy at birth to 77 years by 2030 has been already achieved. However, while the number of healthy life years at birth increased in the period 2004–2009, the indicator has decreased in the last four years, reducing the total growth of the decade to just 3.3 years. This means that although people live longer, the number of years lived without any health issues is relatively shorter. It has been found that much of the increase in life expectancy is attributable to a decline in infant mortality and deaths in young adulthood, rather than an increase in longevity of the elderly

(Kiivet 2013). Neither have people's subjective perceptions of their health changed significantly over the past 10 years (Figure 3.4.1).

In recent years, attention has turned to the impact of the quality of the environment on human health and well-being. The ecosystem services approach indicates the existence of links between the environment, health and well-being. Figure 3.4.2 shows how ecosystem services contribute to the main components of human well-being. Ecosystem services are required first of all to ensure the safety of people and to satisfy their everyday physical needs; however, they also affect our mood and perception of well-being. The nutrient cycle and human health depend on the availability of clean air and safe drinking water. Access to green spaces, be it parks or gardens, is particularly important in urban areas; besides being aesthetically pleasing, they provide opportunities for social interaction and recreation, purify the air, absorb excess rainwater, and help to supply food (Demuzere et al. 2014).

The status of environmental factors has a twofold effect on people's perception of well-being. On the one hand, air pollution, drinking water quality, noise and extreme climatic conditions have an impact on human health – and on the other hand poor health has a negative effect on an individual's perception of well-being (Silva et al. 2013). Epidemiological findings demonstrate that air pollution, the quality of drinking water, noise, extreme climatic conditions, radon levels and food quality have a significant impact on human health (Bowen et al. 2013; van Kamp, Davies 2013). On the other hand, physiological stress caused by environmental factors directly affects our nervous system, causing anxiety and distress, and lowers the level of psychological well-being (Stenlund et al. 2009; Dvatra et al. 2013).

FIGURE 3.4.1 Life expectancy and the number of healthy life years, satisfaction with life (on a 10 point scale) and self-rated health (on a 5 point scale) in the period 2004–2013 (Data: European Social Survey and the Ministry of Social Affairs)



Source: European Social Survey; Ministry of Social Affairs.

3.4.1 Physical health indicators and the environment

Below, we will look at the changes, over the last ten years, in three environmental health indicators: air pollution, quality of drinking water and availability of green spaces.

Air pollution

In Estonia, the main pollutant in ambient air is particulate matter (PM₁₀), major sources of which are traffic (exhaust gases, road dust and tire wear particles) and local heating, in particular woodstoves (Loosaar et al. 2008; Orru et al. 2008; Maasikmets et al. 2012). Industrial facilities and large boiler houses play a smaller role in contributing to particulate matter concentrations, except in East-Viru County (Maasikmets et al. 2013). Locally generated pollution is coupled with air pollution transported from other regions and countries (Laan et al. 2014).

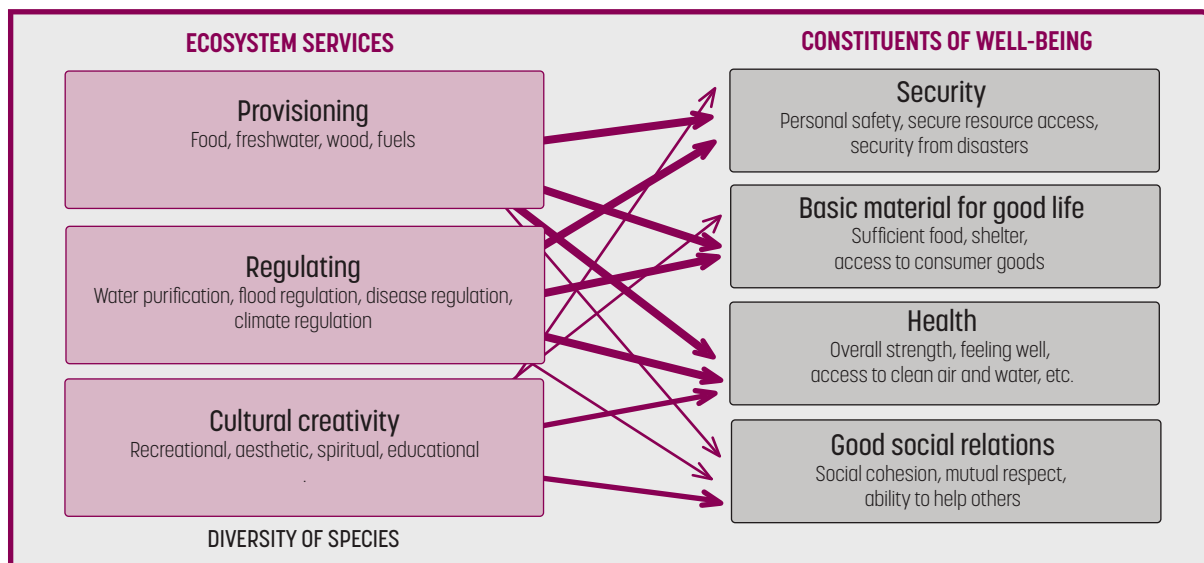
Regarding the concentrations of pollutants in ambient air, Estonia has fulfilled the criteria established by the European Union: the number of cases where the limit values of pollutant content in ambient air has been exceeded has remained within the permitted range (Saare et al. 2014) (according to the Directives, for some pollutants the 24-hour limit values may be exceeded a certain number of times in a year). In order to examine the changes in the concentration of pollutants, we should look separately at periods 2004–2008 and 2008–2013, because these periods are not comparable due to the standardisation of measuring methods in the European Union. The

concentrations of both PM₁₀ and NO₂ decreased in the period 2004–2008 (Figures 3.4.3 and 3.4.4), while in 2009–2013 the concentration of particulate matter in the air stabilised, and in the case of NO₂ even increased slightly. The highest pollution concentrations in towns were recorded in the central and northern part of Tallinn; PM₁₀ concentrations were high also in Kohtla-Järve and Narva (NO₂ concentrations were lower in the towns of East-Viru County because of lower traffic intensity). The National Health Plan 2009–2020 aims to reduce the annual average concentration of PM₁₀ in Estonian towns to below 18 µg/m³ by 2012, and below 14 µg/m³ by 2016. In 2012 and 2013, the concentration levels of particulate matter remained below 18 µg/m³, but still significantly exceeded 14 µg/m³ in many urban areas.

Although the level of pollution has decreased, it still has a significant effect on human health. The study “Effects of ambient air quality on human health – an assessment of the health impacts of particulate matter in Estonia” found that in 2010, fine particles in ambient air were responsible for an average of 600 premature deaths per year (95% confidence limit CI=155–1 061) (Orru et al. 2011a). This means a total of 8,312 (95% CI=2 234–14 608) years of life lost per year and the average life expectancy decreased by nearly 5 months among persons. The decrease in life expectancy was highest in larger towns, such as Tallinn, Tartu, Narva, Pärnu and Kohtla-Järve, and somewhat greater in East-Viru County in general (Orru et al. 2011a). The impact of fine particles is coupled with the effect of ground-level ozone; however, the latter effect is nearly ten times smaller than the health impact of particulate matter (Orru et al. 2013).

Epidemiological studies have shown that there is a link between the levels of particulate matter from traffic and the

FIGURE 3.4.2 Links between ecosystem services and human health and well-being. Arrow's width indicates the intensity of linkages between ecosystem services and human well-being



Source: adapted from the Millennium Ecosystem Assessment.

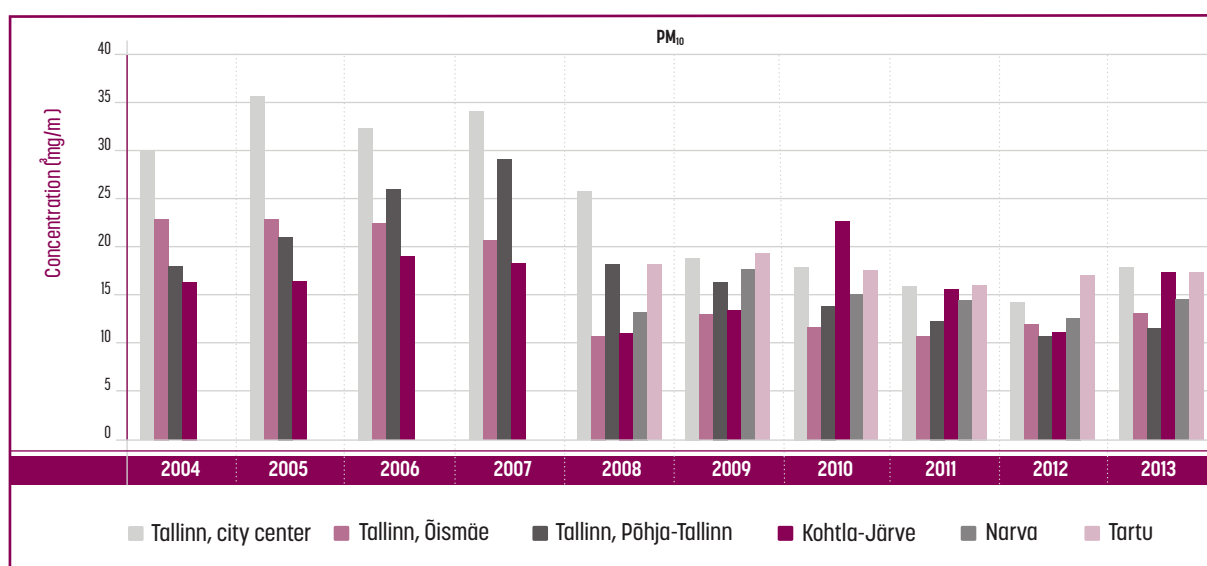
occurrence of heart symptoms (Orru et al. 2009) in Tartu, and a higher risk of developing heart disease for those living near high-traffic streets and roads (Pindus, Orru 2013). The “Respiratory Health in Northern Europe” study also found link between particulate matter levels from local heating and the number of complaints about respiratory problems in Tartu (Orru et al. 2011b). A recent time-series study on PM₁₀ levels in Tallinn in 2004–2011 showed that mortality rates increased in the day following air pollution episode (days with particularly high pollution levels) (Läll et al. 2013). The number of

deaths from respiratory disorders that are closely linked to outdoor and indoor air quality, has been increasing since 2011 in the context of an overall downward trend in many other diseases, reaching the level of 2004 in 2013 (44 deaths per 100,000 persons per year).

Drinking water

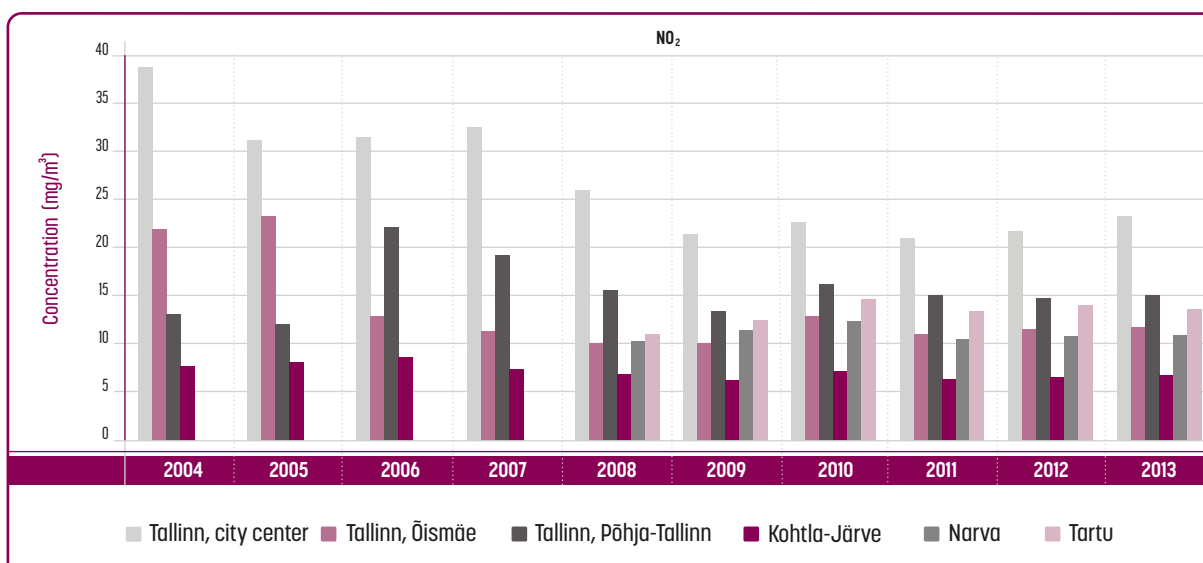
The quality of drinking water has improved significantly over the past decades thanks to major investments in the

FIGURE 3.4.3 Annual average concentration of particulate matter (PM₁₀) in Estonian urban areas in 2004–2013



Source: The graph is based on the data of the Estonian Environmental Research Centre.

FIGURE 3.4.4 Annual average concentrations of nitrogen dioxide (NO₂) in Estonian urban areas in 2004–2013



Source: The graph is based on the data of the Estonian Environmental Research Centre.

infrastructure. The number of public water supply systems in which water does not meet the requirements regarding the concentrations of indicator parameters (non-hazardous concentrations of iron, manganese or ammonium) and chemical parameters has decreased (Figure 3.4.5). According to the Health Board, there were 177 public water works in Estonia as of September 2013 in which the quality of water did not meet the established requirements (about 10% of all consumers). The National Health Plan 2009–2020 target to ensure, by 2016, that 88% of public water supply systems conform to the requirements was already achieved in 2012.

The main health risks related to the public water supply are high concentrations of fluorides and radionuclides. In the 2000s, only 38% of the Estonian population had access to drinking water of optimal fluoride content. Four percent (4%) of the population, mainly in Pärnu, Lääne, Rapla and Tartu counties, were exposed to fluoride levels in drinking water above the acceptable limits. Those people have a higher risk of dental fluorosis, which was confirmed by a higher incidence of the disease in Tartu (Indermitte 2010). The modernisation of drinking water purification systems has reduced the number of people exposed to high fluoride levels by more than a half (Indermitte et al. 2014).

There are two regions in Estonia with elevated levels of radiation in ground water: Tallinn, together with Harju County and the northern part of East-Viru County. Depending on the region, people consuming drinking water from those aquifers may be exposed to a total dose between 0.02 and 0.95 mSv/a (Radiation Centre 2005). While those doses remain below dangerous levels, a total dose may exceed the safe level of 1 mSv/a when coupled with the radiation dose from radon in indoor air. Such small dose of ionizing radiation increases the incidence of cancer by one case per 17,000 man-years. In

comparison, in 2006 the standardised cancer rate was 61.1 per 17,000 man-years and 39.5 per 17,000 woman-years (Mägi and Aareleid 2009).

While public water supply systems have been a priority when investing the funds from the European Structural Funds, the sustainability of the achieved level of quality is questionable (Orru, Rothstein 2015). The water purification systems modernised by using ad hoc investments are aging and deteriorating. The current demographic situation means that the number of consumers in small settlements is too small to cover the cost of maintaining the modernised systems in good working order.

The quality of water in private wells has attracted much less attention than public water supply systems that are the responsibility of the state. The drinking water regulation does not require the monitoring of private wells nor of public water supply systems supplying fewer than 50 people and, therefore, there are no systematic data on them; hence it is difficult to evaluate the health risks. It is known that in 1997 the water in 79% of the wells in Tartu did not meet microbiological standards (samples were taken from 678 private wells) (Saava, Raud 1998). High nitrate levels have been observed in shallow wells and in nitrate-sensitive areas. In 1997, nitrate levels exceeded the limit value (50 mg/l) in 427 out of 678 wells in the suburbs of Tartu (63%) (Saava, Raud 1998). In order to establish the quality of water in private wells and the possible health risks, the Health Board has launched a study “Evaluation of the quality and safety of drinking water in private wells and water supply systems”.

Access to green buffer spaces in urban areas

The ecosystems of urban green spaces provide important services and environmental benefits that play an important role in protecting mental and physical health, social interaction and adapting to climate changes and other environmental changes (Demuzere et al. 2014). Public health studies have shown that good access to green spaces is linked to people's higher physical activity levels, reducing the probability of becoming obese, and suffering from anxiety or depression (Maas et al. 2009).

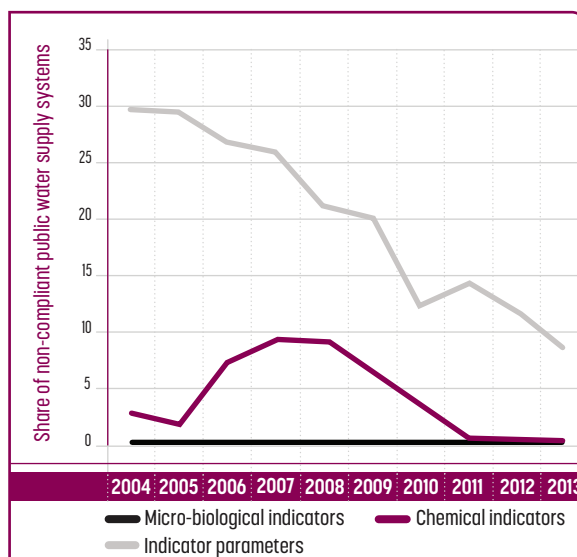
Green spaces dampen noise, improve the quality of ambient air (Escobedo, Nowak 2009) and increase biodiversity (Fuller et al. 2007). The impact of green spaces on urban ecology and human health depends on their size and spatial patterns. For example, trees and shrubs on roadsides catch some of the soot from traffic pollution but are unable to prevent dust and gaseous pollutants, such as N₂O and volatile organic compounds (VOC) from reaching people (Brantley et al. 2013). It may also be that some green spaces prevent the movement of air flows and the influx of clean air.

Although the principles of green networks have been implemented in Estonian planning practices for more than a decade, there is no clear understanding of the pressure exerted by urbanisation processes, suburban sprawl, changes in land use and property development on green spaces (Roose et al. 2013). Neither is it clear how significant the social, recreational and health potentials may be of relatively extensive green spaces, taking into account the parallel process of intensification of land use. Objectively, access to green spaces is very good in Estonia: 57% of the population of small and medium-size urban areas live within a walking-distance radius from green spaces (400 m). Tallinn and Tartu are bigger and have fewer green spaces; however, the urban sprawl that gathered momentum in the 2000s has improved access to green spaces. While 38% of the population of Greater Tallinn lived within a walking radius from green spaces in 2000, by 2011 their share had increased to 47% (Figure 3.4.6). Tartu has also witnessed a fast urban sprawl – the share of people who live within a walking radius from a green space has increased from 33% to 37% (Figure 3.4.6).

Based on the number of residential units and the average size of households living within green spaces or within a 400 m walking distance from green spaces, about 4,500 people moved to green spaces and their vicinity in Tartu and 3,600 people in the suburban zone of Tartu in 2000–2013. Access to green spaces has improved for a total of 6.7% inhabitants of Tartu. Moreover, the recreational and exercise environment in the vicinity of the town has improved in recent years thanks to new cycle and pedestrian tracks (Kõrveküla, Lääte, Lohkva, Kõlitse, Ihaste and Ülenurme roads) which are intensively used by sports enthusiasts on weekends and after work.

The trend of urban dwellers moving to the 'country' should have a positive effect of people's health, personal well-being and life quality. On the other hand, property development has moved to green spaces and is affecting the so far

FIGURE 3.4.5 Share of non-compliant public water supply systems in the period 2004–2013



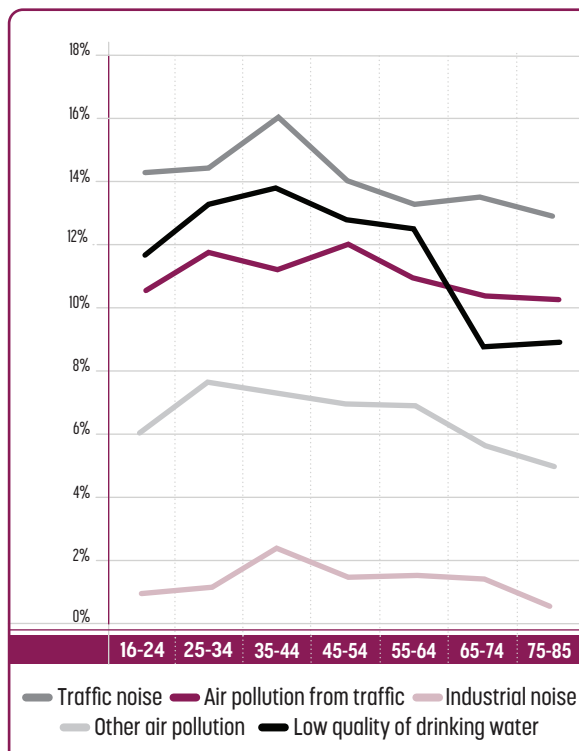
Source: The graph is based on the data of the Health Board.

quite well-protected green zones within the town and in its surroundings. In 2000–2013, 229 plots, or 31 ha were developed within the green spaces of Tartu (~10% of new buildings) and 193 or 66 ha in the suburbs of Tartu (~8% new buildings). Tartu's city centre and other desirable neighbourhoods are experiencing, in turn, an intensification of development, which will also intensify environmental problems and increase the pressure on green areas. In the city, critical links for the preservation of the green network are the green corridors, particularly the banks of the Emajõgi River and the landscaping strip along the main thoroughfare, Riia Street, which however has been narrowed due to the widening of the road. Also in the suburbs, the green corridor of the Emajõgi River has been reduced and fractured, as have the copses on the outskirts of town.

3.4.2 Environmental stress and psychological well-being

There are complex links between the psychological well-being of people and the status of the environment. Various studies on environmental stress suggest that exposure to chemicals, noise or other stress factors activate the autonomic nervous system and brain, affecting our physiology and emotions. Depending on the sensitivity of an individual (overall health, age, gender), a state of distress may develop, which will deteriorate the individual's satisfaction with life. For example, people living in areas of high levels of air pollution are more likely to suffer from psychological disorders, including anxiety and depression (Evans, Cohen 2004; Marques, Lima 2011).

FIGURE 3.4.8 Disturbing environmental factors by age groups



Source: Estonian Health Survey 2006

In European countries, negative correlations have been found between sulphur dioxide (SO₂) concentrations and well-being (Ferreira et al. 2013); similar correlations have been found in Ireland concerning the concentrations of PM₁₀ (Ferreira, Moro 2010). A study conducted in Estonia (Orru et al. 2015) compared the levels of exposure to air pollution with individual perceptions of well-being. The analysis combined the social indicators (marital status, employment, trust in people and institutions) of participants in the European Social Survey in 2010 and 2012 with modelled annual average concentrations of PM₁₀ in their places of residence.

The average annual levels of PM₁₀ in the respondents' places of residence were 8,3±3,9 µg/m³ – a low level compared with Ireland (20,8±3,7 µg/m³). However, when looking at the variables that normally affect people's perception of well-being (marital status, employment, trust), the relatively low levels of air pollution in Estonia still had a statistically significant negative effect on respondents' satisfaction with life. With PM₁₀ levels rising by 1 µg/m³, the perception of well-being decreased by 0.017 points (on a 10-point scale). Even when the variable of health was included in the analysis, the impact of air pollution was still significant. This suggests that air pollution affects not only our health but also our perception of well-being.

Perception of pollution and fear of its impact as a health risk

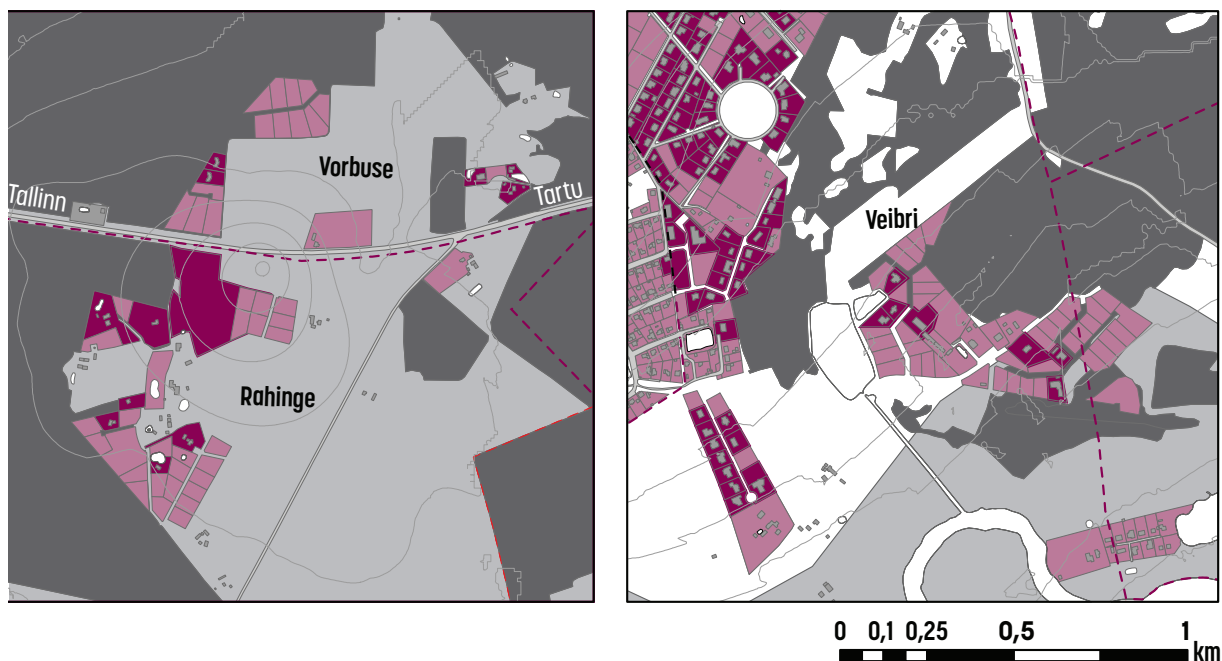
People's psychological well-being and health are affected, not only by exposure to pollution and by physiology-based irritation, but also by subjective perceptions of risk and the fear of the health impacts of environmental factors. It has been found that the perception of pollution and its health risks may predict the occurrence of health effects more accurately than the actual pollution and exposure levels (Stenlund et al. 2009; Claeson et al. 2013). For example, if people believe that air pollution levels and the related health risks are high, it may have a more serious health effect than the direct physiological effects of air pollution.

While the Estonian population's attitude towards environmental health effects is more relaxed than in the European Union on average, Estonians are becoming more concerned year by year. In 2005, 47% of the Estonian population considered the likelihood that environmental pollution would damage their health to be quite high; by 2010, the share of such people had grown to 51% (Eurobarometer 2006; 2010). The EU average was 61% of all respondents. Increased concern about environmental health effects may be related to the fact that in the period between 2004–2012, people started to pay more attention to the safety of their living environment (increased from 15% to 21%) and they became more caring for the environment (from 26% to 31%) (The European Social Survey).

An analysis of the data of the Estonian Health Survey (2006) shows how disturbing different environmental factors are considered to be (Figure 3.4.8). The most disturbing factors were street noise, low quality of drinking water and air pollution caused by traffic; the highest number of people who found these factors disturbing were in the age group 35–44 years.

The perception of environmental risks depends on the general socio-economic status and vulnerability of people (Olofsson, Rashid 2011; Orru, Orru 2014). People who are in a disadvantaged economic situation have weaker links with society and poorer health, are more vulnerable to both socio-economic and environmental risks and therefore, their perception of those risks is more acute. On the other hand, some studies suggest that along with increasing well-being, people have more time to pay attention to environmental issues. According to the Estonian Health Survey (2006), members of smaller households (one- or two-member households) find any environmental factor to be more disturbing. This may suggest that people with fewer social links are more disturbed by environmental factors or that the sensitivity to risks is higher among young people who have not started a family yet. As expected, urban dwellers are more disturbed by environmental factors than rural people, understandably because there are fewer disturbing factors in the countryside. The quality of drinking water concerned respondents from smaller and less affluent households both in towns and in the country. Air pollution (from both traffic and other sources) was considered to be disturbing more often by urban dwellers; household size

FIGURE 3.4.6 Changes in access of the population to green spaces in urban areas in the period 2000-2011



Legend

- Green spaces of national, regional and local significance
- Forest stands
- Residential land with existing buildings
- Improved building land
- Unimproved building land

did not play a role in this case. People with lower incomes are more concerned by air pollution from other sources.

The analysis carried out based on the data from the Estonian Health Survey 2006 indicates that there is an important correlation between environmental stress and health effects. The existence of greater disturbing environmental factors predicts an increase in the occurrence of a number of chronic health effects. Compared with those who did not mention any disturbing environmental factors, each added environmental factor increased the number of cases where respondents reported eye and digestive tract disorders and mental disorders. Those who mentioned three or more disturbing factors reported more often that they were suffering from digestive tract, musculoskeletal and urinary tract disorders as well as allergies. There was a strong correlation between traffic-related air pollution and the number of occurrences of mental disorders, cardio-circulatory diseases and allergies; and between low-quality drinking water and digestive and urinary tract disorders and allergies.

Summary

The situation with the environmental health factors addressed in strategy SE21 has improved over the past 10 years: air pollution has decreased, the number of people who are supplied with high-quality drinking water has increased and access to green spaces has improved. While these are positive developments, there are also challenges.

First, those positive developments are not necessarily reflected in people's health and well-being because self-rated health and well-being indicators have not improved and the number of healthy life years has not increased at the same rate as the overall life expectancy. A trend already earlier observed in the West is that with people's socio-economic well-being improving, they become more demanding about the quality of the environment. Despite the fact that the limit values of air pollution are not exceeded, we can observe important effects on people's health and satisfaction with life. So far, little attention has been paid to the health effects that are not subject to national requirements: the quality control of small water supply systems and their related health effects have been left to consumers to deal with. The social, health and ecological effects of of people moving closer to green spaces

(urban sprawl, intensification of land use) need to be examined more closely.

Second, those trends also indicate a possible accumulation of environmental and social risks in more vulnerable groups of society. People who are in a disadvantaged economic situation, and who have weaker links with society as well as poorer health, are more vulnerable to both socio-economic and environmental risks and therefore, they feel these effects more acutely. More attention should be paid to the fact that environmental issues may aggravate the existing social issues. Third, social developments, including urbanisation and in-

creased pressures on green spaces, population ageing and the resulting increase in the incidence of chronic illnesses (as well as the increase in the proportion of highly sensitive people who are more vulnerable to environmental factors), may amplify the negative effects of environmental health factors. Accelerating urban sprawl without long-term strategic planning will turn cities into focal points of many environmental and health problems. This will pose a challenge to urban and suburban planners who have to consider the well-being and health needs of different groups of society and the provision of ecosystem services. ●

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3.5

Environmental Awareness and Behaviour in the Estonian Population

► TIJU KOFF, ARKO OLESK

Introduction

The Estonians' personal myth, which has recently been amplified in literature by Valdur Mikita, speaks about us as a people who have preserved a special relationship with nature. This sub-chapter examines the data on the environmental awareness and behaviour of Estonians and analyses the measures created to promote environmentally-aware behaviour. The conclusions are based on the results of environment-related studies conducted during the last few years, as well as reports and discussions on the implementation of "The Environment and Sustainable Development" as a cross-curricular theme in the national educational curriculum and the analysis of inclusion practices. Various projects for the promotion of environmental awareness are mapped, and the level of activity and inclusion in civil society is assessed.

The Sustainable Estonia (SE21) strategy has set the following objective: as a precondition for the balanced sustainable development of Estonia, the way of thinking based on the natural sciences must be intensified throughout society, but especially among officials and the general policymakers; this can be achieved by emphasising education as the means for achieving many strategic goals. Nevertheless, strategy focuses more on the public level than on the role of the individual. However, this chapter focuses on the question of the individual's attitudes and behaviour, and the factors and activities that affect them.

3.5.1 The activities undertaken by Estonians to protect the environment

The dictionary compiled by the Stockholm Environment Institute Tallinn (SEI) in 2014 defines environmental awareness as people's factual knowledge about the state of the environment and the concerns related thereto; the comprehension of the relationship between humans and the environment and its effects; and the readiness to take this into consideration in regard to one's own activities. The definition emphasises that environmental awareness does not always determine sustainable consumption: for instance, people may be aware of the impact of using cars on the environment and on health, but do not view their own use of a car negatively, or the society may

not make environmentally-sound choices possible.

A related concept is environmental consciousness, which can fundamentally be shaped by environmental education. Environmental consciousness is generally defined as people's comprehension of the state of the environment, its values and connections to their wellbeing. However, this may not include a comprehensive conception of the various factors determining the state of the environment or of its causes and consequences. Environmental consciousness is directly related to the readiness to consume sustainably (SEI 2014). In ordinary usage, the concept of environmental awareness also includes environmental consciousness, but in the interest of more precise analysis, it is useful to differentiate between the two.

Although these definitions only refer to sustainable consumption, they can also be applied to environmentally-friendly behaviour generally. The currently popular behaviour model is comprised of a linear chain, in which attitudes follow environmental knowledge, which then lead to environmentally-friendly behaviour. Among other things, the perception of this functioning of the chain forms the point of departure for many awareness campaigns, which focus on the distribution of facts, and assume that this will automatically result in behavioural changes (Kollmuss, Agyeman 2002). Studies have shown that this linear model is inaccurate. The studies that have tried to explain the gap between awareness and behaviour have even arrived at the conclusion that approaches that are based on facts and rely on people's rationality have no significant impact on behaviour. Rather, it is thought that consciousness connected to emotionality has the most significant impact on behaviour. Even in this case, however, many barriers obstructing behavioural changes can still exist, including, among others, the lack or unavailability of factual knowledge. Hence, an examination of people's factual knowledge may not provide a picture of their actual behaviour, and in order to find an explanation for the causes for concern related to sustainable behaviour, attention should be paid to attitudes and conditions that promote and obstruct behaviour.

3.5.2 The environmental awareness and behaviour of the Estonian population

There are two consistent sources of information about the environmental awareness (and consciousness) of the Estonians: the biennial Survey of the environmental awareness of the Estonian population (the EA Survey) commissioned jointly by the Ministry of the Environment and the Environmental Investment Centre, (conducted by **Turu-uuringute AS**), carried out in 2010, 2012 and 2014, and the Eurobarometer survey Attitudes of **European citizens towards the environment (2004, 2007, 2011, 2014)**.

According to the 2014 EA Survey, a very large majority (90%) of the respondents consider themselves to be environmentally aware, including 20% who are even very aware. Sixty-seven percent of the respondents consider the Estonian population as a whole to be environmentally aware – this opinion has grown from year to year (**Turu-uuringute AS 2014**). At the same time, direct contacts with nature among Estonians have decreased. Taking into consideration the earlier surveys, starting in 1983, the number of respondents who say they spend time in nature often or sometimes has decreased by about one percentage point per year (**Tago 2014**).

Some present-day studies also deal with people's perception of the connections between their lives and the environment. The EA Survey included the item: "The state of the environment is directly related to people's quality of life", and 90% of the respondents agreed with this, which was noticeably more than two years ago (**Turu-uuringute AS**). The item used in the Eurobarometer survey was the following: "Environmental issues have a direct effect on your daily life" and 75% of the Estonian respondents agreed (EU average 77%). Our local survey showed that Estonians considered the state of the environment in Estonia to be rather good (81%) and no one considered it very bad. The identification of problems has also decreased over the years. The greatest number of respondents wanted more attention to be paid to water quality, the forests, the sustainable use of natural resources and air quality. In the EA Survey, the question of who should pay more attention to these topics was not asked (it was most likely assumed to be the government). The Eurobarometer survey question was more personal and asked the respondents to pick the five main environmental issues that they are worried about. In this survey, Estonians revealed their greatest cause of concern to be the growing amount of waste (52%, EU average 43%), followed by the impact of chemicals used in everyday products on their health, water pollution and air pollution. Regarding the latter, Estonians showed the least concern among the European Union countries, while on average, this problem was considered the greatest concern in the European Union. (**Special Eurobarometer 416**).

According to the EA Survey, the most popular sustainable behaviours include buying food in appropriate quantities, so that nothing has to be thrown away (73%); taking hazardous

wastes to the designated collection points (71%); sorting waste (65%); and using a bag brought from home when shopping (69%) (**see Figure 3.5.1**). In this connection, the respondents' main motive for activities related to waste demonstrated environmentally-friendly thinking, but in the case of planned food shopping, other motives dominate. Environmental motives are also important in involvement with community activities related to environmental conservation, but only 11% of the respondents said that they are involved with this "often".

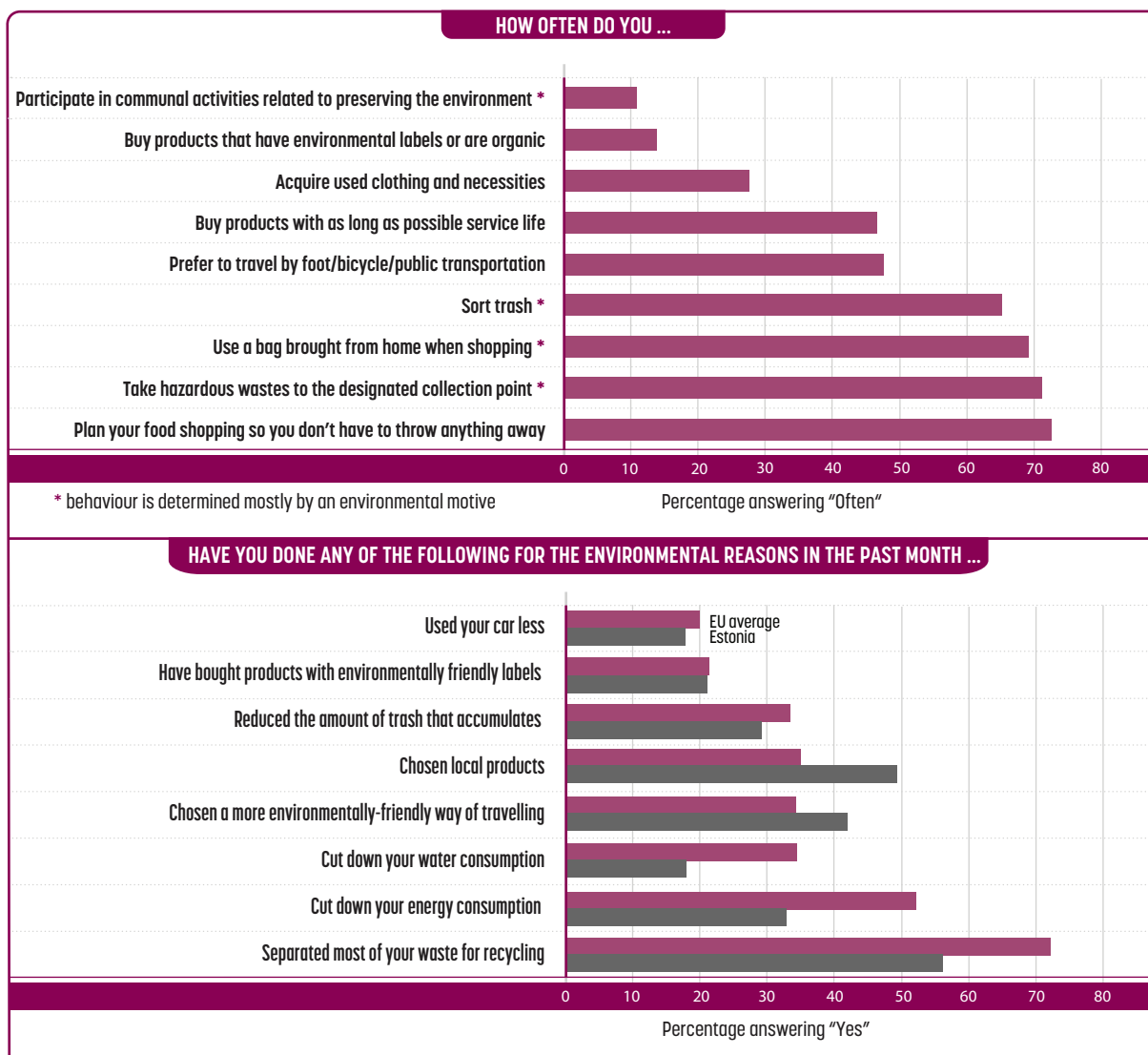
The Eurobarometer presented the respondents with a list of different activities and asked which of them the respondents had undertaken during the last month. From these responses we see that Estonians are among the least energy-saving people in the European Union (33% energy saving, 18% water saving); while the choice of environmentally-friendly means of transportation was higher than the EU average, as was the preference for local products. The most widespread behaviour was waste sorting, but this percentage decreased compared to the last survey, which was conducted in 2011.

Compared to other Europeans, Estonians are least likely to believe that domestic energy saving and the consideration of environmental aspects when making large purchases should be priorities for people in their home country in daily life to protect the environment. Greater emphasis was put on waste sorting and reducing food waste (**Special Eurobarometer 416**). Providing more information is seen as the best measure for solving environmental problems. Estonians ranked lowest (53%) in Europe in believing that environmental protection helps economic growth. A Eurobarometer survey dedicated to climate change showed that, in the EU, Estonians are the least likely to be concerned about this being a serious problem. (**Special Eurobarometer 409**).

The results of various studies show that Estonians prefer activities with a more direct impact, and are more passive and less willing to acknowledge more abstract and global environmental problems. Progress in the areas of more directly perceptible activities, such as waste sorting and clean-up campaigns, may be the reason why the Eurobarometer Survey shows an increase of agreement (+11 points, to 33%) with the notion that citizens are doing enough to protect the environment.

People's behaviour is affected by their belief in whether their activities have an impact or not. According to the Eurobarometer survey, 76% of Estonians believe that they, as individuals, have a role to play in the protection of the environment. This is one of the lowest proportions in the EU. If we take the example of water protection, the results are also sad. A 2014 survey of attitudes related to water protection carried out among the residents of the Baltic countries by the Tallinn University Institute of Communication (2015) showed that few people (27%) believe that they can personally do anything to protect the Baltic Sea. When they were asked what activities could help them to prevent problems in the bodies of water near their homes, ~25% could not name any activity

FIGURE 3.5.1 The activities undertaken by Estonians to protect the environment



Source: Turuuuringute AS 2014 and Special Eurobarometer 416 2014.

and ~25% thought that they could not do anything. Governments and industries are seen as the most significant players in the protection of the Baltic Sea (see Figure 3.5.2). The residents' assessment is that they personally bear the least responsibility for action on this front (TLÜ Kommunikatsiooni Instituut 2015).

The Survey on the Awareness of Environmental Rights, commissioned by the Ministry of the Environment (Klaster 2013) found that a large amount of environmental information exists, but it is not readily available; its content is not comprehensible to ordinary citizens; and it does not inspire individuals to participate. The composite indicator used to describe the attitude that came to light from the answers was defined as a "disillusionment with participation", which describes a condition where people would like to do something, but have been unsuccessful for so long that they no longer believe in the possibility of success. In order to reduce this disillusionment, the authors of the survey recommend that, along with raising awareness, the opportunities for effective

participation should also be increased and positive participation experiences created. To what extent the disillusionment with participation is a problem in Estonia in connection with other forms of environment-related behaviour requires further study.

3.5.3 Estonian students' general environmental awareness and sense of responsibility for sustainable development in the 21st century

According to Jensen (2002), the solution to environmental problems should be sought at the social level as well as at the level affecting personal lifestyles. In order for individuals to contribute to the solution of these problems, they must be able to identify the reasons for them at various levels, and find ways to influence and change them. According to Jensen, the

schools have a responsibility to help equip the members of society with the necessary knowledge and commitment to make personally meaningful decisions and take action to address the challenges posed by both lifestyle and societal conditions. "Consequently, the overall aim of environmental education at school is to develop the abilities of students to act at the personal and societal levels" Jensen writes.

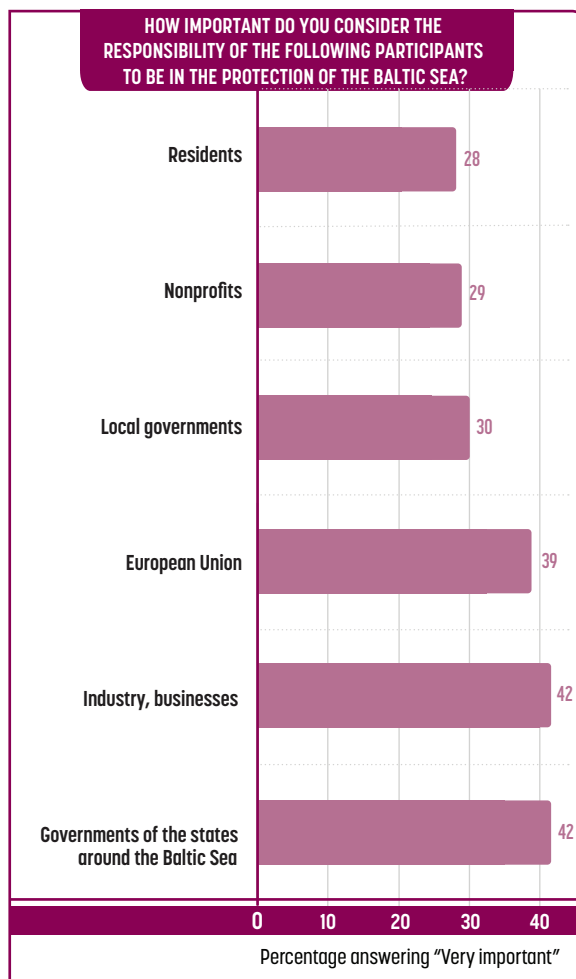
In 2002, the cross-curricular theme "The Environment and Sustainable Development" was added to the national curriculum in Estonia's schools. This is based on the principle that not only knowledge is needed, but also democratic consciousness, civil activism, motivation, and the skills to actively undertake something for the benefit and improvement of one's living environment (Henno 2003). This means learning how to foresee the consequences of one's actions and to design various possible projections for sustainable development. Students must acquire knowledge about the steps they need to take to realise their visions.

One way to assess the success of the implementation of the curriculum is PISA – the Programme for International Student Assessment. In the 2006 survey, the average environmental awareness of Estonian students was higher than the average of all students participating in the survey. There was no statistical difference between the students attending Estonian- or Russian-language schools. However, the students at the schools with Estonian-language instruction placed greater importance on environmental problems than those attending schools with Russian-language instruction. The students at Estonian-language schools were more concerned about air pollution, and energy and water shortages; the students at Russian-language schools were more concerned about the processing of nuclear wastes (Henno 2009).

An even greater difference appeared in the students' opinions regarding the worsening or alleviation of environmental problems in the next 20 years. If the students at the Estonian-language schools believed that air pollution, as well as water and energy shortages, will considerably worsen, then the students at the Russian-language schools were extremely optimistic in comparison to the OECD average. In order to understand to what extent students perceive a need for the sustainable consumption of natural resources, they were asked if they agree with the current measures that support sustainable development. It was worrying that the sense of responsibility for sustainable development among the students from both Estonian- and Russian-language schools was lower than the average of the participants in the OECD survey.

Therefore, the survey of the schoolchildren revealed the same pattern as in society generally. Environmental awareness among students is high, but this is not comparably reflected in their behavioural patterns and value orientations. The result is that the students have broad-based knowledge, but when making decisions that affect their everyday lives, the graduating students favour their own needs and those of their interest group over those of society (Henno 2010). At the same time, Henno also states that the Russian-language schools pay less attention to the implementation of the "The Environment and Sustainable Development" theme and its contemporary

FIGURE 3.5.2 Responsibility of the social sectors in the protection of the Baltic Sea



Source: Tallinn University Institute of Communication 2015.

significance.

A survey published by the same author in 2003 showed that most Estonian teachers are representatives of "normative environmental education" in which goals are interpreted in the narrow context of ecological sustainability, and the emphasis is on providing knowledge related to the environment and learning about the laws regulating sustainable development.

In an environmental education survey conducted in 2012 (Põim et al. 2012), the teachers and instructors identified the main objectives of environmental education to be nature conservation and the development of people's attitudes toward sustainable development. The following were considered to be important: the development of the students' abilities to examine and think; knowing about local and regional natural surroundings; and creating connections for the students between what is learned at school and what exists in reality. In short, the survey indicates that current environmental education does not support the shaping of people's attitudes, since the programs are usually short-term; the target groups are mostly dealt with on an irregular basis; and are often not focused on value education. Most of the field trips taken

within the framework of environmental education programmes are limited to the introduction of plants or animals based on the personal capabilities of the trip leader. Therefore, the participants in the survey believe that a shift in the paradigm is required in the environmental education programmes toward value education.

The results of the survey also revealed differences between the levels of education. As a rule, providing environmental education is not a problem for the teachers at pre-school institutions, and for primary school teachers, because they are providing integrated teaching and are not narrowly focused on one subject. The situation in formal education is less favourable. The teaching is done by subject teachers and since the latter teach academic subjects, horizontal themes are usually not covered. In the curriculum, the inter-disciplinary themes are “orphaned” because grading is subject-based and in the textbooks the information related to environmental education is fragmentary. There is a lack of inter-disciplinary themes in the textbooks and teachers’ books.

Problems already appear in teacher training programs, and are very apparent in the differences between Tallinn University and Tartu University. At Tallinn University, more attention is paid to general didactics and methodology and at least half of the students in teacher training also study the subject of environmental education. At the University of Tartu, the teacher training is subject-based, for which the specific departments are responsible.

During the last few years, great investments have been made in promoting non-formal environmental teaching, and among other things, several cities have acquired attractive nature centres. Various projects have been financed with the more than € 22 million in funding provided by the EU European Regional Development Fund’s supportive measure called “Development of Environmental Education Infrastructure” in order to equalise the availability of environmental education through the development of the relevant infrastructure. The www.keskonnaharidus.ee website, with its slogan “Shapes the Way of Thinking” lists a hundred centres dealing with environmental education and also introduces the environmental education bus.

Compared to other informal education areas, the situation in nature studies is still mediocre: according to 2012 data, in Estonia 76,995 children attended informal education classes, but only 2,434 of them (3.16%) attended classes in the fields of nature and technology (Tuisk 2013).

“The Environment and Sustainable Development”, the cross-curricular theme in the national curriculum and other environmental education programmes, have focused on value education and the development of environmental consciousness. At the same time, studies show that barriers exist preventing the successful implementation of the topic, which are related primarily to the attitudes of the teachers, the organisation of education and its supportive aspects. As of today, the Ministry of Education and Science lacks a clear role and position in the environmental education network. The Ministry’s primary role should be to indicate the strategic directions. The Sustainable Estonia 21 development strategy, which in its cur-

rent form does not empower individuals, should be critically re-evaluated.

3.5.4 Activities for the development of environmental awareness

The Environmental Awareness Programme, supported by the European Social Fund (ESF), which was approved in 2011, has attempted to change the population’s value orientations and behavioural habits. In addition to environmental awareness the Environmental Investment Centre also supports, from the same funding scheme, the development of environmental education and environmental education infrastructure, which includes many of the activities listed in the previous chapter. The programme is implemented by the Environmental Board, and with funding totalling € 3,195,582. of which 85% comes from the ESF resources.

Mariliis Tago, who analysed the projects that receive grants, found that most of them focus only on informing target groups, without creating supportive conditions that could help make the target group’s behaviour more sustainability-oriented. According to Tago, the name of the programme – “The Environmental Awareness Programme” – already alludes to this, since it focuses on awareness (not behaviour) and thereby serves as a guide for the applicants. Between 2011 and 2013, among the 658 projects, there were 361 directed at increasing knowledge and 217 focused on changing behaviour. The primary methods used to shape the target groups’ knowledge and behaviour were field study, trips and training courses. The main target groups were pre-school and school-aged children (the main target group in a third of the projects), as well as “the population”. According to Tago, successful informational activities do support changes in people’s behaviour, but generally do not cause it, because people do not change their behaviour only as a consequence of rational decisions. The most important factors in changing people’s behaviour are people’s everyday behavioural habits (e.g. means of movement, shopping), not their knowledge. In order to change behavioural practices, their everyday behavioural habits, as well as social and spatial environment, have to be understood and, if necessary, re-shaped (Tago 2014). In addition, project-based financing is problematic by its very nature, and may not be suitable for creating change.

3.5.5 Media

According to the EA Survey (Turu-uuringute AS 2014), the most important informational medium is television (eg. the *Aktuaalne Kaamera* news programme and *Osoon* shows), followed by the newspapers (such as the *Postimees* insert “*Looduse Hääl*”, the series of articles “*Meie elukeskkond*”). Few people visit the websites. It is noteworthy that the opinion leaders have not changed significantly in years. The names

most often mentioned by the respondents who specified names were Fred Jüssi, Vladislav Koržerts and Mati Kaal.

Maie Kiisel et al. (2011), who have examined the role of the Estonian media in the reporting of environmental issues, found that the treatment of the environment on the mainstream media channels is characterised by an inability to maintain a long-term dialogue; the lack of political discussion; inroads made by the managerial-economic and consumer-related viewpoints; and the additional amplification of these viewpoints online. The treatment of environmental topics has also become more localised. The number of environment-related media publications has increased significantly, but their readership has decreased.

3.5.6 The engagement of civil society

According to surveys, participation in environmental conservation activities is not very popular among Estonians. There was one great exception: in 2013, 61% of those who do volunteer work participated in maintenance work, clean-up and building campaigns, or repair work, making activities related to environmental protection, nature conservation and sustainable living the most popular type of voluntary activity (**Uus et al. 2013**). More than 20% of the people in Estonia associated voluntary activities primarily with the “Let’s Do It!” movement and clean-up campaigns.

Direct experiences like “Let’s Do It!” are undoubtedly extremely important in influencing behaviour and shaping consciousness. It should be noted, however, that a large segment of the campaign participants are one-time volunteers and their active participation is limited to a single action, and as a rule, they do not belong to organisations that organise regular activities. It is difficult to assess whether and how the experience gained from a single action is transferred to the participants’ everyday practices and is expressed in fields of environmental conservation not related to waste.

The participation of interest groups is increasingly expected in the making of various decisions related to the environment. To promote this, inclusion mechanisms have been introduced and handbooks published, e.g. “Head keskkonnaotsused” (Good Environmental Decisions) (**Kõnnusaar et al. 2010**), a handbook with the goal of assisting local government to make good environmental decisions related to their development activities. Tõnis Põdra’s handbook “Keskkonnariski hindamine: Käsiraamat” (Environmental Impact and the Assessment of Environmental Risks: A Handbook) (2005) also deals with inclusion.

However, the implementation of these principles has been contradictory and caused distrust among the parties. In 2008, based on interviews conducted with local activists, Taavi Kelder described the negative attitude of developers toward the citizens’ environmental initiatives: the developers see these as an obstructive phenomenon and view the local residents as troublemakers. A similar attitude or indifference is encountered among the representatives of the local government,

which alludes to the fact that local governments do not perceive the residents’ problems as their own (**Kelder 2008**).

An analysis made by Katre Liiv in 2014 on the example of the Kurtna Landscape Protection Area, shows that, in the meantime, parties have stated to put greater value on engagement: all the parties emphasise the importance of communication. At the same time, the article also states that many barriers still exist that prevent successful engagement; among other things, a background of distrust, and the one-sided communications without any feedback fostered by state agencies, which continues to exist. The representatives of the public sector are waiting for initiatives, primarily from interest groups and the residents themselves (**Liiv 2014**).

The cases where inclusion has failed or been rife with conflict are the ones that the public hears about. There is less talk about the successful examples, which inspire engagement practices. The most successful are the urban neighbourhood associations in dealing with questions related to their residential environment, but there are few success stories related to natural environments.

3.5.7 Public practices

In order to acknowledge environmentally-friendly behaviour, the Ministry of the Environment presents annual awards for the Environmental Achievement of the Year and the Most Environmentally Friendly Company of the Year. The Estonian Fund for Nature presents the Baltic Sea Farmer of the Year Award. The Responsible Business Forum compiles an index of sustainable businesses and distributes corresponding quality labels.

For instance, the Pärnu Ülejõe kindergarten, which won the competition for the most environmentally-friendly institution in 2014, is aspiring to environmental sustainability by directing attention to water sustainability, waste sorting and even sustainable information exchange. Thus, the kindergarten buys environmentally-friendly cleaning products and the kindergarten workers were even able to find glue sticks made of 90% recycled materials (**Tammela 2014**). According to the kindergarten’s director, the employees’ shared environmental-sustainability concepts were shaped by value discussions, and the parents support the environmentalist and the health-promoting principles.

Within the framework of corporate social responsibility (CSR), many businesses have taken responsibility for the impact of their actions on their surroundings. Corporate social responsibility is comprised of three parts – public, environmental and economic responsibility. These companies integrate a regard for the social and natural environment into their business activities and communications with associated groups.

Positive examples can be presented of international companies, which have branch offices in Estonia, such as Heidelberg Cement Northern Europe, which are working to develop sustainable construction practices and are investing in

this by working on technological developments in cooperation with universities, involving students, and considering and supporting the interests of the local communities. However, this attitude is not widespread. In her Master's thesis at the Audentes Business School, Riinu Lepa examined the sense of responsibility related to the environment as a value in the management of Estonian construction companies. In the paper, she found that the companies do not consider the concept of social responsibility based on "going further than the legislation or requirements prescribe" to be sensible or necessary. The companies were waiting for the state to establish regulations and requirements that would result in all the companies being equally directed toward environmentally-friendly activity (Lepa 2008). A survey conducted in the agricultural sector showed that the main motive for operating in an environmentally-friendly manner was still monetary support, which was followed by personal interest. (Alamets, Selge, 2008). Organic producers are mostly motivated to operate in an environmentally-sustainable way because of their own concerns.

Summary

Estonians assess their environmental awareness as high, but in regard to some attitudes and behaviours, we are still among the last in the EU on the basis of many indicators. The lack of information on the nature of the problem does not seem to be a major barrier to environmentally-friendly behaviour. Instead it is the lack of belief in the impact of one's personal contri-

bution and the choice of possible behaviours. In this connection, Estonians generally assess the state of the environment in their homeland to be good, which apparently also causes them to perceive the problems as being fewer or smaller than in the neighbouring countries.

In regard to behavioural change, success has been achieved in the problems that are directly perceived, such as waste, where the success story of the "Let's Do It" movement is highlighted. At the same time, in the case of problems that are not so directly perceived and are more global in nature (e.g. the state of the Baltic Sea, biodiversity, and climate change), the readiness of Estonians to acknowledge the problems and therefore change their behaviour is smaller.

The majority of the environment-related activities directed at individuals are focused on the sharing of knowledge, i.e. increasing environmental awareness, as opposed to developing environmental consciousness. In education, primarily in "The Environment and Sustainable Development" theme which is woven into the national educational curriculum, the objective is to shape the formulation of behaviour and attitudes, but this runs up against many barriers, which are mostly related to the teachers' attitudes, and the organisation of education, including its supportive aspects. The funded projects and non-formal educational programmes should pay greater attention to the promotion of changes in people's behaviour.

It is important to create terminological clarity for all the parties; today everyone does not understand the content and nature of environmental education in the same way. Environmental education needs to be interpreted more broadly and expanded beyond sustainable development education, in order to constitute an integrated approach to the economy, environment, culture and social sphere. ●

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SUMMARY

▶ MIHKEL KANGUR

Some of the greatest challenges of the 21st century for the continued existence of humankind are climate change, the degradation of our soils, decreasing access to clean water and the deterioration of biodiversity. These four life-sustaining ecosystem services are closely linked and their deteriorating quality is making it increasingly difficult to ensure people's well-being. Global environmental changes will affect Estonia, too, and we have an interest and an obligation to contribute to the prevention, reduction and elimination of environmental risks.

Against the background of global problems, Estonia is distinguished by its pure natural environment. Thanks to Estonia's natural conditions and small population size, the status of the environment is very good. A significant part of the country's territory is protected and the number of near-natural ecosystems is sufficient to buffer the effects of human activity and ensure the resilience of the whole system. For a number of indicators, the status of the environment has significantly improved over the past decade. The quantities of waste discharged into the environment have significantly decreased, mainly due to the requirements established by the European Union and the aid granted to help the country adjust to these requirements. The focus has shifted to the protection of nature, and the access of the population to clean drinking water and green spaces has improved. With the overall status of the environment improving, the clinical health indicators of our people have also improved.

Because human activity is a part of nature's nutrient cycle, the use of natural resources and the discharge of waste into the environment inevitably lead to changes in ecosystems. The main challenge of sustainable development is to find a balance between environmental processes and how we achieve our economic goals. The situation of near-natural buffer zones and waste management in Estonia has improved remarkably over the past decade. The limits established on the amount of waste discharged into the environment, and on the exploitation of natural resources have had a positive effect on the behaviour of enterprises. However, the amendments to environmental charges have not had the desired effect.

It is increasingly recognised that the biologically-diverse ecosystem that surrounds us offers various services, the quality of which are in the long term much more important than quick profits from raw material. Determining the monetary value of ecosystem services and taking it into account when managing our economy will help to find a compromise between economic interests and the values that are more difficult to monetise. A market value can be established for the provision services of ecosystems (e.g. wood as raw material). However, establishing the value of the ecosystem's supporting, cultural and regulating services (e.g. forests as a part of the nutrient cycle, as well as recreational areas and climate regulators) requires more profound knowledge of the system and depends on people's attitudes and values.

Estonians believe that they are a people with high environmental awareness and who have a special bond with nature. However despite our attitudes and behaviours, various indicators show that we rank among the last in the EU. The environmental education activities targeted to individuals focus on sharing knowledge and fail to contribute to the development of environmentally-friendly attitudes and values. We have made significant progress in addressing tangible issues - for example most people understand why waste needs to be sorted. Unfortunately, for the majority sorting waste is the only environmentally-sound activity they know. In the case of global and more abstract issues, such as climate change, people have little confidence in the necessity and impact of their personal contribution and therefore they are less eager to change their behaviour.

Over the past decade, Estonia has made significant efforts to establish an environmentally-sound and clean lifestyle and in many sectors we can be satisfied with the results. Although clean and biologically-diverse environments are becoming increasingly harder to find throughout the world, Estonians have not learned to appreciate this adequately. A good environmental status and clean ecosystem provide an excellent starting point for developing a sustainable country and for being a role model for the rest of the world. ■



DEVELOPMENT OF THE ESTONIAN CULTURAL SPACE

4

ESTONIAN HUMAN DEVELOPMENT REPORT 2014/2015

INTRODUCTION

► MARJU LAURISTIN

The Estonian National Strategy on Sustainable Development – Sustainable Estonia 21 (SE21), adopted by the Parliament in 2005, defines sustainable development as balanced movement towards four related objectives: growth of welfare, social coherence, viability (sustainability) of the Estonian cultural space and ecological balance (Oras 2012: 45–46). This chapter explores the ways in which the developments of the last decade have affected the sustainability of the Estonian cultural space. The Estonian cultural space as such is difficult to define scientifically. It is rather a metaphor for the goal stated in the preamble to the Constitution: “to ensure the preservation of the Estonian nation, language and culture through the ages”. SE21 interprets a cultural space as an arrangement of social life which is carried by people identifying themselves as Estonians and communicating in Estonian. The Estonian cultural space is characterised by the behaviour, relationships and the mode of living based on Estonian traditions. The Estonian cultural space has materialised in the Estonian natural and living environment and in the Estonian environment of signs and symbols: communication language, personal and geographic names, colour preferences, building and home design practices, generally known pieces of art and literature and histor-

ical figures, historical anniversaries and calendars, etc. (Strategy Sustainable Estonia 21).

To have the viability of the cultural space as a goal and, what is more, as the ultimate development goal is unique to the Estonian National Strategy on Sustainable Development. The indicators used by Statistics Estonia to illustrate this field include population dynamics (survival of the Estonian people), use of the Estonian language, and cultural participation (Statistics Estonia 2009: 12–25). Statistics Estonia is regularly collecting data from cultural institutions on the attendance of Estonians at cultural venues or events: theatres, museums, libraries, cinemas and museums. Comparative data on other EU member states are available from Eurobarometer surveys undertaken in 2007 and 2013. These data can be used to determine how the use of Estonian, attendance at cultural venues or events, the status of our cultural heritage, and the workforce in the cultural sector are changing. We can see that the use of Estonian, in particular as a foreign language, has increased significantly over the last decade (Statistics Estonia 2009: 12–15); moreover, Estonia is a leading country in Europe for both the attendance at cultural venues and events and the number of people employed in the cultural sector (ibid: 18–21). It must be added, however, that the proportion of

cultural workers in the workforce has dropped from 3.2% to 2.7% in recent years, although still remaining 0.3% above the EU average (2.4%). The situation is worse regarding the protection of cultural heritage – the number of architectural monuments in bad or very bad condition has increased to 30% (Statistics Estonia 2011: 14–17).

SE21 states that the sustainability of the Estonian national culture depends on the continuance of, or even increase in, the degree of the use of Estonian in different spheres of life and the diversity of its functionality, and on continuing active cultural creation and participation, passing on Estonian cultural traditions to the next generation as well as propagating and making the Estonian-language cultural assets internationally accessible through the ever growing digital environment. Such a quantitative approach is necessarily limited by the availability of reliable data from national or international statistical surveys or specialised studies. Therefore, the issues that require a qualitative analysis of cultural processes are outside the scope of this chapter. Moreover, non-verbal forms of culture are not distinguished based on their ethnic origin but rather on whether or not they belong to the Estonian cultural environment. The analysis of the international distribution of our national culture is also based on Estonia as the country of origin, rather than on the author's ethnic nationality.

In the decade that has passed since the adoption of strategy Sustainable Estonia 21, the Estonian cultural space has rapidly internationalised thanks to the EU membership. Digital culture has created new opportunities for both cultural participation and creation and this has had a strong effect on the cultural participation practices of younger generations. We may speak about a principal cultural shift from print-based to digital, internet-based culture (see Lauristin 2012, Runnel et al. 2013). In this context, a most striking expression of the continuity of Estonian culture is the increasing popularity

of our Song and Dance Celebration among young people who have grown up in the digital environment. However, a major challenge to the sustainability of Estonian cultural space is our capacity to build bridges between the traditional values of our national culture and the digital means of self-expression and cultural participation which are overwhelming in the new global environment.

In the pages that follow we attempt to address the following questions:

- What is the position of the Estonian language in the world? (Sub-Chapter 4.1.)
- What is the strength of the Estonian culture in the international arena? (4.2)
- What is the level of cultural participation among the population of Estonia? How big are the differences in the cultural participation levels of different population groups? How is cultural participation changing with the shift of generations? (4.3)
- How sustainable is the tradition of Song and Dance Festivals – one of the most important and original forms of Estonian culture – in the context of internationalisation and the digital revolution? (4.4)
- How does the emergence of audio-visual culture affect Estonian culture? (4.5)
- How is the Estonian-language heritage in print and other Estonian cultural heritage made accessible in the digital world? (4.6)

¹ Sub-chapters 4.2 to 4.3 and sub-chapter 4.6 of this chapter were prepared with the help of research supports IUT20-38 and IUT22-2, respectively, granted by the Ministry of Education and Research.

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4.1

Sustainability of the Estonian Language

► MARTIN EHALA

Introduction

The Development Strategy of the Estonian Language of 2004 set the long-term goal that “the Estonian language will be the main means of communication of the developing contemporary high-technological and open multicultural society on Estonian territory” (Ministry of Education and Research 2004: 13). Estonian is without doubt the most used language in Estonia today, although not in all areas of the country, nor in all sectors of activity. A key question for the sustainability of the Estonian language is thus the ability of the state and of society to retain and strengthen the position of the Estonian language as a language of general communication. This depends mostly on three factors: first, the number of speakers of Estonian in terms of absolute figures; second, the percentage of these in the total population of Estonia; and third, the attitudes of people living in Estonia towards learning and using Estonian and other languages (primarily English and Russian).

All three factors are interdependent: the larger the number of users and the larger their percentage in an area, the keener the motivation will be for everybody in the area to be fluent in the language. The more people that learn the language, the larger the number of users. The larger the number of users, the easier it is to ensure a high-level educational and cultural life. The richer the cultural life, the more positive attitudes there are for passing the language down from generation to generation.

For these factors to support the sustainability of the language, a critical mass is needed in terms of absolute numbers as well as a percentage of the population. The critical mass needed for sustainability differs for each language, depending on the specific economic, social, geographic and cultural factors at every stage of historic development. An estimate of critical mass can be provided on the basis of comparison with other languages of the world.

The following analysis will focus on the above-mentioned factors influencing the sustainability of a language: the num-

ber of speakers compared to other languages of the world, their percentage in the population of Estonia; the fluency and usage of Estonian and other languages in areas that are important for sustainability; and attitudes towards the Estonian language.

4.1.1 Status of the Estonian Language among Other Languages of the World

According to the world languages database Ethnologue (www.ethnologue.com), there are 7,106 living languages in the world in 2014 (Lewis et al. 2014). Ethnologue divides them into 11 categories, ranking them on the basis of vitality. The highest, Category 0 contains six languages of international spread: Arabic, Chinese, Spanish, English, French and Russian. Category 1 comprises national languages, i.e. written languages with an official status, numbering 96 in the world. Category 2 holds so-called provincial languages that have an official status only in one part of a country; Category 3 contains languages of wider communication but no official status, and Category 4 includes languages that do not have an official status but are still used as educational languages in schools. The languages of the first five levels (0–4) of the ranking chart are termed institutional languages, to emphasize the fact that their sustainability is supported by state and social structures. The fifth class in the list is made up of “developing languages”, i.e. languages that have a user base that is demographically sustainable, but is only in the process of establishing a written language and culture. Category 6a comprises “vigorous languages” that do not have a written language, but are demographically sustainable and passed down from generation to generation as a natural process. Category 6b is made up of “threatened” languages, characterised by a diminishing

number of speakers. The seventh class comprises “shifting” languages, still used by parents, but no longer passed down to children. Category 8 holds languages spoken only by the generation of grandparents. In category 9, there are languages that are no longer used for communication but fulfill some ritual tasks important from the point of view of identity. Category 10 contains languages that are extinct, with nobody identifying themselves through these languages any longer. (Lewis et al. 2014)

Evaluating the status of Estonian using this scale, it is a language of the first category, i.e. a national written language with an official language status, of which there are 96 according to Ethnologue – less than 1.4% of all the languages of the world. By the number of speakers, Estonian also ranks among large languages. According to Ethnologue, there are 393 languages in the world spoken as a mother tongue by at least 1 million people. That's 5.5% of the total number of languages. According to the last census taken in 2011, there are 887,216 persons living in Estonia who speak Estonian as their mother tongue. The number of people speaking Estonian as a mother tongue abroad is hard to estimate, especially now that migration is growing quickly. Before the period of major migration began, the number of Estonians abroad was estimated at 160,000 (Kask, Tammaru 2006); the number has obviously risen by now. Thus, even a rather pessimistic estimate would put the number of people who speak Estonian as a mother tongue worldwide at one million or more. Therefore, Estonian ranks among the top languages of the world in terms of numbers of speakers.

Ethnologue has developed a diagram for expressing the sustainability of the languages of the world (see Figure 4.1.1). Its vertical axis shows the number of speakers in powers of 10, and the horizontal axis shows classes of sustainability. Each dot on the diagram represents a language. If there is more than one language on the exact same dot, the dot is darker. The position of each language on the vertical axis shows the number of its speakers according to the Ethnologue database, while on the horizontal axis, languages are positioned between two sides of a sustainability class value according to their sustainability evaluation by Ethnologue. Within one class, the position on the horizontal axis is random (class borders can clearly be discerned e.g. between classes 5 and 6a). The higher up in the left corner a language is, the higher its sustainability. Estonian is shown on the diagram with the purple dot. It can be seen from the figure that Estonian is part of the leading group of developed languages of the world. The figure also shows that Estonian is far from the smallest among state languages (Class 1) in terms of numbers of speakers.

State languages smaller than Estonian include Maltese (with 390,000 speakers who are also bilingual, with English or French); Maldivian (330,000 speakers on islands in the Indian Ocean), which is little used as a language of education; and Icelandic with its 330 thousand speakers. All of these are languages of island nations, i.e. their high status is supported by relative geographic isolation. In a geopolitically less favourable continental position, languages smaller than Estonian have not been able to retain their status as a national language.

Thus it is positive on the one hand that Estonians have succeeded with their national-cultural and political efforts in securing for the Estonian language the best position possible considering the number of speakers and the geographical position, while on the other hand we must understand that Estonian as a language of the first sustainability class is a borderline case because of its diminutive size, and therefore this achievement should not be taken for granted – it is the result of continuous and determined cultural-political development work with a fair bit of help from luck.

It should also be taken into account with the Ethnologue scale that the sustainability classes are not mutually exclusive, because the classification is based on two indicators that are independent of each other to a certain extent: the status of the language, and the vigor of the speaker base. If a language is losing speakers, it belongs to the group of threatened languages (6b), and if language shifting has begun (7), it is among the disappearing languages. The number of people who speak Estonian as a mother tongue has decreased by 3.8% in Estonia between the two last censuses, so that Estonian is losing speakers and could be classified as a 6b language. Looking at Figure 4.1.1, there are languages with a million and more speakers in classes 6b and 7, although most of the threatened languages have less than 100,000 speakers. Thus, the high position of Estonian is guaranteed only if the number of its speakers is not decreasing.

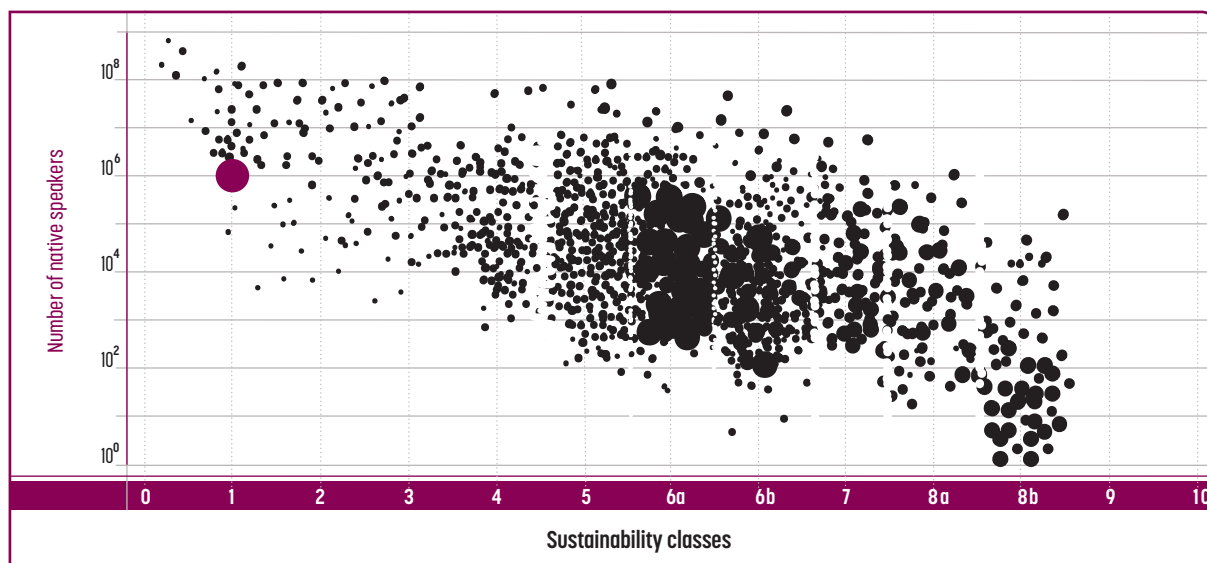
4.1.2 Users of Estonian

To get an overview of the user base of Estonian, two indicators should be looked at: first, the number of speakers of Estonian as a mother tongue – where do they live and what is their proportion among the population of Estonia as a whole? Second, how many people speak Estonian as a second language. It is important that not only the current situation is recorded, but also that development trends should be analysed. A comparison of the censuses of 2000 and 2011 provides an opportunity for that.

Four language environments can be distinguished in Estonia on the basis of native speakers of Estonian (see Figure 4.1.2): one is the towns and municipalities of East-Virumaa, which borders on Russia, accounting for 12% of the population of Estonia; the second is Greater Tallinn, comprising not only Tallinn, but also the town of Maardu and the rural municipalities of Harku, Kiili, Rae, Saue and Viimsi; a third language environment is made up of other towns of Estonia (besides Greater Tallinn and the towns of East-Virumaa); and rural areas (besides the municipalities of Ida-Virumaa) make up a fourth language environment. The latter two language environments account for a bit more than half of the population of Estonia.

Changes in the percentage of native speakers of Estonian between the two censuses across these four language environments as well as in the whole of Estonia are illustrated in Table 4.1.1. The first column of the table shows the change in the numbers of the whole population between the censuses. While

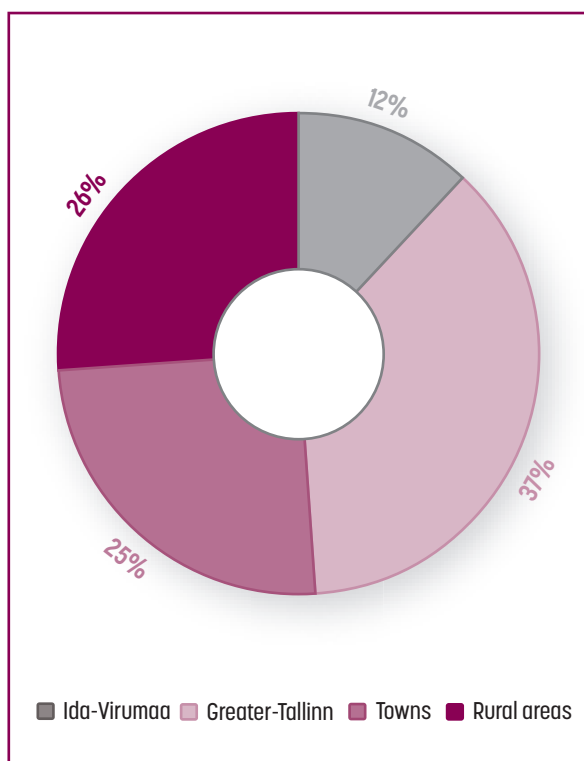
FIGURE 4.1.1 The position of Estonian on the sustainability scale



Source: <http://www.ethnologue.com/cloud/ekk>.

the total population of Estonia has decreased by 5.5% between the censuses, the decrease has been twice as rapid in rural areas (11.7% on average). In East-Virumaa, the population has decreased even more rapidly – by 17%, which places East-Virumaa among the five most quickly-emptying counties of Estonia. In towns, the population decrease is around Estonia's average. Only in Greater Tallinn has the population grown – by 5.7%.

FIGURE 4.1.2 Percentage of Estonia's language environments by population.



Source: 2011. *aaasta rahvaloendus*.

Looking at the percentages of native Estonian-speakers in the censuses of 2000 and 2011, we can see that in Estonia as a whole, as well as in three language environments out of four, there has been a slight growth. East-Virumaa is the exception here, with the number of people speaking Estonian as a mother tongue having gone down by 1.4 percentage points. This may look like a relatively small shift, but we should also bear in mind the rapid decrease in the overall population of East-Virumaa. Thus, the number of people speaking Estonian as a mother tongue has diminished by 23.2% in East-Virumaa (from 32,000 to 24,000), which is six times the average of Estonia. This decrease has been especially rapid in the towns of East-Virumaa, where the number of Estonians has gone down from 17,000 to 12,000, i.e. almost 29% in 10 years. The decrease in the number of people who speak other languages as a mother tongue (i.e. not Estonian or Russian) has been even more dramatic: from 7,300 to 2,700, or a bit over 67%. One of the reasons for the decrease in native speakers of other languages, besides a low birth rate and migration, is also language shift to Russian. It should be noted that the number of native speakers of other languages has decreased at a faster rate than those of native speakers of Estonian and Russian in the whole of Estonia – by almost 31% (from 32,000 to 22,000). It is probable that, unlike in East-Virumaa, in rural areas and towns where the majority speaks Estonian, a large part of the decrease has been caused by language shift to Estonian.

To summarise this, we can say that a slow but obvious regional segregation is taking place in Estonia: In East-Virumaa, the importance of Russian is growing, while in the rest of Estonia, it is the prevalence of Estonian that is increasing. This, however, is only a part of the picture. To get a better understanding of the status of Estonian, we should focus not only on the native speakers, but also analyse the level of fluency of Estonian as a second language in the various language environments (Table 4.1.2).

We can see from Table 4.1.2 that the number of speakers of Estonian as a second language has somewhat grown among

TABLE 4.1.1 Changes in the native Estonian-speaking population in different language environments

Language	Change in size of population between censuses (%)	Percentage of native speakers of Estonian in the population		Change in the number of native speakers of Estonian (%)
		2000	2011	
East-Virumaa	-17,0	17,8	16,4	-23,2
Greater Tallinn	5,7	53,7	56,4	10,8
Towns	-7,2	81,7	83,7	-4,9
Rural areas	-11,7	92,8	93,7	-10,9
Estonia total	-5,5	67,3	68,5	-3,8

Data: Statistics Estonia.

non-Estonians (it should be kept in mind that this is based on how people assess their language skills themselves, not on test results). We can also see that the number of Estonian-speakers, as well as its growth rate, depend on the language environment. Both parameters are lowest in East-Virumaa and highest in the towns and rural areas with an Estonian-speaking population. The number of Estonian-speakers is considerably higher in Greater Tallinn than in East-Virumaa, while the growth rate is closer to that of East-Virumaa than the rest of Estonia. At the same time, the growth numbers of language speakers do not differ significantly in different environments, which means that people's assessment of their own fluency has grown quite uniformly all over Estonia.

The current state of Estonian-speaking skills is summarised in **Figure 4.1.3**, where the percentages of native speakers of Estonian, speakers of Estonian as a second language and non-speakers of Estonian out of the total population, according to the 2011 census, are shown.

Considering the fact that towns and rural areas account for slightly more than a half of Estonia's population and more than 90% of the territory, we can say that in a predominant part of the territory of Estonia, Estonian has become the natural everyday communication language of all people living there. The percentage of speakers of Estonian is approaching 80% in Greater Tallinn as well. It is safe to assume that if current trends prevail, the position of Estonian as an everyday communication language will become stronger in those three language environments. For example, according to the survey "Mina.Maailm.Meedia" (**Me. The World. The Media, shortly MeeMa**) conducted in 2014, the level of fluency in Estonian is very high among younger age groups of native Russian speakers (over 63% evaluate their Estonian as very good or excellent – MeeMa 2014), while the Russian skills of young Estonians are rather moderate (**see Figure 4.1.4**). Also, 5.4% of non-Estonians named Estonian as their mother tongue in the same study, and the proportion was over 18% among the age group of 15-18. Therefore it is likely that when generations change, the number of speakers who identify Estonian as their mother tongue will grow compared to those who speak Estonian as a second language.

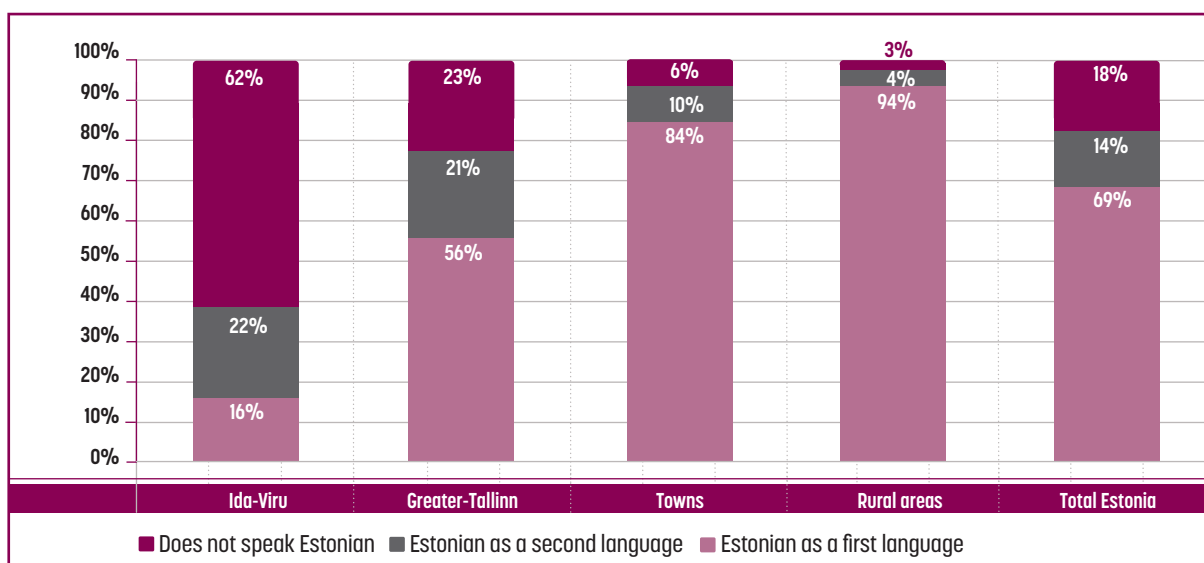
We can summarise by saying that while the position of

Estonian has grown stronger in three larger language environments and the trend is likely to continue, the status of Estonian is worsening rather than improving in East-Virumaa. While 10.8% of the population of towns in East-Virumaa spoke Estonian as their mother tongue in the 2000 census, it was just 7.5% in the 2011 census. And we should bear in mind that over 60% of the population in this region speak no Estonian at all.

With the decline of the Estonian population, a weakening of the position of the Estonian language in East-Virumaa is also inevitable in spite of the efforts of the Language Inspectorate to strengthen it with all means available. For example, in 2013, the medical workers, teachers and policemen of East-Virumaa were tested. In the East-Viru Central Hospital, the language skill of 41% of the doctors did not meet the requirements, and only 11% of the policemen tested had achieved the required C1 language skills level, although there were no policemen who did not speak any Estonian at all. In Russian-language schools, the language skills of 89% of the teachers tested did not meet the requirements (**Language Inspectorate 2014**). Although intensive language courses are provided, those that pass the courses are not able to maintain the achieved levels in a predominantly Russian-speaking work environment (**Ernits 2014**). As a result, it is little wonder that Estonian falls into third place after Russian and English in East-Virumaa (**Rannut 2014**).

This situation is further complicated by the fact that according to the 2011 census, only 49.8% of the population of the towns of East-Virumaa had Estonian citizenship. Although there was an almost 10 percentage point increase in the number of persons holding Estonian citizenship between the two censuses, the number of Russian citizens grew at the same rate. As of 2011, 31.2% of the population of the towns of East-Virumaa fall into the latter category. Keeping in mind that about 20% of the Estonian citizens living in East-Virumaa are ethnic Estonians and that the proportion of Estonians in the region is decreasing, it is not impossible that if the slow growth in the numbers of Estonian citizens continues, citizens of Russia may become predominant in this region.

FIGURE 4.1.3 Percentage of speakers of Estonian in various language environments in 2011



Data: Statistics Estonia

TABLE 4.1.2 Percentage of speakers of Estonian as a second language among non-Estonians

	2000	2011	Growth (% points)
East-Virumaa	20,1%	25,8%	5,8
Greater Tallinn	42,4%	48,4%	5,9
Towns	54,8%	61,7%	6,8
Rural areas	51,9%	59,2%	7,3
Estonia total	37,4%	43,7%	6,3

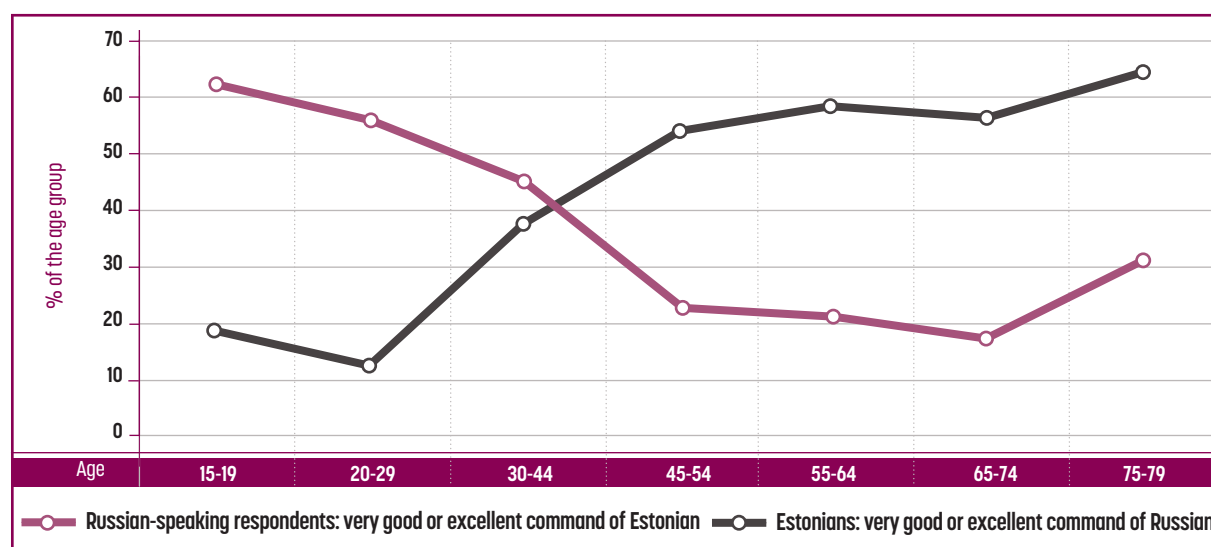
Data: Statistics Estonia

4.1.3 Use of English

As the need to use Russian has declined after Estonia's re-independence and the level of Russian-language skills has gone down among the younger generation, fluency in English has been growing, especially among the young people who speak Estonian as their mother tongue (see Figure 4.1.5).

According to the MeeMa survey of 2014, almost 64% of Estonians of secondary school age claim to speak English excellently or fluently. The level of English fluency starts falling rapidly only in the age groups of 45 and older, staying between 20 and 30%. Secondary-school age Russian-speaking respondents assess their language skills as quite high as well (50%), while this number is very low in older age groups.

FIGURE 4.1.4 4 Fluency of Estonian and Russian among respondents who speak Russian and Estonian as their mother tongue. The percentage of respondents with very good and excellent language skills across age groups



Data: MeeMa, 2014

The high level of English fluency among young people is a result of connections with the international English-speaking youth culture as well as the growing need to use English in everyday life. According to the MeeMa 2014 survey, a little over 35% of native Estonian speakers and a little over 15% of native Russian speakers under the age of 30 use English constantly, on a daily basis. The inevitability of communicating in English has already affected the use of Estonian significantly in some areas, most of all in science, higher education, entertainment and electronic social networks.

Thus, in Estonia, the majority of works in natural sciences is published in English, while in social sciences and humanities scholars also publish in Estonian (Klaas-Lang 2012). The publication of research results also dictates that the majority of doctoral dissertations are written in English. For example at the University of Tartu, where half of the doctoral dissertations of Estonia are defended, 16.3% of these were in Estonian in the years 2000-2010 (Klaas-Lang 2012), and in 2013 the number was 15.3%. In the whole of Estonia, 18% of doctoral dissertations defended in public universities were in Estonian in 2013. There have been no great shifts in the languages of doctoral dissertations over the last 15 years. Thus we can assume that the language of scientific research has largely stabilized: English predominates in "hard" sciences and Estonian has retained its position in "soft" sciences.

The status of Estonian is much stronger in education. Only doctoral studies are predominantly bilingual (English/Estonian), while in Master's and Bachelor-level studies Estonian dominates: The University of Tartu has two Master's and two Bachelor's programs in English; at the Tallinn University of Technology, there are 17 Bachelor's programs and at Tallinn University, there are 7 Master's and 5 Bachelor's programs (data from the homepages of the universities). Although the use of English in Master's and Bachelor's level studies has been slowly growing, this is still but a small part of higher education in Estonia.

At the same time, we should keep in mind that the number of students graduating from secondary school is declining, and a significant portion of those who do graduate continue their studies in universities abroad: in 2013, it was 6% of secondary school graduates from Tartu and 8.3% of those from Tallinn, (see Aljas 2014). A likely result of this will be that the universities will look for ways to increase the numbers of foreign students, which means that the numbers of English programs in Master's and Bachelor's level studies will grow.

On the secondary-school level, general education is predominantly in Estonian or Russian. Starting in 2009, Estonian schools can structure the program of the last two years of secondary school based on the International Baccalaureate Diploma Program, which is in English. At present, the International Baccalaureate Program is provided in four Estonian-language general schools, and there are also three international schools in Estonia where English is the study language. Thus, although it is possible to obtain an education in English in the municipal schools of Estonia, this remains a marginally used opportunity in general education. Besides research, English has a strong influence also in the

areas of fashion, design, popular culture and lifestyle, especially in Tallinn, where "trade and service institutions prefer information and promotion as well as company names in foreign languages" (Estonian Language Council, Ministry of Education and Research 2013: 47). The influence of English in these areas is a result of the spread of popular culture where English dominates, and also of the fact that modern lifestyle and fashion are rather cosmopolitan areas where success and recognition are easier to achieve through English, even if the majority of readers and consumers come from Estonia.

This presents fashion and lifestyle bloggers, for example, a tough choice of language. A linguistic analysis of fourteen of the most popular fashion blogs in Estonia (see Kulper 2015) shows that a specific linguistic norm is developing in this area: most bloggers (6) write all texts in parallel in Estonian and English, a significant portion (5) prefers Estonian and just three are writing exclusively in English. Creating texts in two languages undoubtedly requires more time and energy, therefore it should be appreciated that the leading core group of writers consistently supports the use of Estonian even in this relatively globalised area of activity.

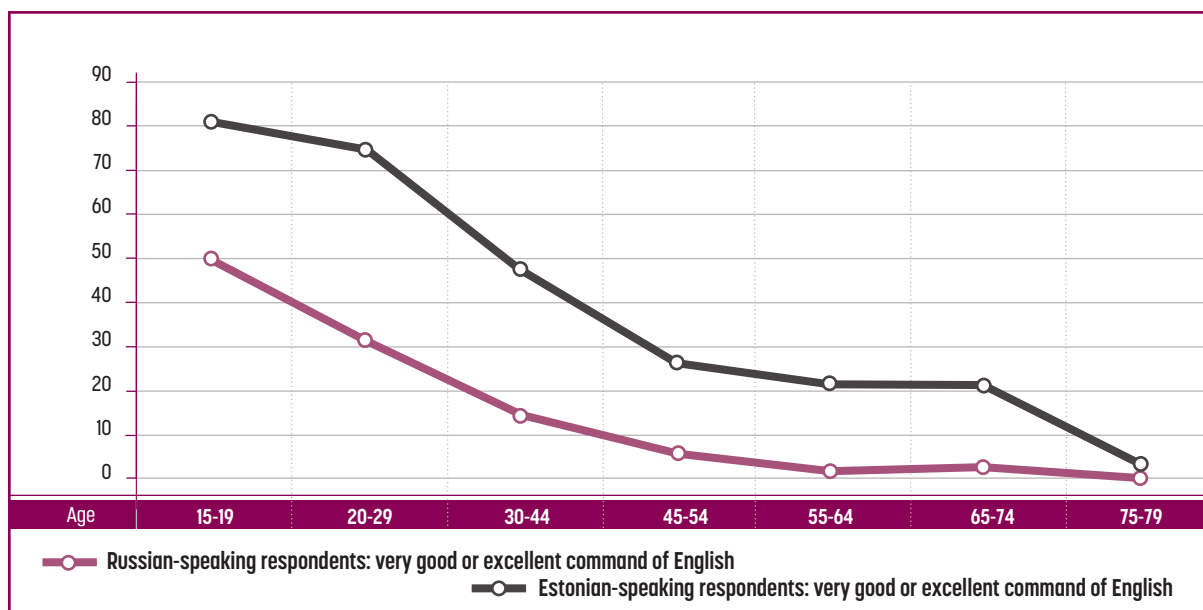
In social networks, communication and content creation is also partially done in foreign languages, depending on the size of a person's active circle of acquaintances who do not speak Estonian – there are those who write almost all of their posts in two languages, and there are those who vary the language depending on the subject. It is quite certain that the greater the number of significant contacts who do not speak Estonian that are added to the virtual communication networks of Estonians, the higher the rate of posts in English will be. The key question here is whether or not communication in English between Estonians will also start to grow as a result. This depends largely on the attitudes of Estonians towards using Estonian and English.

4.1.4 Language Attitudes

Attitudes towards the use, importance and future of Estonian and English have been studied in 2003 (Ehala, Niglas 2006) and in 2011 (Tammemägi, Ehala 2012). The studies focused on secondary school students, as the attitudes of this age group will have the most direct effect on the usage opportunities of various languages in the future.

Data comparison shows that in the course of nine years, the number of young people who are ready to prefer English to Estonian for purely pragmatic reasons – e.g. in situations where there is a choice whether to buy a more expensive phone with Estonian menu options or a less expensive one that is in English only, or where abandoning Estonian subtitles would mean a 25% cheaper cinema ticket – grew significantly. In 2003, 54% of the respondents would have chosen a cheaper product that does not support Estonian, while in 2011 it had already grown to 63%. Similarly, there was a growth in the percentage of people who would be ready to use English as a working language in a team consisting of Estonians if this would mean more convenient communicating with foreign

FIGURE 4.15 English language skills in various age groups of people speaking Estonian and Russian as their mother tongue



Source: Meema 2014.

superiors and partners. In 2003, this was 32%, in 2011 it was 45%. The analysis also showed that preferring English in such pragmatic communication situations is related to intensity of use – the more a young person uses English in everyday life, the more likely he/she is to prefer it to Estonian (Tammemägi, Ehala 2012).

In both studies, a very high number of respondents (over 72%) expressed the opinion that it should be possible to obtain a secondary and higher education in English as well as Estonian in Estonia, and that education in English should be publicly financed. Attitudes towards the study language of one's prospective children have also remained stable: 41% of respondents were ready to educate their children in English instead of Estonian. It was also shown that preferring English to Estonian was related to the opinion that Estonian is probably not going to be of any practical importance in professional life by the time the prospective children of the respondent become adults (Tammemägi, Ehala 2012).

Although the young people of Estonia do not rate the medium-to-long term prospects of Estonian as high, and agree that English will replace Estonian, they see Estonian as a fairly valuable vehicle of national identity. In 2011, 83% of respondents agreed that if their future spouse or partner is not Estonian, Estonian should still be their home language, spoken by the children as well as the foreign spouse. In 2003, the proportion of young people with this attitude was a bit higher: 86%. A medium-strength negative correlation ($r = 0.33$) was also demonstrated between the valuing of education in English and the valuing of Estonian in a mixed family: the higher a respondent valued education in English, the lower he/she valued the use of Estonian in a mixed family. Cluster analysis of the data from the 2011 study showed that the proportion of young people who do not value Estonian as a carrier of identity, and have a clear preference for English in education and

daily life, is 18% of the sample. These respondents are more likely to come from "elite" schools and families with a higher-than-average income level (Tammemägi, Ehala 2012).

Undoubtedly, 18% of the younger age groups is a very significant portion of the speakers of a language. Even if half of them acted according to their expressed attitudes in the future, this would bring along a significant decrease in the number of speakers of Estonian through language shifting.

4.1.5 General Conclusions

One of the main variables describing the sustainability of a language is the size of its speaker base. Although very small language communities can remain sustainable in conditions of isolation, e.g. on islands, a language that is used in a modern developed society needs a significant speaker base in order to retain sustainability, because the development of a language-based science, education and culture requires human resources as well as monetary means. Should the current demographic trends continue, the number of speakers of Estonian would fall close to 800,000 by mid-century (Puur, Rahnu 2014), which may not be enough to guarantee the functioning of the Estonian language in various areas at the present level. Therefore, a decreasing population is the main risk factor for the sustainability of the Estonian language in the 21st century.

If the ongoing intensive culture consumption of Estonians continues unabated, the decrease in population will not necessarily harm the versatility of the Estonian-language cultural environment. Higher education in Estonian, however, is facing a much more complicated situation. If the number of Estonians enrolling in universities continues to decline because of the diminishing birth rate as well as the fact that a significant number of secondary-school graduates choose universities

abroad, universities will have to increase the number of foreign students if they want to retain academic levels and versatile curricula. This is not realistic without increasing the proportion of programmes in English. A decision has to be made as to whether foreign students should also be provided good Estonian language skills and an opportunity to settle down in Estonia.

It is likely that support for immigration will become inevitable in the coming decades. Return-migration will also contribute, however the fluency in Estonian of a generation who has grown up abroad is not always comparable to that of native speakers, especially if the proportion of those migrants who do not consider it important to pass down Estonian to the next generation is growing among the younger generations. Sustainability will also be affected by virtual communication with relatives living in the diaspora, the younger generation of whom may not speak Estonian. All these factors combined may affect the present delicate balance of using Estonian, Russian and English in daily life.

The key environment for the sustainability of the Estonian language is clearly the multinational Greater Tallinn area, where Estonian is spoken as a mother tongue or a second language by 77% of inhabitants at present. A majority of services, public as well as private, will surely remain available in Estonian, Russian and English – the user bases of these languages are large enough to have an effect on the market. A more questionable point is the choice of a communication language in a situation where the number of new immigrants starts growing in the city. If communication with these immigrants

remains on the level of the sphere of services, this will not impact the use of Estonian significantly. If common personal communication networks evolve for Estonians, diaspora Estonians and new immigrants, a growth in the importance of English at the expense of Estonian is inevitable.

The share of Estonians and Estonian in East-Virumaa is likely to continue decreasing. Linking this region to the Estonian linguistic and cultural space would probably require nothing less than moving the capital to Narva. A more likely development, however, is that a combination of interpreters and various language technology solutions will be used there in the future in order to guarantee public services in Estonian. Russian will remain the general communication language of East-Virumaa, and should remarkable economic growth develop in the region, this is likely to promote the importance of English rather than Estonian.

We can conclude by stating that the key factor in the sustainability of Estonian is its small user base, which has a direct effect on the viability of higher education in Estonian. Growing numbers of new immigrants and foreigners in the language environment and communication networks is also a likely development that would increase the use of English. On the other hand, the sense of national identity is strong among Estonians. This means that Estonian retains its pivotal role at home and on lower levels of education. Whether the increase of the use of English in public sphere will start affecting the intergenerational transmission of Estonian, and if so, when, is hard to predict at present. ●

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4.2

Export of Estonian culture throughout the world

► PEETER VIHALEMM

Introduction

In recent years, Estonia has made a great effort to introduce and promote its culture abroad. However, we cannot offer a full and comprehensive overview of cultural contacts between Estonia and the other countries due to the lack standardized indicators and traditions of collecting such data. Instead this Chapter will provide a brief overview of the export of Estonian culture throughout the world and introduce some experience of empirical analysis of the space of cultural contacts with other countries.

4.2.1 Introduction of Estonian literature to foreign readers

Each year, an increasing number of Estonian literary works is translated into foreign languages: According to the Estonian Literature Information Centre (ELIC – Eesti Kirjanduse

Teabekeskus) established in 2001, a total of 12 Estonian literary works were published in five different languages in 2001, and 46 in 17 languages in 2009. In subsequent years, the number of books translated and published in other languages has continued to grow (see Table 4.2.1). If we wish to introduce our literature internationally, it is important that the translators are native speakers of the target language and the books are published by foreign publishers because the books published in Estonia do not reach the bookshops and libraries of foreign countries and no reviews are published in foreign media.

Because the number of Estonian speakers abroad is very small the spread of language-based culture is slow, requires active intermediation and rarely reaches a large audience. A successful translation of a book into a widely-spoken language paves the way for its translation into other languages. A good example is Andrus Kivirähk's “Mees, kes teadis ussisõnu” (The Man Who Spoke Snakish). After its translation into French in

TABLE 4.2.1 Introduction of Estonian literature to foreign readers

	2001	2007	2009	2011	2013
Number of translated literary works	12	36	46	66	58
Number of target languages	5	10	17	18	21

Source: Estonian Literature Information Centre

2013, a number of other countries have also expressed an interest in Kivirähk's book: The Netherlands, Croatia, Israel, Italy, Portugal, Germany, Finland, The United Kingdom, Denmark, Hungary and the USA. The book has sold over 17,000 copies in France and four editions have been published so far. The Grand Prix de l'Imaginaire, a French award for speculative fiction, awarded to Kivirähk's book in 2014, has also helped to boost the sales.

Ilvi Liive, the head of the Estonian Literature Information Centre, said in a radio interview last year that among the greatest literary achievements was the publication of all five volumes of A.H. Tammsaare's *Tõde ja õigus* (Truth and Justice) into French, as well as the translation of *Kalevipoeg* (the Estonian national epic) into Hindi. Tammsaare's dream was to see his *Truth and Justice* translated into English. A translation of the first volume of the book into English was published in April 2014 (Liive 2014). By the spring of 2013, all five volumes of *Truth and Justice* had been published in Finnish.

Another accomplishment in recent years has been the translation of *Kalevipoeg* into English: *Kalevipoeg: The Estonian National Epic*. Literary scholar Sirje Kiin has highlighted several other achievements: Juhan Liiv's poetry published in Finnish and Spanish; more than ten collections of poems by Kristiina Ehin published in English (thanks to the excellent work by congenial translator Ilmar Lehtpere, a volume of Kristiina Ehin's selected poems was awarded the Poetry Society Corneliu M. Popescu Prize for European Poetry in Translation); a psychoanalytic biography of Jaan Kaplinski by Thomas Salumets, published in English in Canada, which elevates the Estonian poet to the world stage as an original thinker and magician with words; the selection by the influential magazine *The Economist* of *Into Exile: A Life Story of War and Peace* by Elin Toona Gottschalk as one of the best books of 2013; And the

continuing success at book fairs of Indrek Hargla's series of Estonian medieval crime novels (Kiin 2015).

According to the Estonian Literature Information Centre, in 2010–2014 the highest number of Estonian literary works (65) were translated into Finnish, followed by those translated into Russian (58), English (37), Latvian (27), French (20), Hungarian (13) and German (8).

By comparison, during the same period, 1,200 titles were translated into Estonian and published in Estonia (according to the National Library). Translations from Russian, which dominated during the Soviet era, were replaced by translations from English immediately after Estonia re-established its independence: 64% of all translations in 2013 were from English (data of the National library). In fact, the share of books translated from English has slightly dropped, as in 2009 it was 71%. Other languages from which literary works were translated into Estonian were German (7%), Russian (5%), French (5%), Finnish and Swedish (both 4%).

4.2.2 Theatre

According to the Ministry of Culture, Estonian theatres gave 61 performances abroad in 1995 (Lauristin, Vihalemm 1997:324). In 2007–2013, the number of guest performances abroad was around 100 and in some years even as high as 200 (see Table 4.2.1).

According to the Estonian Theatre Agency, the largest number of guest performances in the last three years as well as in the all period 2004–2013 were given in Germany, Finland and Russia. The theatre companies that gave the largest number of guest performances in 2002–2013 were Kanuti Gildi Saal, Von Krahli Teater and NO99. The productions that drew the

TABLE 4.2.2 Estonian theatres performing abroad in 2007-2013

	2007	2008	2009	2010	2011	2012	2013
Number of theatre companies that have performed in foreign countries	14	13	17	17	20	21	19
Number of countries hosting guest performances	17	20	19	27	15	28	23
Number of productions	36	36	37	43	55	50	47
Number of performances in foreign countries	111	115	91	100	129	187	117
Number of audience members (thousands)	27	17	15	24	36	66	26

Source: Estonian Theatre Agency

biggest audiences were the children's plays "Johnny's Seven Friends" (Estonian Puppet Theatre – NUKU) and "Snow White and the 7 Dwarfs" (Estonia Theatre) that were performed in China in 2012: a total of 19,000 audience members at 16 performances.

According to the Estonian Theatre Agency, in the period 2004–2013, 30 Estonian theatre troupes gave 1055 performances to 280,000 audience members in 45 countries, including the USA, Australia, Japan, India and Iran.

Estonian theatre has had a very good reception abroad. For example, the theatre companies that performed at the Tampere theatre festival in 2014 (NO99, R.A.A.A.M., Cabaret Rhi-zome, Rakvere Teater) received very positive feedback. The Finnish broadcasting company YLE Uutiset pointed out that the productions of Estonian theatres were very bold. The Estonians love theatre even more than the Finns (with a population of 1.3 million, we have one million theatre visits, 500 productions and 6000 performances per year). Mikko Kanninen, Artistic Director of The Tampere Theatre Festival, says: "Estonian productions are experimental and venturesome. Definitely something big is happening in Estonian theatre. All productions are staged by new, young troupes. The new generation of Estonians has a unique and strong voice." (Pedaru 2014).

Important international recognition of the high level of Estonian theatre came with the selection of the production by NO99 – My Wife Got Angry – for presentation as part of the main programme of the Festival d'Avignon in 2015. No Estonian theatre has participated in the festival before.

4.2.3 Music

No quantitative overview of the performances of Estonian musicians abroad nor the distribution of Estonian music in other countries has been made. However, the Estonian Music Information Centre regularly collects data on performances and audio works, see: www.emic.ee. A general vision of how Estonian music could be exported is presented in the export plan for 2012–2013 prepared by the Estonian Music Development Centre. The document admits that while our classical and pop music have great potential, this potential has remained to a large extent unrealised. There is a wish to increase export in both genres because the Estonian market is too small and the opportunities for development are limited. Estonia does not have an institution responsible for export that would cover the whole musical sector. Contacts are made mainly through personal networks. In Europe, there are classical music promotion agencies that are hundreds of years old. (Estonian Institute of Economic Research 2013: 35).

Estonian pop music is mainly exported to the Nordic Countries and those in the Baltic Sea region, while classical music is exported to Germany, Russia and the Netherlands (Ibid: 36).

The great export potential of Estonian classical music is shaped by our renowned conductors, composers, choirs and performers: Arvo Pärt, Erki-Sven Tüür, Neeme Järvi, Eri Klas,

Andres Mustonen, the Estonian Philharmonic Chamber Choir, etc. In 2014, Arvo Pärt was the world's most performed living composer for the fourth year running; examples of international recognition include the prestigious Praemium Imperiale Prize awarded by the Japan Art Association – in 2014 the acclaimed prize was awarded to Arvo Pärt by Prince Hitachi. In May and June 2014, the Estonian Philharmonic Chamber Choir and the Tallinn Chamber Orchestra performed the music of Arvo Pärt in renowned concert halls in Washington DC and New York, including the world-famous Carnegie Hall. This was the first time Estonian musicians performed a full programme of Estonian music in the USA.

A major project was the Baltic Music Festival in China in October and November 2014. Estonian music was introduced and promoted by the Estonian Philharmonic Chamber Choir, Arsis Handbell Ensemble, cello quartet C-JAM and pianist Rein Rannap, who gave 20 performances in the most important concert halls of the major cities of China.

The export of pop music depends on the success of single groups or soloists. For example, Ewert And The Two Dragons performed in a couple of hundred European and North American cities in 2012 and 2013, and signed a number of contracts with large agencies (Sildna 2014). Kerli Kõiv has released a number of albums and singles in America through international agencies. For example, Kerli's single "Walking in Air" was downloaded from iTunes over 500,000 times in a week (Estonian Institute of Economic Research 2013a: 37).

The number of foreign performances of Estonian pop musicians has increased significantly. More than 30 musicians from Estonia gave about 500 performances abroad in 2014. Concert tours to neighbouring countries have become a normal part of a professional musician's career. "We have gained international recognition. Estonian pop music is known and the audience knows that they can expect something new and unique from Estonian musicians." (Sildna 2014).

4.2.4 Visual art

While Statistics Estonia collects statistical data on foreign trade also in the field of visual art, these data do not provide a comprehensive overview of the distribution of the works of Estonian artists throughout the world. The import of works of Chinese origin and their resale to EU countries constitutes a major part of the foreign trade in paintings. According to experts, young artists have increasingly more direct contacts with foreign countries and Estonian modern art has great export potential. Estonian galleries have not targeted foreign markets. (Estonian Institute of Economic Research 2013: 19).

The international reputation of Estonian modern art increased significantly in the years 2012–2014. According to Karin Laansoo, the head of the Estonian Contemporary Art Development Centre, Estonia "has opened the door to the international world of art, and not just as an extra." More than half a million people have enjoyed the works of Estonian artists at international art fairs, not to mention international exhibitions held across the world as well as through art export,

which has been brought to life from its previous comatose state. In terms of its renown and its export potential, Estonian modern art is reaching the level of Estonian modern music which has so far been our country's calling card. (Laansoo 2014).

The most ambitious art project of our country so far is the Estonian Pavilion at the Venice Art Biennale, which receives huge financial support in comparison with the amounts of all other art project funding. At the Venice Art Biennale 2013, Estonia was represented by Dénes Farkas' project *Evident in Advance* – “a large scale post-conceptual installation in which words, photos, sounds, plants, books and various three-dimensional objects are combined to create an experience that cannot be expressed in words” (Information Centre of Estonian Museums 2014). The Estonian Pavilion was praised on the international website Art Agenda as one of the Biennale's most impressive (Ramos 2013).

Although Estonian artists have received international recognition before, it was still a significant honour for Kaido Ole – whose works were displayed in 2014 at the exhibition “100 Painters of Tomorrow” at One Art Space Gallery in New York – to be included in the top 100 painters of the world. The exhibition will move to London. Thames & Hudson will publish a catalogue of the exhibition, featuring, among others, Kaido Ole's works. According to Karin Laansoo, the inclusion of Kaido Ole in the list of 100 chosen artists, selected from 4,300 entrants, is an extraordinary achievement. “Such global exhibitions organised by top curators and critics often serve as an important platform for finding new artists. Kaido Ole's success will definitely give a boost to the promotion of Estonian modern art across the world. Estonia is known to be an innovative country with its e-services; why can't we be known as a country of high-level modern art and artists.” (Estonian Contemporary Art Development Center 2014). We should point out that in the modern world, all spheres of art are in interaction - music festivals have art exhibitions and art exhibitions have music and film programmes (Laansoo 2014).

The promotion and export of Estonian design has also received a boost in recent years. There have been a dozen high-level exhibitions and fairs organised abroad, such as the major one held in Brussels in 2014, and Estonians participated in the London Design Festival, as well as in an exhibition at Hoxton Gallery (Gurjanova 2014).

4.2.5 Film

Estonian films have been rather successful at international festivals. According to the Estonian Film Institute, a total of 185 Estonian films participated in 807 festivals in 2012 (about a half of them – 443 – being animation film festivals. (Estonian Institute of Economic Research 2013: 12).

By mid-October last year, Ilmar Raag's films *Kertu* and *I Won't Come Back* had won seven and four international film awards, respectively (Pedaru 2014b). The European Film Academy selected *Kertu* as one of the best 50 European films that

will compete for the Academy's awards at the end of the year. Veiko Õunpuu's film *Free range* has also received awards. The nomination of the Estonian-Georgian joint film *Tangerines* for a Golden Globe award and an Oscar is unprecedented in Estonia.

Pilots on the Way Home, an animation by Priit and Olga Pärn, took home a Grand Prix prize from the 2014 Fredrikstad Animation Festival. This is the 15th film by Priit Pärn that has received international recognition. To celebrate the 50th anniversary of ASIFA (International Animated Film Association), a competition was held in 2011 to select the 50 most outstanding films created during the half century of the existence of the International Animated Film Association. Among the 50 selected films were two by Priit Pärn: *Breakfast on the Grass* (11th place) and *Hotel E* (36th place) (Wikipedia, Priit Pärn).

“We can say that Estonian films have made an international breakthrough and we have directors whose new films are eagerly anticipated not just in Estonia.” (Karjatse 2014).

Since 2014, the International Federation of Film Producers Associations (FIAPF) placed the Tallinn Black Nights Film Festival PÖFF on its list of significant international film competitions. The accreditation delivered by FIAPF gives the right to hold non-specialised competitive festivals, such as those in Cannes, Berlin, Venice, Karlovy Vary, etc. – a total of 15 locations, including Tallinn.

At the PÖFF 2014, 650 films from 70 countries competed within three programmes (the International Competition, The Competition of Debut Films from Baltic Sea and Nordic Countries and the North American Competition) and three festivals (animation films, children's and youth films, and short films).

For one of the most spectacular presentations of Estonian culture to date, Estonian Public Broadcasting and one of the best known producers of musical films in Europe, Accentus Music, have joined forces to produce two unique films: a documentary and a performance film (*Adam's Passion*). The subjects of the documentary are the composer of *Adam's Passion*, Arvo Pärt, and its producer Robert Wilson.

The documentary *Adam's Passion* follows Pärt and Wilson through rehearsals of the musical theatre performance of the same name, as well as the premiere in the following May.

A feature film will also be made of the premieres of the production of *Adam's Passion*, in a collaboration between Eesti Kontsert and the Milanese production company Change Performing Arts, and released on world markets separately. The score of the production will include some of the most influential works of Arvo Pärt – *Adam's Lament*, *Tabula Rasa*, *Miserere* – intertwined with *Sequentia*, a new work composed specifically for this production. *Adam's Passion* will be performed by conductor Tõnu Kaljuste, the Estonian Philharmonic Chamber Choir, Tallinn Chamber Orchestra, soloists, actors and students of theatre and dance schools.

According to Paul Smaczny, the founder, director and film producer of Accentus Music, one of the best known production companies of musical films, the film will be broadcast by the TV channels of up to 50 countries as well as featured at film festivals in Europe, America and Asia. Both the documentary and the concert film will premiere internationally to coincide

with Arvo Pärt's 80th birthday, in September 2015. The estimated number of audience members for the documentary is expected to be up to 50 million people throughout the world (Estonian Public Broadcasting 2014).

4.2.6 Empirical analysis of Estonia's placement in the space of International cultural contacts

After a detailed analysis of the geographical span of Estonian artists' guest performances, based on the data of 1997, Aili Aareleid-Tart concluded that, based on the total number of performances, the countries most interested in Estonian artists were Finland, Sweden and Germany, followed by such cornerstone countries of European culture as Italy, France and the UK. The third group included The Netherlands, Denmark and Austria. Surprisingly, Russia lagged behind Spain. Cultural exchange with Central European countries as well as smaller Western countries was not very intensive and was nearly non-existent with Portugal, Malta and Greece. (Aareleid-Tart 1998: 100)

The Institute of Social Studies of Tartu University has also gathered data on cultural exchange with other countries. Two attempts have been made (in 1995–1997 and 2001–2003) to determine the cultural closeness of different countries to Estonia within the international cultural space (in addition to political, economic and personal space) (see: Vihalemm 1999; 2005; 2007). The indicators used to determine cultural closeness were: the number of books translated into Estonian, the number of guest performances of foreign theatre companies in Estonia, the number of guest performances by foreign musicians, and the countries of origin of films and TV-series broadcast on our three national TV channels. Therefore, the promotion of the culture of the relevant country in Estonia has a greater weight in the calculations of the cultural closeness index than the promotion of Estonian culture abroad. Due to the lack of relevant data, the only indicator used to determine the international distribution of Estonian culture was the number of guest performances of Estonian theatre companies abroad. Based on that indicator, Estonian culture was most intensively promoted in Finland, Sweden and Russia. Based on the overall cultural closeness index, in 1995–1997 Estonia had the closest cultural contacts with the USA (due to the domination of American films on TV), followed closely by Finland, Russia and Germany (see: Vihalemm 1999: 256). In 2001–2003, Germany gained the first place, followed by Russia, France, Finland, the USA, Sweden and the UK (Vihalemm 2005: 88).

Naturally, it is debatable whether or not the international cultural contacts can be statistically analysed. It is even more debatable whether the index of density of cultural contacts should be calculated at all and if yes, then how (for example, in our analysis we ranked countries based on the relevant indicator: the highest ranking country was awarded 10 points, the following 9 points, etc.). The question arises as to what do the used indicators actually show and what does an aggre-

gated indicator show? Because the collection of information is complicated, we discontinued the calculation of the index of cultural contacts as well as the empirical determination of the closeness of countries within the economic and personal spaces. In an open cultural space, the borders between nations blur because different cultures are intertwined with each other.

However, an empirical analysis of cultural contacts enables us to highlight overall trends and the conclusions can be specified and verified by comparing the results by using different methods. For instance, a comparison of our findings with those published by Aili Aareleid-Tart indicates that our cultural contacts with Russia in the mid-1990s were stronger than suggested by Aareleid-Tart. Including translations and TV programmes in the analysis enabled us to characterise cultural contacts more precisely and to bring to the fore the importance of American culture in the globalising cultural space.

Conclusions

When comparing the current distribution of Estonian culture throughout the world with the data collected 10 to 20 years ago, it is clear that while our nearest neighbours – Finland, Sweden, Germany and Russia – dominated in the 1990s, the list has expanded in a number of spheres.

This involves not only the global distribution of Estonian music, successful performances in the USA, China and Japan and the success of our films in many countries, but also the breakthrough of Estonian literature, theatre, visual art and design into the international cultural space. Strong development can be observed in virtually all spheres of culture.

The success of Estonian culture in the international arena in the last decade confirms the viability and sustainability of our culture.

The Good Country Index, developed by Simon Anholt, published in the summer of 2014, rates 125 countries in six categories (see: <http://www.goodcountry.org/overall>). Estonia finished sixth in terms of contribution to world culture, which makes it one of the top countries in that category (Mikita 2014). Given the small size of our country, Estonian culture beams a very strong signal to the world (Kiin 2015). ●

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4.3

Cultural participation as an indication of the viability of a cultural space

► PEETER VIHALEMM, MARJU LAURISTIN

Introduction

The high level of spread of various cultural activities among Estonian population is a vibrant indication of the vitality of the Estonian cultural space. Besides the participation in cultural events and visits to cultural institutions, one very important indicator is love of books – buying and reading literary works (in particular fiction). Below, we will give an overview of how often the Estonian population visits cultural institutions, as well as of the interest in books and of the general typology of cultural participation.

4.3.1 Visiting cultural institutions

The meaning and importance of culture and culture consumption changed after Estonia regained its sovereignty. In Soviet society, the consumption of culture in our own mother tongue united the Estonians and compensated for the lack of sovereignty. It was an expression of cultural opposition to Soviet policy and ideology and played a very important role in the preservation of national values and identity. After the restoration of Estonia's independence, cultural participation started to decline, reaching its lowest point in 1993–1994. It then in-

creased again in 1995–2005, decreased slightly during the economic crisis of 2008–2009 and recovered afterwards (see Table 4.3.1).

The biggest increase can be observed in the number of museum visits: By 2013, these had more than quadrupled compared with 1995. However, about one third of all museum visits in recent years were made by foreign tourists. (Statistical Yearbook of Estonia 2014: 81). Compared to 1995, the number of visits to cinemas had nearly tripled by 2013, remaining however many times below the level of the 1980s. In connection with theatre visits, it is important to note that Statistics Estonia only publishes data on visits to national and city theatres, leaving aside independent theatres and troupes, the numbers of which have expanded considerably in recent years. According to the Estonian Theatre Agency, in 2013 the total number of theatre visits in Estonia was 1,091,000, exceeding the number of visits per 1,000 population in 1990.

The number of books published in Estonia has increased considerably compared with 1995, while the average print run has decreased. (see Vihalemm 2014). The number of visits to public libraries tripled in the 1990s and has been relatively stable since.

TABLE 4.3.1 Number of visits to cultural institutions per 1,000 population from 1990–2013

	1990	1995	2000	2005	2009	2013
Museums	1235	679	1124	1309	1663	2802
Theatre*	791	528	590	532	553	634
Cinema	7000	700	780	830	1290	1940
Concerts organised by Eesti Kontsert in Estonia**	183	51	142	180		

Source: Statistical Yearbooks of Estonia 1995, 2006, 2014.

* Since 1995, national and city theatres

** Since 2006, the data are no longer collected

When breaking the data down by population groups, we can see significant differences between people of different ethnic backgrounds, genders and education levels (Table 4.3.2).

The population groups that are significantly more actively engaged in cultural activity are the Estonians (which is, no doubt, in part due to a larger number of Estonian-language cultural institutions), women and people with more education. People with higher education are, as expected, more actively engaged in cultural activities in all countries, while comparably high participation levels of women are not so common. According to the findings of Eurobarometer from 2007 and 2013, there were only 4–5% more women among the respondents who had been to the theatre at least once in the preceding year (EU average). (European Commission 2007: 16; European Commission 2013: 19). As in Estonia, women in Finland are much more active theatregoers (Tilastokeskus 2011), while in the USA this is not the case (NEA 2013: 16–17). As regards book-reading, the differences between men and women are characteristic of many European countries as well as the US.

Differences between age groups are not significant in Estonia, except for the fact that young people go to the cinema more often. It is worth noting that while in the European Union as a whole, older people are much less engaged in culture, this does not apply to Estonia. Older generations have even higher book-reading frequency than young and middle-aged people (See Table 4.3.5 below).

People's engagement in cultural activities has slightly decreased compared with 2011.

A comparison of the findings of Eurobarometer surveys

from 2007 and 2013 corroborates that cultural participation is becoming more passive. In the course of these surveys, people were interviewed across the EU, to explore their book-reading practices and frequency of visits to cultural institutions. Table 4.3.3 shows that the level of cultural engagement in Estonia is higher than the EU average in all but one category: 'been to the cinema'.

We can see a huge north-south division in citizens' participation in cultural activities, as well as a significant difference between people with different educational levels. In terms of specific areas of cultural activity, broadcast media were the most important cultural mediators in Estonia in 2007 (93% of the respondents stated that they were participating via television and radio, the highest rate in Europe); Estonia also has the biggest share of concertgoers (62%) and the second-largest share of theatregoers (49%) (see Vihalemm 2014). By 2013, cultural participation had fallen in all but one European country: Sweden, and in all but one category: cinema. While this also applies to Estonia, we still ranked among the top three EU countries with the highest levels of participation in the above three categories in 2013.

A Eurobarometer index of cultural participation has been developed, reflecting participation in a range of cultural activities. Both in 2007 and 2013, Estonia was among the top five EU countries, based on the proportion of people with high cultural engagement (see Figure 4.3.1).

Figure 4.3.1 illustrates the north-south divide in Europe. In terms of frequency of participation in all types of cultural activities Northern countries (Sweden, Finland and Denmark)

TABLE 4.3.2 Visits to cultural institutions over the last 12 months, by population groups, 2014 (% of population group)

	ETHNIC BACKGROUND		GENDER (ESTONIANS)		EDUCATION (ESTONIANS)		
	Estonians	Non-Estonians	Men	Women	Below secondary school	Secondary school	Higher education
Theatre (plays): at least once	56	30	49	63	33	54	75
At least three times	17	4	13	21	6	16	27
Theatre (musicals): at least once	40	21	33	45	28	37	51
At least three times	9	5	5	10	6	6	13
Concert: at least once	67	55	61	72	46	67	80
At least three times	20	8	17	22	8	19	28
Cinema: at least once	46	44	43	48	36	41	60
At least three times	22	16	21	23	19	18	30
Art exhibition: at least once	29	27	25	33	13	26	45
At least three times	8	6	6	9	0	5	14
Museum: at least once	46	30	43	48	30	42	62
At least three times	10	8	10	11	2	9	17
Library: at least once	55	38	44	65	43	55	64
At least three times	37	21	28	45	27	37	45

Source: Representative survey *Me. The World. The Media* conducted in 2014 by the Institute of Social Studies, University of Tartu

as well as the Netherlands and Estonia score highest. France and the UK also have reasonably high levels of cultural engagement. Latvia and Lithuania also have higher levels of participation than the EU-average, ranking 10th and 12th respectively.

Over a six year period (2007–2013) the overall levels of participation have decreased in all EU member states apart from Sweden and Finland, and especially in Hungary, Poland and Slovakia. This general decline can probably be attributed to the impact of the economic crisis, coupled in post-communist countries with the weakening of the cultural practices of the previous 30 to 40 years, devaluation of the role of culture, shrinking participation in high culture and the increasing importance of the economy. However, economic factors are not the only reason for such changes. In addition to cultural participation, the surveys of 2007 and 2013 explored the respondents' active involvement in cultural activities in the 12 month period preceding the surveys. The general extent of involvement as active participants is characterised by the response "none of the above mentioned activities". The percentages of "none of the above" were very different in the two surveys because the 2013 questionnaire did not include the most popular

activities in 2007: decorating, handicrafts, gardening (36%). These activities were replaced by topics of less widespread interest such as designing a website, blog or other creative computing activity (8%). **Figure 4.3.2** illustrates the ranking of EU countries based on the average levels of active participation in various cultural activities in 2007 and 2013 (based on the increasing frequency of the response "none").

We can see that there are significant variations between northern and southern Europe in terms of cultural and artistic activities. In both 2007 and 2013, active involvement levels were highest in the Nordic countries, Luxembourg, Estonia, the Netherlands and France. This group also included Belgium and Germany in 2007 and Slovenia in 2013.

The lowest levels were recorded in both years in Bulgaria, Portugal, Romania, Greece, Malta, Hungary and Poland. This group included Slovenia, Spain and Lithuania in 2007 and Italy in 2013. Averaging the two surveys, Estonia shared the 5th place with the Netherlands, Latvia ranked 15th (slightly below

We can see that there are significant variations between northern and southern Europe in terms of cultural and artistic activities. In both 2007 and 2013, active involvement levels were highest in the Nordic countries, Luxembourg, Estonia,

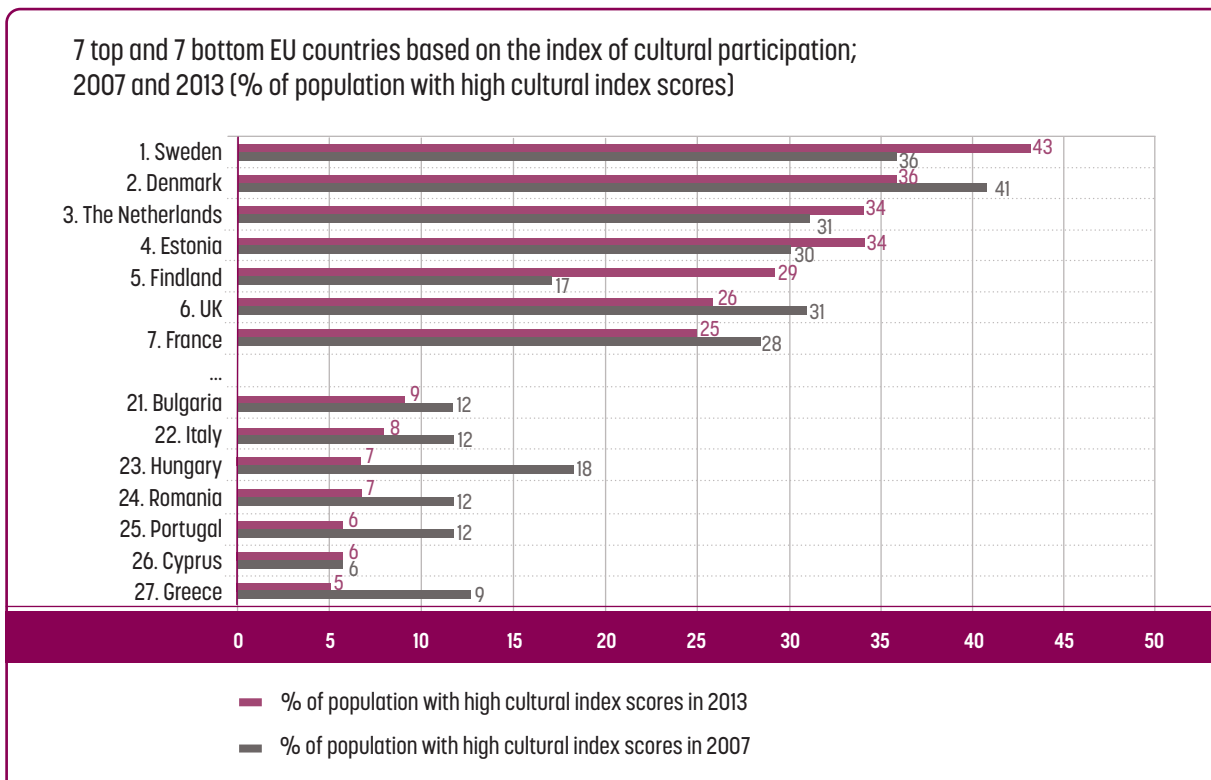
TABLE 4.3.3 Participation in cultural activities in EU Member States in 2013

(at least once in the last 12 months; % of population ages 15+; ranking based on book-reading)

	Read a book	Been to the theatre	Been to a concert library	Visited a public gallery	Visited a museum or monument	Visited a historical cultural pro- or site	Watched or listened to a programme on TV or on the radio	Been to the cinema
Sweden	90	53	61	74	76	79	89	74
The Netherlands	86	53	51	45	60	71	84	70
Denmark	82	38	60	63	62	73	86	76
United Kingdom	80	39	37	47	52	65	77	61
Germany	79	30	45	23	44	63	74	54
Estonia	78	45	54	47	46	59	86	46
Luxembourg	76	35	52	17	49	59	81	61
Finland	75	42	47	55	40	47	75	50
EU27	68	28	35	31	37	52	72	52
Italy	56	24	26	24	30	41	60	53
Poland	56	16	22	26	24	36	61	40
Bulgaria	55	24	30	18	26	41	71	29
Malta	55	24	32	29	37	53	77	51
Cyprus	54	23	30	8	18	31	59	30
Romania	51	15	25	17	21	33	59	20
Greece	50	24	23	10	16	22	54	36
Portugal	40	13	19	15	17	27	61	29

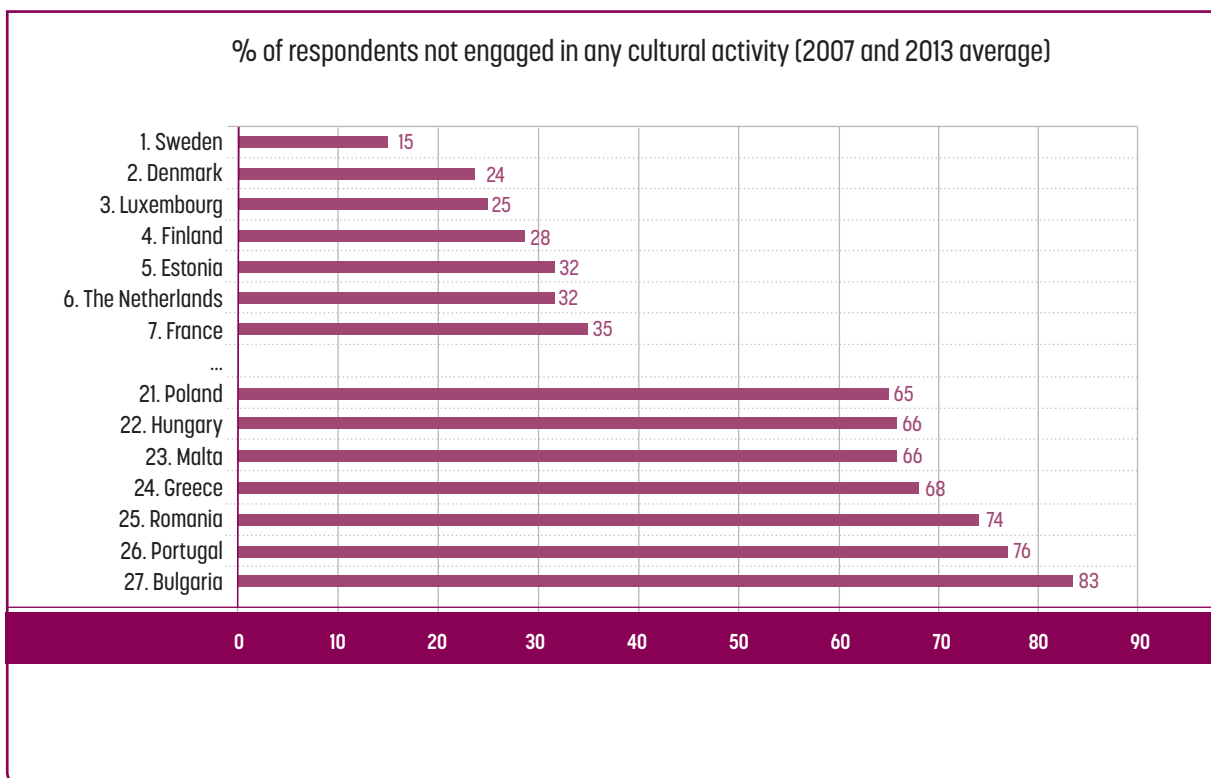
Source: Cultural access and participation, 2013

FIGURE 4.3.1 Cultural access and participation in the EU in 2007 and 2013



Source: European Commission, 2007; European Commission, 2013

FIGURE 4.3.2 Engagement in cultural activities in the EU in 2007 and 2013



Source: European Commission, 2007; European Commission, 2013

the Netherlands and France. This group also included Belgium and Germany in 2007 and Slovenia in 2013.

The lowest levels were recorded in both years in Bulgaria, Portugal, Romania, Greece, Malta, Hungary and Poland. This group included Slovenia, Spain and Lithuania in 2007 and Italy in 2013. Averaging the two surveys, Estonia shared the 5th place with the Netherlands, Latvia ranked 15th (slightly below the EU average) and Lithuania 19th. **Table 4.3.4** illustrates engagement in cultural activities in EU Member States in 2013.

In 2013, the number of participants was smaller than in 2007 in all categories except for acting (see the findings of 2007, **Vihalemm 2014**). We are not able to show the change because the proportion of those who were not involved in any activity increased from 38% to 62% because of the above-mentioned change in the questionnaire.

According to Eurobarometer, the north-south difference in levels of self-expression is even more significant than in the case of visits to cultural institutions. How should these findings be interpreted? The climatic differences definitely play a role as people in northern countries spend more time developing indoor activities, mental pursuits and making greater efforts. The overall mentality - rational or emotional tempera-

ment, orientation to success and self-restraint - also plays a role. **Max Weber (1958/1905)** has linked this to the spirit of rational capitalism, inspired by the spread of the Protestant ethic and ascetic Protestantism.

When looking at European countries it is obvious that the differences in economic development correlate significantly with the differences in the spread of the spirit of rational capitalism. Lithuanian sociologist **Zenonas Norkus (2012)** has suggested that one of the reasons why Estonia's economic development has been faster than that of Latvia and Lithuania is the domination of the Protestant ethic in Estonia. Such a comparison seems surprising in the case of Latvia because Latvia is also a Protestant country. Norkus points out that this is not about the spread of Protestantism alone but about the spread of ascetic Protestantism (the Herrnhut movement) that was much more widespread in Estonia in the 18th and 19th centuries.

The importance of the Protestant ethic as an influencing factor in the field of culture, including both passive and active cultural participation, is even more clear than in the economic field.

We can assume that the Protestant spirit and the Protestant

TABLE 4.3.4 Engagement in cultural activities in EU Member States in 2013

(at least once in the last 12 months; % of population aged 15+; ranking based on overall involvement based on the increasing frequency of the response "none")

	Played musical instrument	Sang	Acted on the stage Acted in a film	Danced	Wrote a poem, an essay, a novel, etc.	Did creative computing, such as designing websites or blogs, etc.	Produced a film or took photographs	Created visual art, applied art	None
Denmark	21	38	5	35	13	23	49	27	26
Sweden	22	28	9	22	12	26	35	24	32
Finland	16	23	3	15	12	16	19	26	37
The Netherlands	14	17	5	15	9	20	20	23	42
Luxembourg	15	16	3	18	7	9	21	19	43
Slovenia	9	21	3	21	4	8	22	14	49
France	10	16	3	21	7	11	20	20	49
Estonia	9	15	4	19	8	12	10	15	50
EU27	8	11	3	13	5	8	12	10	62
Romania	4	7	1	14	3	4	7	3	74
Greece	3	12	1	17	1	2	4	5	74
Portugal	3	6	1	10	2	2	5	3	78
Hungary	3	5	1	7	1	3	8	4	79
Italy	6	4	1	3	2	2	2	3	80
Malta	5	2	4	2	3	2	4	5	82
Bulgaria	2	5	1	7	1	2	1	2	86

Source: Cultural access and participation, 2013

foundation of Estonian culture have been and still are important factors that ensures the continuance of our culture and the viability of our cultural space.

4.3.2 Changes in book-reading practices

A couple of decades ago, the Estonians were one of the most book-loving nations in the world – based on both the number of books published and read and in particular on the number of books bought.

Social changes have had a significant impact on both Estonian book buying habits and the meaning of this field of culture in people's lives and the development of society. People read less and buy fewer books.

While the number of different books published in Estonia has increased and the content has become more diverse, the average print run has decreased.

The structure of the book industry has changed. The proportion of fiction has increased from 13% in 1990 (Järve 2002) to 27% in 2000 and 2007 (*Kultuur 1997–2007: 69*). At the same time, the importance of domestic literary works has decreased and the market share of translations from foreign languages has increased. While in the Soviet period the main source language for translations was Russian, English has been dominating as the source language since the 1990s. (According to the National Library, 64% of all translated books published in 2013 were translated from English).

Many popular types of literature (crime and love stories, fantasy and esoteric literature) were considered to be “Western rubbish” by the Soviet authorities and were published very rarely (which, naturally, increased interest in them and made them highly sought-after). The number of practical handbooks and self-help books was very small and their print runs fell behind the demand. In the free market economy the market share of such books is significant.

Unfortunately, we do not have comparable data on the decline of book-reading. We can only admit that while in the 1980s and 1990s, the proportion of Estonians who read fiction at least once a week was 57% and 48% respectively, by 2011 this proportion had decreased by almost half, to 24%.

Book buying has also significantly decreased, partially due to the high prices of books. In the early 1980s, 62% of the Estonian population bought books regularly. By 2014, the percentage of regular book buyers had decreased tenfold – to 6%. The home libraries of Estonians have shrunk in size as compared to the 1990s, probably because some books bought during the Soviet era got thrown away in the course of home improvement. This trend has continued in the last decade. The number of book buyers has decreased by nearly two-thirds – from 91% to 35% among the Estonians and from 76% to 23% among the Russian-speaking population.

The population's interest in reading continues to decrease. According to a survey conducted in 2014, the percentage of non-readers has remained the same in comparison with 2011,

while the proportion of avid readers (reading more than 10 books in a year) has fallen from 23% to 19%. The proportion of people who do not buy any books has increased from 30% to 32% among the Estonians and from 35% to 49% among the Russian-speaking population.

However, the interest in books is in Estonia still bigger than in many other European countries (see *Table 4.3.3 above*). According to Eurobarometer 2007, 79% of the adult Estonian population had read books during the year preceding the survey. This meant that we shared the 7th and 8th place with Finland among the EU countries and our book-reading was at the same level as Germany's (Sweden ranked first with 87%). According to Eurobarometer 2013, book-reading had decreased across Europe and Estonia ranked 6th with 78% (*European Commission 2013*). A survey on adult education conducted in 2007 in all EU countries showed that Estonia ranked third, after Finland and Sweden, in terms of the percentage of people who had read more than 12 books during the year.

How about book reading in different population groups?

Our surveys conducted in recent years indicate that the book-reading patterns of the Estonians and the Russian-speaking population in Estonia are quite similar, although the Russian-speaking population prefers fiction to non-fiction. The differences are more significant when it comes to buying books and the sizes of home libraries (see *Table 4.3.5*). Huge home libraries are still a distinctive feature of the Estonian-language cultural space, even despite the fact that home libraries are shrinking in size. According to the survey on adult education conducted in 2007, 53% of the Estonian population aged between 25 and 64 had more than 100 books in their home libraries, which brought us to 4th place among the EU countries (Sweden ranked first with 57%) (*Eurostat 2011: 178, 180*).

Much as with overall cultural participation, book-reading levels are higher among women than among men. According to the survey of 2014, 13% of women and 25% of men had not read a single book in the previous year, while the proportion of avid readers was 24% among women and 13% among men. The reason is probably that men are less interested in reading fiction – there were significantly more fiction-lovers among women than among men. The differences are smaller when it comes to non-fiction and specialised literature; however, women are here too more active readers than men.

Older middle-aged and elderly people read considerably more than younger generations. This is especially obvious in the case of fiction. The biggest proportion of non-readers was in the age group 20–44, probably because these people are engaged in other activities (studying, starting a family, earning money) and they do not have to read books from obligatory lists like students (aged 15–19). Non-fiction and specialised literature is attractive to 15–19 year olds at the same levels as in 20–44 year olds, while the proportion of non-readers is significantly larger than among older people.

Education is the strongest predictor of reading. People with higher education read much more than those with lower educational levels.

The largest difference between Estonia and other countries is in the reading frequency among the elderly. This is especially evident in the case of fiction reading: as shown in **Table 4.3.5**, there are twice as many fiction readers among those aged between 55 and 79 than in the age group 20–44. Both in the European Union (**European Commission 2007: 17**) and the US (**Zickuhr, Rainie 2014**) the opposite trend can be observed – young people read more and book-reading frequency decreases with the age. Taking into account the overall trend of declining book-reading frequency, the continuously high reading levels among our older generation is an important sign of cultural resilience.

4.3.3 Typology of cultural participation

The following typology of the participation of respondents in various forms of cultural activity is based on a cluster analysis of the data of the survey. “Me. The World. The Media”. Such an approach is based on the concept of socio-cultural stratification of society introduced by French sociologist Pierre Bourdieu. Socio-cultural stratification reflects the engagement of people with different socio-economic resources in various cultural activities and the impact of education and upbringing on people’s cultural preferences (**see Bourdieu 1984**). The typology of cultural participation of the Estonian population

helps us to observe the general trends in the links between the interest in, consumption of and participation in cultural activities – and socio-demographic factors, such as economic status, age, gender, ethnicity, etc. (**see Lauristin 2014**).

When comparing the types of cultural participation based on the data of 2002 and 2014, we can say that a rather stable pattern of socio-cultural stratification has developed in Estonia. According to the cluster analysis based on the data of 2014, the respondents were divided into groups that were similar to those in 2002 (**see Figure 4.3.3**). The main differentiating axes were, on the one hand, the level of cultural participation (consistency and frequency of cultural participation, level of interest), which differentiates active, moderate and passive participants, and on the other hand, the nature of people’s preferences, which is expressed by the preference of certain channels, subjects, forms of art and authors and can be extended based on different indicators: whether people prefer complex or simple texts, traditional or modern forms of art, personal participation or participation through the media, etc.

Based on these criteria, we can distinguish active types A and B, constituting a total of 30%-40% of respondents. (Since the indicators of cultural participation were not identical in both surveys, we cannot state with certainty that the percentage of active types decreased in 2014 as significantly as **Figure 4.3.3** suggests). While both types are more active consumers of culture than the average, their preferences of channels and content differ. Type B has a more classic humanities orientation: people belonging to this type prefer classical literature and literary works dealing with philosophy, history

TABLE 4.3.5 Book-reading by population groups in 2014 (% of population group)

	ETHNIC BACKGROUND		GENDER (Estonians)		AGE (Estonians)						EDUCATION Education		
	Estonians	Non-Estonians	Men	Women	15-19	20-29	30-44	45-54	55-64	65-74	75-79	Below secondary school	Secondary school

Have read in the last 12 months:

not a single book	18	18	25	13	7	27	23	17	13	12	12	34	17	11
more than 10 books	19	19	13	24	15	13	14	20	23	27	28	12	18	24

Time spent on weekdays on reading fiction:

none	49	30	60	39	56	64	62	46	32	32	32	67	47	41
more than 1 hour	25	22	23	26	15	15	14	21	29	52	57	20	26	25

Time spent on weekdays on reading non-fiction and professional literature

none	45	60	50	40	52	52	54	40	35	31	43	65	43	35
more than 1 hour	14	15	11	16	17	16	7	12	15	22	22	9	16	15

Source: MeeMa 2014.

and social issues. The emerging Type A participant is not so much interested in ethical and philosophical themes as in the playful and technological aspect of culture: they are interested in popular literature, non-fiction and subjects related to technology, economy and natural sciences. Both types have a common feature in that they prefer more abstract and complex forms of culture to simple entertainment. They are also characterised by the active use of diverse channels, including digital channels. However, one uses those channels to obtain information required for their work and to follow the news, while the other is a multifunctional user of the possibilities offered by information technology.

The third type of cultural participation is Type C, which is characterised mainly by a preference for entertainment and is home-centred – not very active as an audience but likes to read, watch films and has various hobbies. The fourth group comprises people who do not participate in cultural activities and do not have any cultural hobbies. This group includes young people who are increasingly passive (their passivity is expressed by total indifference to both social life and culture) and spend time playing computer games and in social networks (Type D) and also (elderly) people who are traditionally passive, have very little social interaction and whose only entertainment is TV (Type E).

Different types of cultural participants are interested in different thematic areas. A factor analysis of thematic interests in the breakdown of cultural participation types (Figure 4.3.5) reveals that while the group of traditional cultural participants is interested in cultural and social topics, the new active participants prefer the themes of economy and law, and also the thriller genre and fashion. In the classic cultural participation group, interest in the two last themes was below the average.

Looking at the prevalence of different groups of cultural participation types in population groups will give us a clearer picture of the socio-demographic background of these types (Figures 4.3.6 and 4.3.7). While men and women are quite different in terms of specific hobbies and cultural interests, the proportions of different types of cultural participation are relatively similar (Figure 4.3.6). However, there is a huge difference between Estonians and non-Estonians regarding “home-centred” cultural participation. Non-Estonians are more likely to lead an urban, passive and withdrawn lifestyle, preferring TV to other ways of cultural participation. The Estonians are more likely to have a hobby. Also, the proportion of people characterised by active cultural participation is larger among the Estonians. This may partly be due to the fact that the Estonians have more opportunities for cultural participation, for example by going to the theatre to watch plays in their native language.

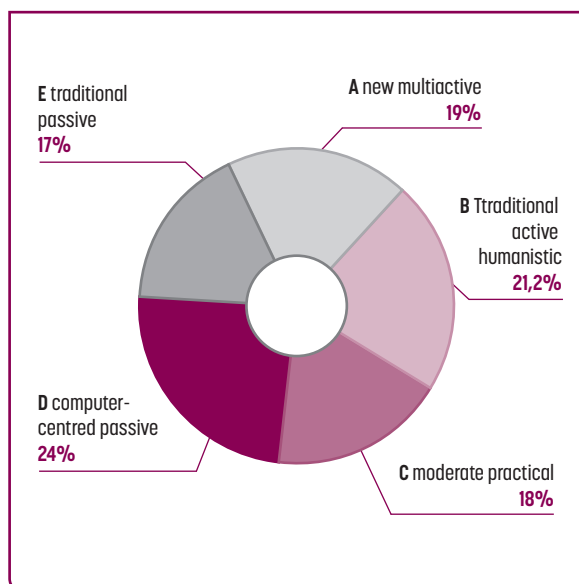
What is most interesting and revealing in terms of the probable nature of future trends is the change in the differential shares of various modes of cultural satisfaction in correlation to the age of respondents (Figure 4.3.7). It is clear that the pattern of cultural participation has changed in the last decade.

Among 20–29 year olds, the proportion of Types A and B, versatile and active consumers of culture, which play an important role in the sustainability of a culture, is the smallest (28% in total). Young people are clearly polarised in terms of cultural participation. For more than half of under 30-year olds, cultural participation has been almost completely replaced by computer-based entertainment and social interaction.

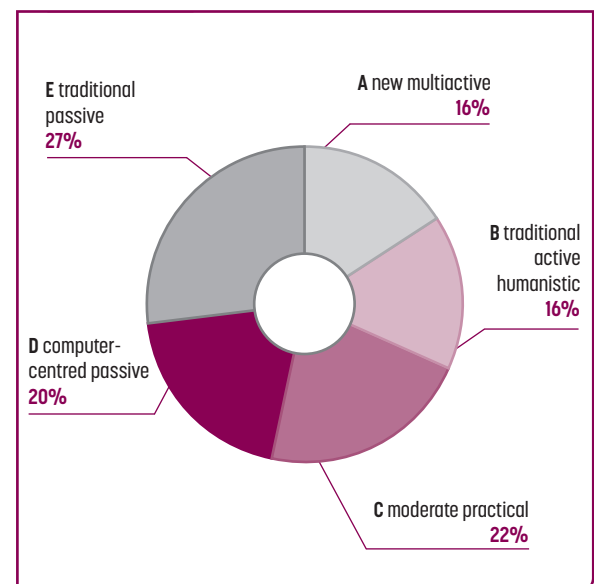
The home-centred type of moderate cultural participation –

FIGURE 4.3.3 Distribution of respondents into clusters of cultural participation in 2002 and 2014; based on the survey Me. The World. The Media

Clusters of cultural participation 2002

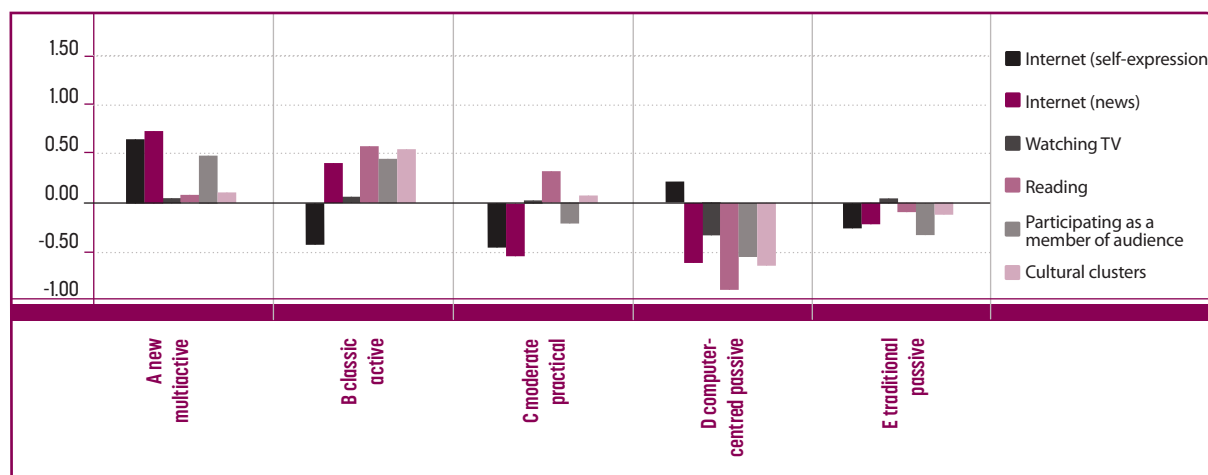


Clusters of cultural participation 2014



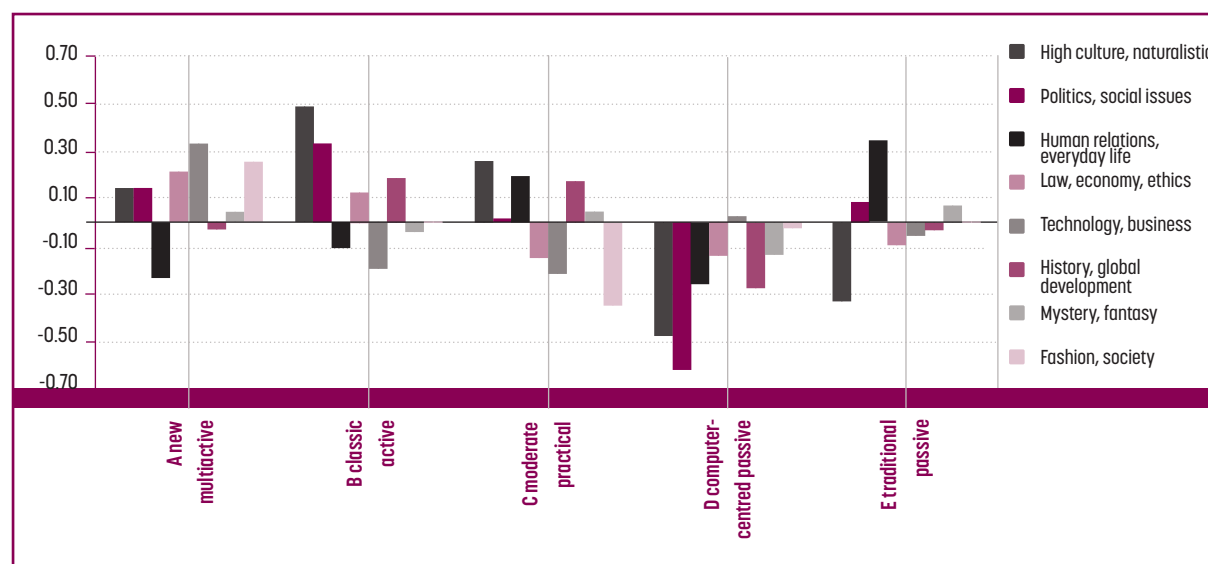
Source: MeeMa 2002 ja 2014.

FIGURE 4.3.4 The use of cultural channels by different types of cultural participation



Source: MeeMa 2014.

FIGURE 4.3.5 Preference of themes offered by cultural channels (deviation of the thematic factor from the mean)



Source: MeeMa 2014.

engagement in practical hobbies, watching films and reading fiction - is disappearing in this age group.

The social composition of types of cultural participation is described in Table 4.3.6. We can see that Bourdieu's concept applies to present-day Estonia: cultural participation and versatile cultural relations depend on the access to education and economic resources. In Estonia, people's relation with the cultural environment depends heavily on gender, ethnicity and age, as well as on education: the active types A and B are mainly comprised of people with at least secondary-level education, and more than half have higher education. Cultural relations are also linked to social self-identification: active clusters include more of those who place themselves higher on the social ladder.

Conclusions

The high demand for books and the active visiting of cultural institutions during the Soviet era may be seen as an exceptional phenomenon that was caused by many different factors. Firstly, the Estonian-language culture functioned as a socially unifying factor, an opportunity to oppose the totalitarian political and ideological system. The participation in one's own culture in one's own language compensated for the restrictions to political and economic activity and ensured the sustainability and viability of the nation. Secondly, culture was endowed with very high prestige and the costs of participation were low, creating a high unsatisfied demand, i.e. books were in short supply and hard to get.

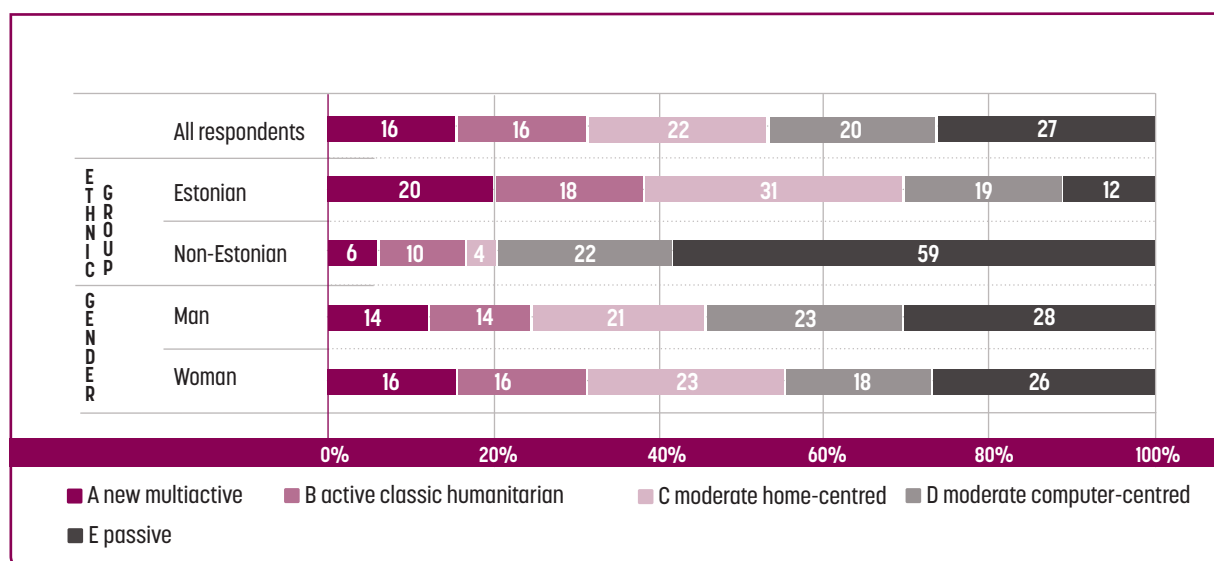
After the restoration of independence and the transition to a free market economy, the cultural mechanisms that had been characteristic of the western world already from 20–30 years earlier kicked in: differentiation of high and popular cultures; decline in the demand for books; a number of population groups giving up reading, with interest in books limited to bestsellers and self-help books. The demand for more serious and complex fiction has fallen significantly.

After a post-independence decline, the practice of visiting cultural institutions has reached almost the same levels as before. This may be an indication of the viability of our cultural space.

When interpreting the pattern of cultural participation, in which, on the one hand, a new, internet-based versatile type of participation has emerged alongside the classic forms of participation, and on the other hand, cultural ignorance and passivity are on the increase, we can distinguish three main processes that have caused the cultural shift: Firstly: transition to a free market economy and changes in the functions of culture shifted the values related to cultural participation from

the political and ideological field to the field of personal self-fulfilment. The cultural sphere became less standardised and more diversified; there was more freedom of choice, including the freedom of not being engaged in culture or preferring those forms of culture that earlier had been considered inferior, inappropriate or not serious. The general interest in culture declined, cultural participation polarised and consumer stratification increased. Secondly: the creation and consumption of culture are increasingly affected by the development of information technology which changes cultural codes, creates new means of self-expression and blurs the boundaries between different forms of culture and between different cultural spaces. The third factor, which has an intensifying effect on the above-mentioned factors, is the generational change among both the creators and consumers of culture, which changes both values and interests as well as preferences of cultural media. The classical, book-centred culture that has dominated for the last four centuries is giving way to a more convenient and diverse audio-visual and digital culture. In the following sections of this Chapter we will look more closely at how such changes are affecting our national culture. ●

FIGURE 4.3.6 Types of cultural participation among the total population, ethnic groups and genders



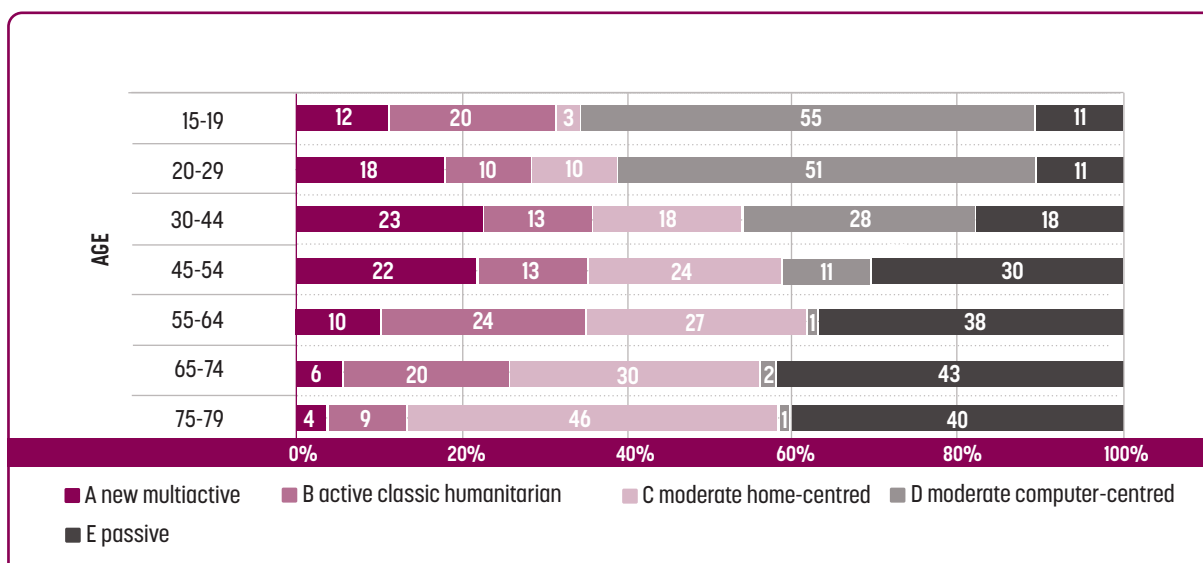
Source: *Me. The World. The Media*, 2014.

TABLE 4.3.6 Social composition of types of cultural participation

		CULTURAL CLUSTERS					All respondents
		A New e-active	B Classic active	C Moderate practical	D New e-passive	E Traditional passive	
Ethnic background	Estonian	88	80	95	65	30	68
	Non-Estonian	12	20	5	35	70	32
Gender	Men	43	43	43	52	47	46
	Women	57	57	57	48	53	54
Place of residence	Tallinn	26	34	22	27	40	30
	Tartu, Pärnu	20	12	8	15	10	12
	Areas surrounding Tallinn, Tartu, Pärnu	15	8	9	11	5	9
	Towns of East-Virumaa	5	5	2	11	18	9
	Small towns	18	22	37	22	17	23
	Rural areas	17	19	22	14	9	16
Age	15-19	4	6	1	14	2	5
	20-29	18	11	8	41	7	16
	30-44	36	20	20	33	16	24
	45-54	24	13	18	9	19	16
	55-64	12	30	25	1	28	20
	65-74	5	16	18	1	20	13
	75-79	1	3	12	0	8	5
Place of residence	Urban areas	61	65	54	65	82	66
	Rural areas	39	35	46	35	18	34
Social status	Low	4	9	18	8	34	17
	Lower-middle	10	17	20	15	23	18
	Middle	24	29	33	23	22	26
	Upper-middle	32	24	18	28	11	21
	Upper	29	21	10	26	9	18
Education	Below secondary education	5	9	15	26	22	17
	Secondary education	40	41	64	50	62	53
	Higher education	55	50	21	24	16	30

Source: MeeMa 2014.

FIGURE 4.3.7 Types of cultural participation by age groups



Source: *Me. The World. The Media*, 2014

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4.4

The Song and Dance Celebration as a Symbol of Estonian Cultural Space

► MARJU LAURISTIN

Introduction

The importance of the national Song and Dance Celebration (also known as the Song and Dance Festival) for the formation of the modern Estonian nation can be compared to that of another institution from the time of the national awakening: Estonian journalism. Estonian-language journalism began in the middle of the 19th century to address the newspaper-reading audience all over Estonia as an “Estonian people”, thus developing a sense of national belonging to, in Benedict Anderson’s terms, an “imagined community”. We could also attribute a similar role to the Song and Dance Festival in civilising the modern Estonian nation, to borrow a term from Norbert Elias. Choir singing gave a voice to the Estonian people, trained them to discipline the raging sentiments of protest into meaningful harmonies and taught peasant children to engage in cultural and political practices as an active collective subject.

Through its network of choirs and dance groups, its exercises in search of perfect harmony, its repertoire which unites the national with the eternal, the 150-year-old tradition of the national Song Festivals has contributed to the self-realisation of the Estonian people and kept us aware of the higher values concealed in the background of everyday life. This is the key that places the metaphor of the “singing revolution” into its correct context: after all, the Baltic Chain was a modern political expression of the same national civilising process, and broadcast our message about being a part of Western civilisation.

In today’s individualistic world, which tends to overrate virtual reality, Estonians with their continuing tradition of the Song and Dance Celebration can be seen as an actual community of people, a collective linked by a living cultural network and a shared emotional experience of joint activities. This emotional experience of course comes from the artistic level of the programme of the Festival, the moments of complete silence from a crowd of a hundred thousand people after top-level performances, an expression of the magic of breathing and being together. It is no accident that a nation which is famous in Europe for being lukewarm in religious matters,

is not afraid to use the adjective “sacred” when describing their Song Festival experiences.

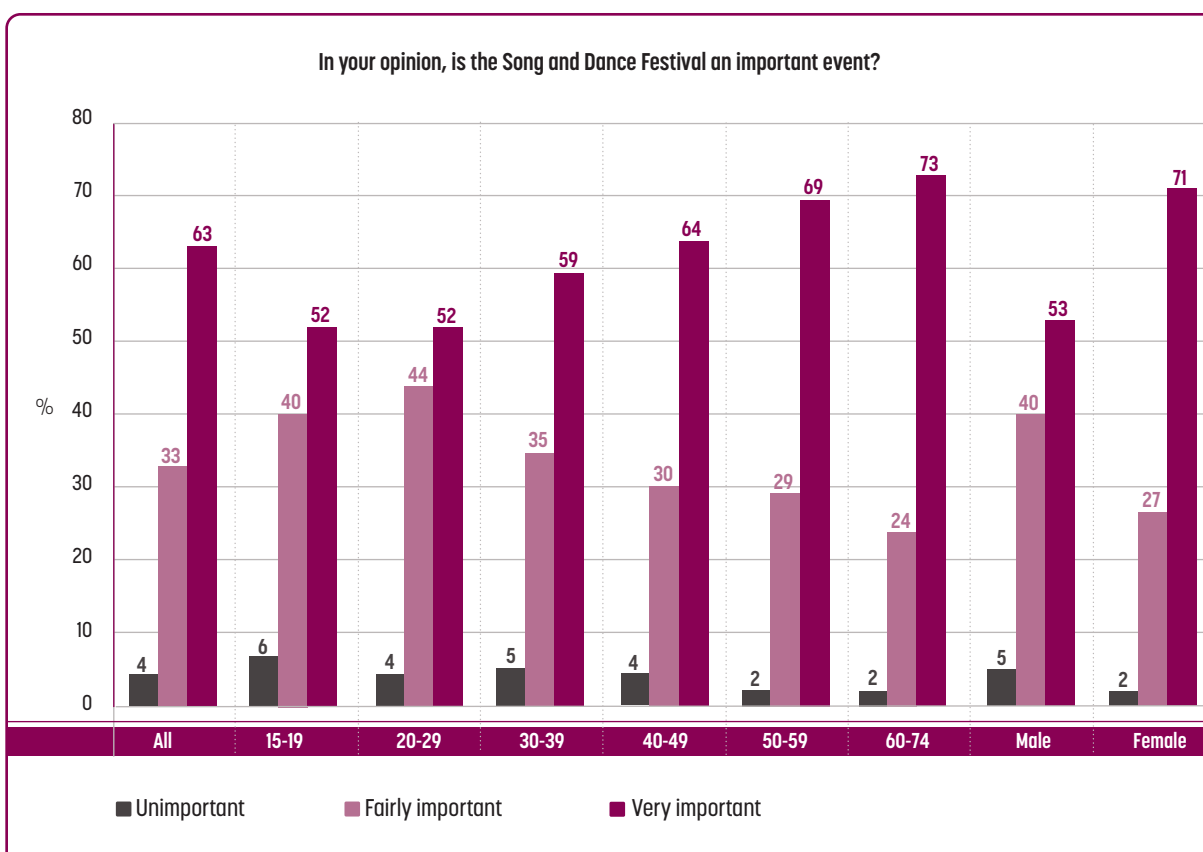
The format, organisation, and repertoire of the national Song and Dance Festivals, as well as the Song and Dance Celebration as a cultural process that carries it forward and is influenced by it, has been a symbol of something solid and traditional for Estonians for a long time. As demonstrated by a survey of the Song and Dance Festival participants (see Lauristin, Vihalemm 2013), this is a process of extremely high emotional importance for Estonians, related to their national identity and ensuring cultural continuity. The results of the survey, however, also warn us against taking this perpetuation for granted. The Festival itself has changed in form as well as in essence, and the renewals that have been accepted by the people have become a part of the tradition.

The Song and Dance Festival survey¹ demonstrated clearly that for the majority of Estonians, this celebration is perceived not as a concert or performance taking place under the grand dome of the songfest field, but rather as a collective ritual for expressing and re-creating one’s sense of national identity. The survey showed clearly that the tradition of the Song and Dance Festival is very strong and vigorous in Estonia. An absolute majority, 96% of the respondents, considered it an important event, 63% calling it very important (see Figure 4.4.1).

The survey indicates the importance of the Estonian traditions of choral singing and folk dance in the sustainability of value orientations and identity. The results of the survey tell us that half of the Estonian population (49% of the respondents to be precise) have themselves sung or danced at the Song and Dance Festival at least once. Extending these results to cover all Estonians between the ages of 15 and 74, we can say not only that half of the Estonian nation has personally participated in the Song and Dance Festival, but that 13%

¹ The data set of the survey ordered by the Estonian Song and Dance Festival Foundation was collected with the help of the pollsters Saar Poll, in the form of representative interviews of the population. The survey was carried out from February to March 2013, and it involved 1,301 Estonian-speaking respondents between the ages of 15 and 74.

FIGURE 4.4.1 Relevance of the Song and Dance Festival



Source: Study "My Song and Dance Festival".

participated in both, 29% in just the Song Festival and 8% in just the Dance Festival. Two-thirds of the respondents had also been among the public, and 90% had followed TV or radio broadcasts, with 15% having participated in the Festival only through the media. Only 9% of the respondents had no Song or Dance Festival experience at all. In the field among the audience, people with personal singing or dancing experience also predominate, along with those who have come because their family members are involved.

A clear generational cultural shift can be observed in the perceived meaning of the Song Festival as well as in the general understanding of the cultural forms born at the dawn of the modern era. Among respondents under the age of 20, there were almost twice as many respondents who had no personal connection with the Song and Dance Festival. And even those young respondents who had sung or danced at the Festival themselves displayed more contradictory attitudes about it than respondents of older age.

Statements about the meaning of the Song and Dance Festival were used to test how much the Festival is affected by globalisation and an economy-centric view of culture, as well as whether the Song and Dance Festival has retained its role as a carrier of national identity or whether it is losing this role. Half of the respondents were convinced that the traditions of choral singing and folk dancing are very strong and sustainable in Estonia today. A bit more than a third, however,

felt that they have become weaker in the last years; only 7% agree that they have become significantly weaker in the last decades. At present, 12% of adult Estonians are active in choral singing, 46% had been involved earlier and 42% were never involved. Eight per cent (8%) go in for folk dancing, while 57% have never done it. When asked if the Song and Dance Festival is losing its popularity and uniqueness because of the many other grand open-air events, 73% said no. In general, older respondents tend to consider the ritual and institutional framework of the Song Festival much more important than younger ones. Approximately half of the younger respondents find the Song Festival to be an important carrier of national values, while the other half sees it more as an entertaining festival experience to be enjoyed with friends. At the same time, the percentage of those who can read music is highest among the 15-19 age group (54% among the young people cf. the national average of 39%), as is the percentage of those who actively participate in choral singing, folk dancing and/or instrumental music (25% cf. the national average of 12%).

For the vast majority of the respondents, the Song and Dance Festival is the most important ritual related to national identity. Only a marginal number of respondents chose statements that make it possible to doubt this in some way. This is demonstrated by the unanimous agreement of respondents with the following statements.

- ▶ I expect an experience of national feelings from the Song and Dance Festival, not entertainment. (84%)
- ▶ The Song and Dance Festival is an expression of the identity of Estonians, and will remain so. (82%)
- ▶ The Song and Dance Festival is so important to us that it deserves public funding even in hard times. (81%)
- ▶ The Song and Dance Festival is a very special festivity for Estonians, it is not just an interesting performance meant for tourists. (77%)
- ▶ The Song and Dance Festival is our ritual, it is not a commercial event. (72%)

An analysis of the results showed that there are significant differences in how people see the Song and Dance Festival and what they expect of it, thus giving different meanings to the Celebration itself and sending out contradictory signals to the organisers.

A factor analysis of the motives for participating and of memorable experiences from the Festival brought out four main dimensions in the people's expectations and the meaning of the Festival tradition.

- 1.** The Festival as a ritual, as an expression of the national feelings of Estonians, highlighted by those components of the Festival that have the highest symbolic meaning (the procession, the entering and exiting marches, the lighting of the fire, well-known patriotic songs, the dance "Tuljak" at the end of the Dance Festival and the song "Mu isamaa" at the end of the Song Festival, etc.).
- 2.** The Festival as a general national holiday with its leaders, ceremonies, verbalised messages and traditions of honouring people of great authority.
- 3.** The Festival as a grand festival of the arts of song and dance, offering the audience a chance to partake of high-quality performances, while also creating a direct experience of self-expression and joy for the participants.
- 4.** The Festival as a gathering of the community, a network connecting singers and dancers, choir and dance group leaders, composers, poets, dance choreographers, their families, relatives and friends, defined by common values, common memories and experiences.

One of the most important questions of the survey concerned the influence of the shift of generations on the sustainability of the Song and Dance Festival tradition. As expected, older age groups showed higher interest and stronger participation experiences in the Song and Dance Festivals than younger ones. The number of people who have participated in the Festival at least once is approximately the same in all age groups; differences between age groups do not exceed 13%, although they reach 30% for attending the Festival and 52% for mostly or always participating via broadcasts. We also asked how important the respondents consider culture to be in their lives. It is worth noting that in answer to this question, the youngest age group (15-19) sees culture as much less important in their lives than other age groups. Just 10% of the respondents between the ages of 15 and 19 said that

culture occupies a very important place in their lives (cf. the national average of 23%). Another cause of concern is the below-average confidence that young respondents have in the sustainability of choral singing and folk dancing (39% of the young people think it is sustainable, the national average value being 50%).

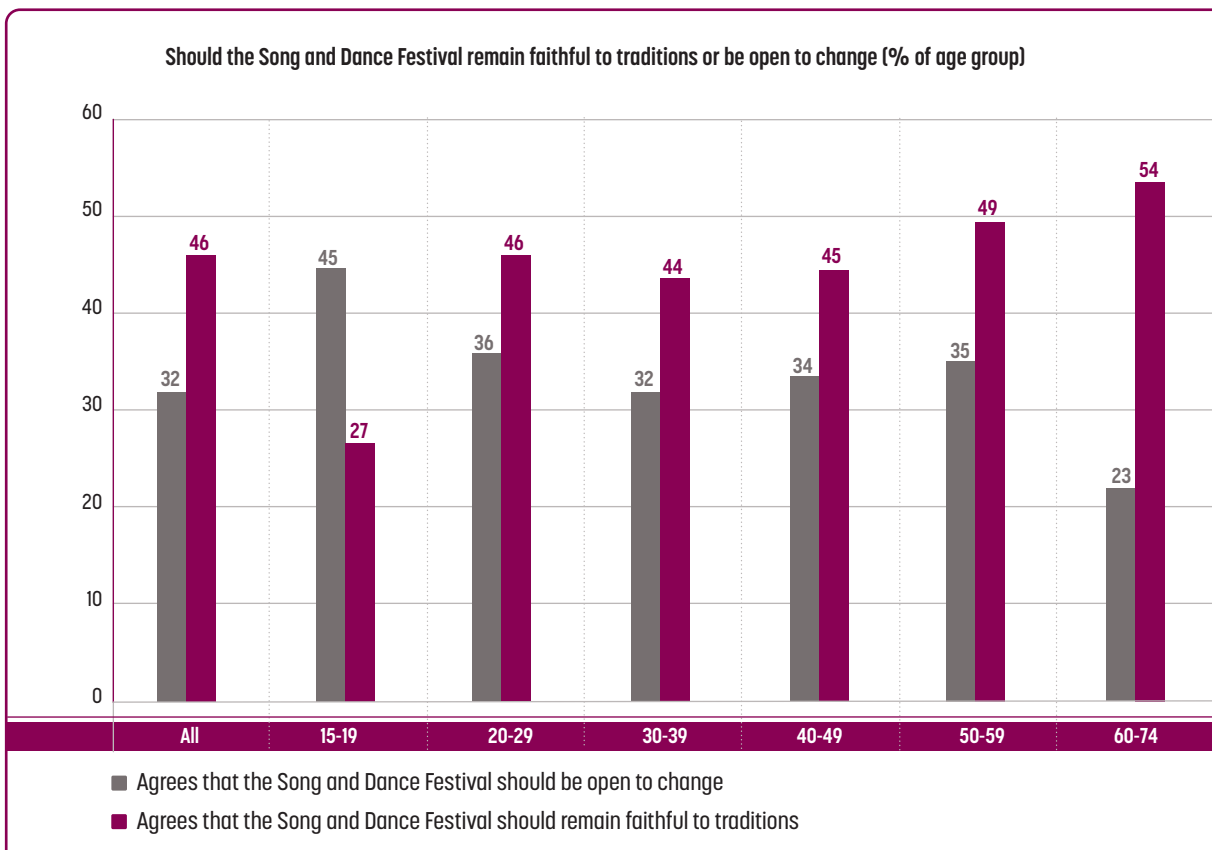
As can be expected, the motives of the younger and the older groups for participating in the Song and Dance Festival are somewhat different as well, although the general chart is quite similar. Older respondents, who have experiences of attending the Song and Dance Festivals in Soviet times, tend to value the national-institutional approach, while younger people, who have formed their experience of the Festival in independent Estonia, preferred an expression of national feelings that is relatively free of institutionality. The nationalist meaning of the Festival is not as important to them as social participation in the festive activities. The older generation on the other hand considers the nationalistic tradition and the feeling of unity conveyed by the general atmosphere of the Festival, the folk costumes worn by participants and the patriotic songs ringing out under the dome much more important. Older festival-goers tend to enjoy the quality of the songs and dances more and feel excited about seeing renowned conductors and dance leaders. The young participants are characterised more by an interest in self-expression or an attitude of cultural consumerism, as well as the wish to take part in the festivities together with family and friends, and share the joy of the celebration with guests.

The most active and culturally-rounded segment of the corps of singers and dancers who participate in the Festival, however, balances these two orientations - toward institutionality and community - successfully, while also paying attention to nationalist as well as artistic values.

The organisers of the Song Festival and its procession face the same question before every Festival: what should be done according to established patterns and what should be changed to create an element of surprise that would maintain the interest of those who find repetition unsatisfactory. How can the tradition of choral singing and folk dancing be refreshed while retaining the essence of the Song and Dance Festival, a uniquely Estonian cultural code carrying the important message of the historical continuity of our people?

When thinking of the future of the Song and Dance Festival, we should try to answer these questions: will this national tradition preserve its role in the modern globalising world and will it continue in the traditional format of the Song and Dance Festival? Would it be able to survive as a part of the natural flow of the cultural process, or will it need more direct cultural-political support in the future in order to persevere? Changes caused by the generational shift will take place in Estonia in the next 15 years, affecting the Song Festival process significantly. The generations with Soviet-era experience, who have been carrying the Song and Dance Festival tradition up to now and for whom this tradition (with its specific rituals and the whole institutional framework) has been one of the supporting pillars of the continuing existence of the

FIGURE 4.4.2 Readiness to change dominates in the expectations of the younger generation



Source: Study "My Song and Dance Festival".

Estonian nation, will step aside. The leading positions of society will be taken over by new generations who have been formed in the circumstances of the independent Republic of Estonia and the free market, and for whom the Song Festival tradition as an institution of national identity and values may not be so unequivocal and self-evident. This shift will also cause controversy and conflicts of values among the practitioners of singing and folk dancing, related to the contents and the form as well as the underlying principles of the Festival. One may presume that at the next two Song and Dance Festivals the lead role will still be held by members of the older and middle generations of singers and dancers, while at the Festival of 2024, those that were born after 1991 will already predominate. The generational shift will mean an increase in those participants for whom the meaning of the Song and Dance Festival as a symbol of national sustainability is no longer a priority, and who tend to be either indifferent or critical towards the present traditions of the Festival, valuing participation in the Festival, but not so much the symbolic meaning of it.

In addition to the natural process of the generational shift, the continuance of the tradition of the Song Festivals is also influenced by other, broader trends and factors, some of which are quite clearly foreseeable, while the possible form and scope of others is hard to predict. The more important influencing

factors of the external environment include globalisation (including cultural), increasing mobility of people, rising education levels and the resulting increase in urbanisation, further fragmentation of society (due to an increasing variety of opportunities for self-realisation, education and careers), and new and attractive leisure activities. These tendencies may be 'subversive' to the Song Festival process, while a reverse process is also possible: the re-valuing of the Song Festivals and traditions in general as a counterweight to the globalisation and fragmentation of society, which many do not want to accept. In view of the fact that an increasing portion of Estonians will be living abroad in the future, either permanently or temporarily, the importance of the Song Festival as a bridge connecting them to their homeland and its culture will rise. Another question to face will be how to relate inhabitants of Estonia with a different ethnic background to the Song Festival process.

When developing the Song Festival tradition, the process of technological renewal that will affect Estonian society and culture in general will have to be taken into account, especially the opportunities inherent in IT and communication technologies. Traditional media will in the foreseeable future lose its role of merging, through live transmissions, the Song and Dance Festival stage into a unified whole with a larger audience. How should the Festival, taking place in real space, be

linked to opportunities of virtual participation? This is a question that should be given thought already now.

Participants in the discussions among the organisers and researchers of the Song and Dance Festival about future scenarios pointed out the risk of a “value fatigue” hitting the audience after the centenary festivities of the Republic in 2018 (which will probably include a nighttime song festival with strong patriotic overtones) and the celebrations of 150 years of Song Festivals in 2019. One can predict that if not earlier, the preparations for the 2024 Festival will see a heated discussion on the subject of renewing the Song Festival tradition. By that time, the older generation of enthusiasts will be leaving the Song Festival grounds and dance fields, and they will be gradually replaced by those for whom keeping up the tradition and defending it from the pressure of the global commercial culture will not be a self-evident value. A large new generation of Estonian emigrants will be working, studying and raising their children abroad, for whom participation in the Song Festival could and should be one of the most important experiences connecting them with Estonian cultural traditions.

Three alternative development scenarios emerged from the discussions (see [Terk et al. 2014](#)). The first one sees the continuance of the Song and Dance Festival as a key cultural process with a format that is more open and harmonised with the strengthening trends of civil society and the internationalisation of Estonians (the so-called “New Esto”). Uniting the artistic level of the Festival programme with a general interest in this kind of network-based format will require more resources than are available today to be spent on supporting the furthering of the choral and folk dancing culture at home as well as abroad, and on ensuring the access of a maximum number of prepared groups to the Festival.

A second opportunity was pointed out as a more elitist, creative economy solution: to achieve a situation where our Song and Dance Festival becomes a cultural event of international renown, a globally-recognized brand transmitted by high-level international media channels (like Mezzo) all over the world. For this, the symbolic key elements of the Festival tradition would have to be retained, while the main focus would need to be on world-class artistic performances, where participation in the Song and Dance Festival should be limited exclusively to very high-level groups who are able to perform extremely complex major works. The international attraction of the Festival could be increased by inviting world-famous conductors, guest choirs, soloists and dance groups.

As a third scenario, the specter has been raised of the for-

mat of the Song and Dance Festival being synthesised into a pop-culture/retro event (we already have a few song festivals of pop choirs). The second and third versions essentially mean the replacement of the Song Festival as a cultural process of collective creation with the consumption of a high-tech ‘song-and-dance-festival-like’ cultural product. This in turn would probably affect choral singing and folk dancing, the sources of the Song and Dance Festival tradition. Compared to their present-day central position in the cultural field, choir singing and folk dancing could become merely sub-cultural activities.

Conclusions

The relations between the traditional Song and Dance Festival culture and postmodern cultural forms are ambivalent. Attitudes towards national values are becoming more and more divergent as well. Therefore, the future of Song and Dance Festivals is closely connected to the answer to a more general question: whether and how Estonians want to contribute to the development of national identity in the twenty-first century. How will Estonians be able to keep going as a unique cultural community? However, the survey gives us no reason to declare that we have serious signs indicating the looming disappearance of Estonian traditional culture; it is rather rearranging itself, taking on new forms and adapting quite successfully to the shift of generations as well as changes in technology. It is this dynamic ability to adapt to changing environments that forms the main warranty of sustainability for Estonian culture. The changing of existing traditions does not mean that people do not want to keep their unique cultural community alive. At the same time it should be kept in mind that as generations shift and technology keeps developing rapidly, the continuance of the tradition of the Song and Dance Festivals as a cultural process uniting the Estonian nation will require increasing care and support. This concerns the preparation of choir conductors and dance group leaders, the technical development of the infrastructure of the Festival, as well as providing opportunities for preparing for and participating in the Festival. Maybe our tradition of Song and Dance Festivals, a part of the UNESCO World Heritage, should have a special law protecting it and a dedicated financial facility? Discussions about the format of the Festival as well as an increased openness about the subject of national identity itself must continue. ●

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4.5

Culture is becoming more visual and therefore richer

► **INDREK IBRUS**

A key thread running through this Chapter is the endurance of Estonian culture. In other words, the question: will we persist? Some authors worry about the sustainability of the Estonian language and about the print-centred culture going into decline. The rise of visual culture to a status rivalling the printed word may threaten the survival of the Estonian culture in its familiar and therefore valued form. This kind of understanding of the hierarchy of text modalities is not uncommon. Only a few of us dare to challenge the assertion that reading is more beneficial and commendable than watching TV or online videos. After all, the abstractions offered by the written word mean enlightenment, while the flows of audio-visual images are pure entertainment. Even if these flows have explicit artistic ambitions, the brief, immediate and concrete nature of audio-visual modalities seems to suggest that it is not capable of generalisation – it is not perceived as contributing to the formation of culture’s constituting body of textual material.

This perspective is not new in European culture. It is a cultural tradition here to consider images to be cursed and the lack and rejection thereof a measure of being spiritual, cultured and intellectual. As stated in the book of Exodus 20:4 “Thou shalt not make unto thee any graven image, or any likeness of any thing that is in heaven above, or that is in the earth beneath, or that is in the water under the earth”. “The angels will not enter any house in which there is a picture,” warns Prophet Muhammad in the Koran. The list of picture-disdaining opinion leaders is also quite impressive: Plato, Huxley, Adorno, Baudrillard, Sontag, Bourdieu and many others.

The reason for the strong presence of “old school” cultural theorists on the list is obvious – the increase of visual communication in culture is showing no signs of slowing down. It is perceived that culture is becoming faster and more colourful, more easily sensed, yet harder to capture. A recent analysis of the readers of Estonian arts and culture periodicals conducted by Peeter Vihalemm and Marju Lauristin indicated that while a large segment of today’s under-30s are open-minded and culturally-active young people, they tend to pre-

fer audio-visual forms of culture. When it comes to knowing literature and reading books and arts and culture media, they are being left behind by older generations. Lauristin and Vihalemm concluded that in the Estonian context, this new group represents a post- or late-modernist cultural orientation.

I will proceed from that statement, presuming that deconstructing the “postmodernist” form of culture helps in understanding the effects of the rise of the visual on the modern evolutionary dynamics of culture. Most commentators situate the formation of post-modernism as a cultural epoch in the last third of the 20th century. What actually happened in culture at that time? In the 1970s and 1980s, national telecommunications networks were privatised and the related service markets liberalised. First in the USA, then in Margaret Thatcher’s UK, and rapidly onward across Western Europe. This was accompanied by the proliferation of cable TV channels and later on by the development of the internet as a commercial service targeted to private users. Why is the development of cable TV as the provider of the “post-modernist condition” so important? It created a technical capability to mediate an increasing number of audiovisual flows – to such an extent that a large part of audiovisual culture was increasingly reused. On the one hand, the media industry was not yet capable of producing a sufficient amount of audiovisual content to fill the whole new technological space. On the other hand, the implementation of economies of scale and economies of scope logics of media economics meant that the existing intellectual property had to be reused in search of new audiences and the repackaging of the same content, continuous linking and recombining of content brands, topics, stars and other representative material became common practices in the audiovisual media. That is, television as a new form of media quickly acquired the function of self-reproduction: it started to focus increasingly on itself, and its constantly circulating signifiers became reflections of the evolving system.

In view of this, it is not surprising that a renowned critical thinker, Jean Baudrillard, started to define post-modernism as an epoch where signs increasingly refer to other signs without any connection to reality – a process that, according to Baudrillard, would culminate in the implosion of meaning, i.e. the inability to make meaningful contact with the “real”. However, we need to realise here is that post-modernism as a cultural condition grew primarily out of the increasing dominance of visual communication within culture. Although in literature or printed media the self-reflexivity of cultural systems and the intertextuality of texts had been a universal condition linking all eras of cultural evolution, the adding of visual information to that intertextual play created a crisis. Many critics believed that culture was about to lose its ability to perform “properly”. That is, the rise of visual communication resulted in a wave of cultural pessimism. Such criticism and scepticism was strongly characteristic of the pre-internet era. The web culture born from the integration of California hippie, yuppie and hacker cultures was characterised by a more upbeat attitude towards the play of re-combining modalities and signs as well as towards visual culture itself. As Lev Manovich (2013) predicted in his *The Language of New Media* (recently translated into Estonian), the interactive forms of media will also be dominated by the film-like representative conventions. Indeed, as media managers all around the world as well as in Estonia admit, their goal is to increase the amount of audio-visual content in their news portals or other online media services. Videos are popular among audiences and are therefore backed also by advertisers. The development teams of media channels are in particular inspired by the need to make different sign systems function in concert – to decide when is a video playing the main role when is it supplementing a text; and vice versa - when is a text required simply to contextualise an eloquent video. In other words, the question is how to combine text and video in both hypertextual wholes and crossmedia strategies that may combine multiple platforms.

This ultimately means that while the rise of visual communication in culture is apparent, it is rising alongside the existing forms, not replacing them. Verbal communication has such important functions in culture that it simply cannot disappear. Official and rational communication that has to be efficient and precise is done in written language (“Put it in an email!”); the role of visual communication is to illustrate or explain what has happened, demonstrate environments, describe relations or offer immediate experiences - and sometimes, to be sure, oblivion. What is even more important is that the rise of visual communication may entail new possibilities and needs for translation. Interaction between modalities means that meanings need to be transferred from one modality to another. The number of multimodal entities is increasing and so is the need for intersemiotic translation between those modalities. What does it mean? As Juri Lotman has said, complete overlapping of meanings between modalities is in principle impossible. It is not possible to transfer a meaning between a picture and language without changing it.

Paradoxically, it also offers a new possibility: the transformation of each text provides an opportunity to perceive the world in a different way, which means a possible change in understanding that world. When such translations happen frequently, culture is busy with a profusion of perspectives, or “meaning innovations”. Therefore, we can say that the more multi-, cross- and transmedia there are in a culture, the better is its health. For example, the Baltic Film and Media School (BFM) of Tallinn University offers a programme in crossmedia production. The aim of their courses is to train specialists in intersemiotic translation, who see their vocation as crossing media boundaries and ensuring that Estonian culture is dynamic and capable of adapting itself to the multi-technological environment.

The translatory intensiveness is important not only in the context of creating explosive innovations – it also creates stability in culture. Translations between different domains of culture create bridges and intersections between meanings. A high level of translation activity in a networked culture (in which we all make decisions on mediation, operating as nodes of the media network) helps to filter out what is valuable – socially important meanings in people’s everyday lives. We can suggest that such a practice of translation may contribute, at the meta-level of culture, to the process of reflective modernisation described by Beck, Giddens and Lash (1994), in which society as a whole sorts out, through dialogic practices, its risks, their solutions and based on these, all possible further trajectories for development.

The belief that the abundance of representative modalities (including visual forms) in culture and their continuous rearrangement (i.e. the creation of new semantic links between them) is beneficial to the health of culture differs cardinally from the postmodern criticism described above. While the latter viewed such audio-visual practices as destroying of the communicative capacity of culture, more recent cultural theories of cultural innovation based on the cultural semiotics approach take an opposite view: such practices will ensure the endurance and communicative effectiveness of culture.

Irrespective of the potential offered through theoretical discussions above, the question remains: which input material can we use in such translation processes in each case? Despite the opportunities provided by various new kinds of crossmedia strategies to audio-visual industry companies in Estonia and neighbouring countries, there are various structural factors in local media markets that limit the potential of cross- and transmediality to be unleashed and fully exploited (Ibrus, Merivee 2014; Ibrus, Ojamaa 2014). Sometimes the problem is a lack of education, sometimes a deficit in relevant institutional strategies. Also the kind of companies are lacking in the marketplace that would be able to produce diverse and original high-quality content for multiple platforms (such as television and web-based platforms). In European countries, it is often the public sector that drives and invests in the various cross- and transmedia-related experiments and innovations; however, they often do not know how to support small-content production companies in this field. The problems are

often structural. For example, public service media institutions often do not have the right to share intellectual property rights with small-content producers and therefore to support their innovation practices on various web-based platforms.

What is even more important than the production issues of innovative transmedial forms, are the policies concerning the ensuring of media and cultural pluralism in society. If most of the audio-visual content is consumed on web platforms, the question arises: what kind of audio-visual content is released from such platforms? There is an unprecedented inundation of visual information in the web. The main reason for this is that both recording devices and the web have become accessible to the large majority of the world's population. The internet has provided similar possibilities also to smaller companies of the audio-visual industry. Networked co-creation – an opportunity for all to create their content and to further develop it, to remix, comment on and mediate the content created by others – is undoubtedly important for the democratisation of the creative processes and for the broader exchange of ideas, as well as for eventually improving the quality of content. The implementation of various transmedia and crossmedia strategies by audio-visual industry SMEs means that smaller market participants are also trying to make use of such co-creation opportunities and network dynamics. At least, that's what they expect and hope for.

However, as a number of studies indicate, only those who have the means to invest not just in their presence but also in marketing their content across all platforms are strong players on internet-based media markets. In the internet era the limited resource that defines the media market is not the content but the time that users can spend on the media. This principle, which is dubbed the "attention economy", means that only those who can generate attention succeed. Paradoxically, media empires with large budgets that promote their brands across platforms and develop specialised business models that suit these different platforms, all have a big advantage also in the internet era. Added to this is the "network effect", i.e. the fact that users tend to join those platforms that other users (the network) have already chosen, meaning that the ability to interact with other users is an important factor affecting their decisions. In other words, the network and transmedia era may, against expectations, further enforce the oligopolistic structures of media markets. This poses a risk to the developing visual culture. Instead of the desired cultural diversity we may receive just more of the same content but in different forms of media, i.e. the existing structuration of media systems may result in limited courage for experimentation and consequently, little variety in the content. Therefore, with regard to visual culture, modern cultural policy is facing the rather classic problem of how to ensure sufficient diversity in the media and the culture at large.

Regarding Estonian culture, one way to achieve such diversity and to add visual resources is through the digitisation of our audio-visual cultural heritage and making it publicly available. Estonian cultural institutions have cooperated to this end for more than two years. By the end of last year, a

detailed plan for digitisation and making film heritage available was prepared. The plan covers all stages of planned work, areas of responsibility for different institutions and the cost of the undertaking. Provided that the necessary funds will be available, intensive work is foreseen for the next five years. The goal is to digitise nearly all of the film heritage (except for music films and commercials). Estonian Public Broadcasting will be responsible for the digitisation of the Estonian television heritage.

Making audio-visual heritage publicly available has a multi-faceted positive effect. For example, it would have important economic potential. After we have a digital video resource, various service developers will have an opportunity to use it to develop innovative applications for the education, tourism and entertainment sectors. Yet, there would also be important social and cultural effects. When our audio-visual heritage in its full richness (we are talking about 50,000 titles of professional films and TV programmes) will be available in a digital format, we will have created all the necessary conditions for increasing the population's awareness of Estonian audio-visual culture, in particular cinematic art. Our national film heritage in its full diversity would be just a mouse-click away. Yet, the rationale behind making our heritage available goes beyond the audio-visual arts. All those films also depict something: historic persons, places, lifestyles, etc. Films will help us learn about those objects and phenomena. The fact that audio-visual heritage has a higher degree of realism than other types of heritage adds value to it, and makes to work as an "evidence". An opportunity to see with one's own eyes how people lived in different times will ensure the attractiveness of audio-visual heritage to wider audiences.

Audio-visual heritage also has a diverse reuse value. Video content can be used to make classes in schools – from literature through natural science through geography to music, not to mention history – more interesting. Let us not forget that one of the most intriguing films by documentary director Peep Puks, who was awarded a Lifetime Achievement Award last year, was a translation of Juhan Liiv's poetry into the language of film. The author's initial idea was to make an educational film. The nature films of Rein Maran, and the majority of documentaries, are good educational materials and can also be used in classes.

Besides using audio-visual heritage for educational purposes, it can be used for creative purposes. There has been a lot of talk about using films as components of new interactive digital textbooks. Heritage can also be seen as a democratic resource broadly stimulating creativity. After all, video editing software is becoming increasingly widespread and easy to use. Let us imagine that the Estonian audio-visual heritage as a whole, all those tens of thousands of hours of material, is available to pupils for preparing video essays on curriculum related topics. How much more interesting would it make the learning process and how much immediate and intimate would the relationship with the topics taught at school become for pupils! In other words, heritage as a resource will provide an opportunity to learn about the past and tell new

stories. The outcome is a society of a multitude of stories and social dialogue based on those stories. What is most important is that the dialogue will stem from our cultural history, and the present and the future will be in an organic relationship with the past. Therefore, we cannot agree with the allegation that modern technologies are separating us from our roots. On the contrary, the digitisation of our national heritage will create an opportunity for an opposite development.

There is also another paradox: in order to make audio-visual culture accessible we need it to develop a cooperation with specific textual forms of culture. I here refer to the methods for the meta-description of digitised cultural heritage, which are significantly more complex in the case of audio-visual heritage than in the case of other heritage categories. As regards the taxonomies of metalanguage, the Estonian Film Database is doing a very good job. When their work is completed, i.e. the total Estonian film heritage is meta-described, it will be easily searchable. This is one of the preconditions for the realisation of the above-mentioned new possibilities. However, the logic of indexing cultural heritage is never unideological – specific presumed search interests are preferred to those that are unknown or considered to be unessential. This brings us to the tensions between the memory curation and the free use of heritage. The question is how to open heritage meta-description up to the public and what would be the actual results of such opening up. How systematic or all-encompassing can self-organising meta description be? Should it be endorsed and how? This is a central question in making audio-visual heritage available for reuse. Therefore, out of the digitisation of cultural heritage arises yet another issue: the meta-description of heritage as a new constitutive tension for cultural policy.

Conclusions

In conclusion: visual forms of communication in culture can only rise to complement the various text-centric forms of communication. This rise, which not only creates conditions for new types of intersemiotic translation practices, is also actually born from such translation dynamics (as cultural semi-oticians have argued for a long time). The more translations and modes of representation (including visual modes) there are, the more capable a society is in communicative terms. Communicatively more capable societies that have all channels open for societal and cultural dialogue tend to arrive at good ideas (necessary innovations) more often, and those ideas will eventually be widely shared and consensually approved. If we make sure that the visual input to those processes is diverse and ensures clashes and dialogues between culture's different undercurrents, between its past and the present, we may be able to conclude one day that the increased role of visual communication in Estonian culture is not a problem but an opportunity. We just have to find solid methods of offering the relevant skills and resources as a public benefit available to all. ●

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4.6

Digital culture as part of Estonian cultural space in 2004-2014: current state and forecasts

► MARIN LAAK, PIRET VIRES

Introduction

Digital culture is associated with the move of Estonia from a transition society to a network society where “digital communication is ubiquitous in all aspects of life” (Lauristin 2012: 40). This sub-chapter will trace some trends in the development of digital culture in the last decade (2004–2014), with the objective of examining the intersection of the habits and needs of users who have adapted to the digital era, and the possibilities of the network society. Modern digital culture also encompasses e-books – an evolution that has brought about and aggravated a number of issues specific to the development of digital culture. Both e-books and digital culture are strongly linked with the forecasts concerning the future of education and cultural creation in Estonia. To understand the development of the sector, we will highlight some of the most general trends in cultural creation and practices of the digital era.

The term ‘digital culture’ is used as an umbrella concept for the radical changes in the development of human culture in the 21st century. What distinguishes digital culture from earlier forms of culture is that all objects/data (texts, images, sounds) exist in the form of numeric codes stored as data on electronic media, which makes possible the fast processing and storing of massive amounts of data on microscopic carriers and facilitates the programmability of the media (Manovich 2001; Aarseth 2003: 717–718).

The global cultural changes caused by the development of information technology changes have resulted

in a myriad of implications for culture: we now speak of such things as levelling, dispersal, hypertextuality, bandwidth, anarchy and synchronicity (see Lister 2003: 13–37; Caldwell 2000: 7–8; Livingstone 2003: 212). Dispersal is the fragmentation of the production and consumption of texts, which in turn is linked to the decentralisation and individualisation of culture. On the other hand, dispersal is linked to the hypertextuality and interactivity of new texts circulating in digital environments. The digital environment has abolished the traditional centre-periphery cultural model: the interrelations between texts are non-hierarchical and the core and periphery of culture are indistinguishable from each other. Texts can be developed as a network in which different media are linked to each other and each node can be semantically linked to any other node (see Laak 2006: 40–41). New cultural units – cultural paths – have been formed (Ibid: 76).

From a subjective point of view, people’s perceptions of the world and the practices of text creation and reception have also changed. For example, the written word is giving way to (multimedia) visual culture; there is a shift towards image-centred self-expression (e.g. an audio-visual compilation instead of a poem).

Digital culture is inextricably linked to internationalisation and cultural convergence, and brings into focus the movement of cultural phenomena across the borders of national cultures, irrespective of the social and historical contexts of such cultures.

4.6.1 Changes in cultural creation

The digital era has brought along new, distinct forms of culture. So far, digital culture has been mostly analysed from the perspective of users and consumers. There has been little discussion about the impact of information technology on cultural creators and culture creation processes. Below, we will analyse the relevant trends and new forms of culture using literature as an example.

In the 1980s and 1990s, hypertext literature and hypertexts started to emerge. This phenomenon has been interpreted at the theoretical level by using the cyber-text theory (Aarseth 1997). This type of literature is known as digital literature or electronic literature (Viires 2002).

Digital literature has a number of sub-types, but the most pure-genre works are those that make use of the possibilities offered by information technology: hypertext poems, collective online novels, programmed literary texts of more complex structure and multimedia works in which text is merged with film and sound. While there are relatively few examples of classic digital literature in Estonia (see Sarapik, Viires 2011: 13), some works were created already in 1996, such as Hasso Krull's pure-genre hypertext poem "Trepp" (Staircase) (Krull 1996).

The turn of the millennium saw an important shift in the development of information technology and the Internet. The early stage of the World Wide Web's evolution (Web 1.0), which was characterised by static web pages that were seldom changed, was replaced by new-generation web solutions. Web 2.0 allows users to interact, exchange information and collaborate with each other as creators of user-generated content. This means that the users of Web 2.0 generate a vast amount of the Web's content. Examples of Web 2.0 include blogs, Wikipedia, Twitter, Facebook, YouTube, social networking sites, comments posted online, forums, etc.

The relations of Web 2.0 with culture have been explored through the notion of participatory culture (see Jenkins 2006) which corresponds to the democratisation of culture in cyberspace. The roles of authors and readers of cultural texts created in the course of a participatory process have changed – such texts are characterised by interactivity and fragmentation. Besides the concept of participatory culture, Web 2.0 can also be associated with the notion of digimodernism which marks a new relationship between text and computer (see Kirby 2009).

Web 2.0 has a dual effect on cultural creation: 1) the boundaries between professional culture and amateur

culture are disintegrating; each user can become an author and publish their work (irrespective of its quality) on a blog; 2) professional creators have also started to use the possibilities of Web 2.0: they write blogs, publish their works and get feedback from readers in Facebook. A special case here is web-based young authors' literature portal Poogen: in addition to publishing their works, aspiring authors comment on the creations of others, and some have risen to popularity and have become acclaimed writers of contemporary Estonian literature (see Kruus 2013).

In view of the above, a major change in cultural creation that has happened in the last decade is the information technology leap, active exploitation of the possibilities of Web 2.0 and participation in the world of networks. Figuratively speaking, cultural creators, in particular writers, have been captured in the first decades of the 21st century by a "digimodernist web explosion" (see Viires 2013). An interesting phenomenon to note is that there is still a line between the "anything goes" approach of the internet world – with its lack of boundaries and hierarchies – and institutional culture. For example, in literature, publishing a book is still considered to be a certain kind of initiation, a transition from the world of the web to the elitist world of 'real literature'.

4.6.2 Digital heritage

Digital preservation of the nation's cultural heritage, making it available to the public, and the development of e-services have made a major qualitative and quantitative leap forward in the decade of 2004 to 2014. 'Memory institutions' – museums, archives and libraries – are entrusted with the task of preserving the Estonian cultural heritage. While traditionally the mission of memory institutions has been the collection, preservation and making available of cultural heritage, the digital era of the 21st century has added the requirement of making our cultural heritage also available in a digital format, a powerful reflection of which is the development plan The Fundamentals of Estonian Cultural Policy, adopted by the Parliament in November 2013 (Kultuuripoliitika 2014).

The chapter Principles of the development and implementation of cultural policy foresees the digitisation of the most valuable part of our cultural heritage by 2018 and the ensuring of its long-term preservation in accordance with international standards and quality requirements. The interoperability of the information

systems of the cultural sphere is ensured by standard descriptions and web services. All works digitised by state institutions, and all digitisation which is funded by the state, are freely available to the public, provided the relevant rights exist. The use of digitised cultural heritage in e-learning and in the provision of e-services to the media and creative industry is promoted. (Kultuur 2013: 4).

This policy document also foresees increased digitisation in all spheres of culture. The priority areas of digitisation are audio-visual (film, sound), heritage artefacts and printed works. It should be noted that there is a discrepancy between the objectives of the development plan and the actual possibilities. It is particularly obvious when we compare the findings of a survey on the volume of digitised information, conducted among Estonian memory institutions in December 2012, and the forecasts for December 2020 (Table 4.6.1).

From the Table 4.6.1 we see that the objectives set out in the development plan Culture 2020 for the digitisation of the most valuable segment of our cultural heritage by 2018 is not realistic: the digitised share of photographs, documents and printed matter is less than 10% at this time. It is expected that only 50% of heritage photos and art will be digitised by 2020. Moreover, the memory institutions responsible for the digitisation of our cultural heritage face a number of issues, from philosophical (what is valuable?) to practical (how do we choose from millions of valuable items?). Next, we will analyse the developments in the field of cultural heritage from the perspective of memory institutions. We will describe the current state in the field of digitisation, issues that need to be solved, and forecasts.

TABLE 4.6.1 1 Digitisation of cultural heritage: state of affairs in 2012 and forecast for 2020 (proportion of digitised material, %)

	2012	2020	Kasv %
Photo heritage	2,29	57,79	55,5
Document heritage	1,63	2,63	1
Print heritage	2,12	7,02	4,9
Heritage artefacts	19,89	31,65	11,76
Art heritage	12,46	61,73	49,27
Heritage maps	12,46	?	?
Other	19,6	?	?

Source: The Implementation Plan for Digital Preservation of Cultural Heritage 2015–2020 Ministry of Culture 2014, Version 1.3.

Notion of cultural heritage

The term ‘digital cultural heritage’ has two meanings: 1) older material cultural heritage that has been converted into a digital format; 2) more recent cultural production that was created in a digital format and for which no other (analogue) format exists.

To co-ordinate digitisation and digital preservation of cultural heritage in Estonia and monitor progress in digitisation, the Council for Digital Preservation of Cultural Heritage, made up of representatives of various memory institutions, was affiliated to the Ministry of Culture of Estonia in 2004, and Digiveeb, a portal collecting and distributing information on digitisation, was established (<http://digiveeb.kul.ee/?id=66234>). In the spring of 2014, new members were included in the Council – representatives of the Ministry of Education and Research and the Ministry of Economic Affairs – to develop a sectorial action plan (see Talihärm 2014). The Council completed the development of the Operational Programme for the Digitisation of Cultural Heritage 2015–2020 in December 2014. The document divides cultural heritage into the following categories: film, documents, photographic, art, print and artefact heritages. The classification is based on the location (memory institution) and specifics of the heritage which determine the digitisation actions starting from the choice of materials through to volume of data, standards, users, and then to databases.

Types of digital cultural heritage

The specifics and stages of digitisation depend on the type of heritage (documents, photographs, art, printed matter, films, audio material, maps, etc.). It should be noted that the term ‘digitisation’ is an umbrella notion that encompasses different activities: 1) preparation (selection, restoration, conservation and other activities related to the physical carrier), 2) digitisation (scanning), 3) archival processing (preservation), 4) creation of user files, 5) creating meta-descriptions and adding them to the digitised object, 6) entry into a database (making available).

For the Ministry of Culture, a priority in the field of digitisation has been the digitisation of the film heritage preserved on analogue carriers in the archives of the Estonian Public Broadcasting Company. The audio-visual heritage includes films, TV films, radio programmes and music. The Estonian Film Archives, a structural unit of the National Archives of Estonia, is also focusing on the digitisation of heritage films. The Estonian Literary Mu-

seum is responsible for the digitisation of folklore and cultural history materials.

Our film heritage contains the most problematic objects of digitisation – more than 3,500 hours of professional films and newsreels have been created (16,000 works) in the past 100 years. About 1,800 hours of that material – the most valuable works – need to be digitised, while only about 20% of all works have been entered in the Estonian Film Database.

Digitised works have been available on the programmes of national TV channels ETV and ETV2 for a couple of years now. Another initiative of incalculable worth in the field of film heritage was the establishment of the Estonian Film Database (EFDB) in 2010 (<http://www.efis.ee>). EFDB is continuously developing content and making the national filmography available on the Internet. A special feature and added value of the database is that all Estonian films are described frame by frame in order to provide information about the Estonian history, culture, politics, economy, science, law, administration and life in the past 100 years. The database also includes searchable keywords, a lexicon of names, various metatexts and accompanying texts, documents, scripts and photographs. Users can also watch the films. EFDB has created the conditions for active reuse of our national film heritage for the purpose of creating new audio-visual works (TV programmes, films, multimedia texts, new media art, etc.)

Similar activities in the field of literary culture and print heritage have been carried out by the Estonian Literary Museum since 2004 (<http://kreutzwald.kirmus.ee>). Their information environment is called “Kreutzwaldi sajad: eesti kultuurilooline veeb” (The Kreutzwald Century: the Estonian Cultural History Web) and includes different types of cultural heritage from various archives (photographs, documents, printed matter plus a lexicon of names). This information environment is extensively used by teachers of the Estonian language as a learning source: in 2014, the portal had an average of 836 visitors per day (approximately 5 million clicks).

The digitisation of **printed matter** and making it available on the Web was started more than ten years ago in the form of small projects. The first joint project of Estonian libraries was the Red List of Estonian Printed Matter I (<http://www.nlib.ee/PunaneRaamat/>) that included 413 endangered printed materials published between 1535 and 1850 (Maaslieb 2009: 208–215). The Archival Library of the Estonian Literary Museum launched project Grafo in 2004 to digitise old reading primers, calendars and reference books (<http://www2.kirmus.ee/graf/>). At the same time the

Literary Museum began systematic digitisation of the first editions of the Estonian-language fiction of the late 19th and early 20th centuries in the “Kreutzwald Century” information environment. (<http://kreutzwald.kirmus.ee>). The University of Tartu Library launched a project called EEVA to make available the first works of fiction published in Estonia in the 17th to 19th centuries (mainly in German) (<http://www.utlib.ee/ekollekt/eeva>).

An outstanding achievement in making print heritage available to the public is project DEA – The Digitisation of Estonian Newspapers (<http://dea.nlib.ee>). The project was developed cooperatively in 2004 by the National Library of Estonia, the Archival Library of the Estonian Literary Museum and the Academic Library of Tallinn University. DEA makes available on the Internet the older Estonian-language press of 1821–1944 and the Estonian-language newspapers published outside Estonia since 1944. The newspapers are digitised from microfilm (see Olonen 2014: 82–83). By the end of 2014, 380 titles and 1.3 million pages of newspapers were made available as image files. In 2013, DEA registered 300 visits per day (Kiisa 2014: 201). A new project of the National Library is making newspapers available also in text format.

In the late 2000s, the Estonian academic and cultural journals and educational magazines (Looming, Akadeemia, Keel ja Kirjandus, Vikerkaar, Teater. Muusika. Kino, Täheke, Muusika, Nõukogude Kool, etc.) started to be digitised and made available in the database DIGAR of the National Library of Estonia and through the websites of the magazines (Digira OÜ). The project is supported by the Cultural Endowment of Estonia.

The Estonian Libraries Network Consortium (ELNET) was established in 1996 to manage the preservation of the print heritage in Estonian libraries. In 1998, the international software Innopac was introduced as a joint database of the 15 largest libraries and on 1 January 1999, the e-catalogue ESTER was made available to readers (see Olonen 2014: 68–75). The ESTER database was taken to a new level in 2014 when the databases of the libraries of Tallinn and Tartu, which had been stored in different servers, were merged (<http://www.ester.ee>). As of 19 January 2015, the e-catalogue ESTER contained about 9 million item records and 3 million bibliographic records; the database is continuously updated. The e-catalogue ESTER also includes (besides publications – books, periodicals, etc.) records of sheet music, audio discs and recordings, photographs, manuscripts and various other e-resources. Articles can be searched at the single record level in the ISE database of the ELNET Consortium (<http://ise.elnet.ee>); about 200 articles are added to the database daily (Kiisa 2013: 199).

The total number of Estonian national publications (books, periodicals, sheet music, etc.) includes nearly 330,000 titles (55 million pages). About 2.5% of that amount was digitised by the end of 2014 (4,000 publications per year). The main digital archive storing digital print heritage is the National Library of Estonia's digital archive DIGAR. According to the Operational Programme for the Digitisation of Cultural Heritage, DIGAR contained a total of 20,000 titles and 113,000 publications as of the end of 2014. About 85,000 of them are accessible on the Internet. The use of digitised publications is growing fast: In 2011 and 2012, DIGAR was accessed about 45,000 times and in 2013, the number of visits more than doubled (101,500 visits).

The Estonian university libraries store and publish their publications in digital repositories (E-Ait repository of the Academic Library of Tallinn University; DSpace of the University of Tartu Library and the digital collection of the Tallinn University of Technology). The progress made in the digitisation of print heritage shows how and in which directions the role of libraries is developing in the 21st century.

The most recent task of libraries is the archival processing of websites; the National Library has already started this work. In 2014, there were approximately 78,000 .ee domains and 20,000 other domains (.eu, .com, etc.) on the Estonian Web. The Estonian Web Archive, managed by the National Library, was opened to the public in November 2013 and has had about 7,000 users so far. About 1,000 websites are archived periodically, plus special collections (expatriate, local government, etc.) and extraordinary websites (closed domains, local governments, etc.), a total of 31 million URLs and 1.6 TB of data (<http://veebiarhiiv.digar.ee>).

The institutions responsible for the digitisation of **heritage artefacts** are Estonian museums. The activities are coordinated by the Estonian National Museum in Tartu. According to a survey conducted at the end of 2013 by the Ministry of Culture, 508,750 museum items need to be digitised. To preserve the heritage artefacts and other heritage pieces, a joint database began to be developed in the first decade of the 21st century – The Information System of Estonian Museums (MUIS). By the end of 2014, MUIS included information about digital heritage created by 60 Estonian museums and the Kanut Conservation Centre. The availability of cultural heritage in a digital format has significantly increased the number of visits to the websites of memory institutions: compared to 2013, the number of MUIS users doubled in 2014. In the first months of 2014, the average number of visits per day was 650.

There are plans to describe and digitise at least 125,400 museum items in 2014–2018. According to a survey conducted by the Ministry of Culture in 2013, the size of the **photo heritage** preserved at Estonian memory institutions was 1.8 million photographs, 960,000 photographic negatives and 51,000 slides. The **art collections** of Estonian memory institutions contain about 175,000 works, 27,195 of which have been digitised.

The **document heritage** contains mainly unique archival items, (handwritten) single copies and documents and original works with a small number of copies, preserved in archives and libraries. The main institutions preserving the legacy of documents are the National Archives, the Estonian Folklore Archive and the Cultural History Archive of the Estonian Literary Museum and the Manuscripts and Rare Books Department of the University of Tartu Library; a smaller number of documents are preserved in various museums. The Estonian memory institutions preserve items from the 13th century to the present day, a total of approximately one billion pages. About 1.6% of the document heritage has been digitised and the share of digitised items is expected to increase by not more than 1% over the next five years. We can see that the gap between the targets set out in the development plan and the actual possibilities is huge.

According to the development plan, the digitisation of the document heritage will be coordinated by the National Archives. Users can access digitised records through the portals SAAGA and AIS. SAAGA started making available digitised genealogy materials in 2005 (church records, etc.); from 2008, all items digitised by the National Archives and the Tallinn City Archives have been accessible to the public. As of December 2014, SAAGA contained about 149,500 digitised items (18 TB). The AIS database of the National Archives contains 7.8 million entries.

KIVIKE, the general digital repository of the Estonian Literary Museum, was developed in 2011. The repository contains files and metadata of the heritage preserved in the museum. As of December 2014, KIVIKE contained about 286,400 digitised items (22 TB), and by March 2015 it held fully 1 million data records.

Preservation and archival processing

The digitisation of cultural heritage is carried out in line with international quality standards, taking into account the physical state of each object. If necessary, objects are conserved (this concerns mainly art). A major issue is long-term preservation because the preservation

of digitised objects – huge files – requires powerful servers and cutting-edge database systems.

Each type of digitised cultural heritage is stored in a relevant central archive; the descriptions are made available as open data (see Vallner 2012). Based on the specifics of the material, the operational programme on digital cultural heritage foresees the division of digital resources into four central repositories that prioritise the data. The Information System of Estonian Museums, MUIS, (heritage artefacts, photos and art), DIGAR (print heritage), SAAGA (document heritage), the Estonian Public Broadcasting and the Estonian Film Archive (audio-visual heritage, films).

The DIGAR database of the National Library is the first specialised repository of e-books, including print files; the development of the database was begun in the early 2000s. In addition to DIGAR, the University of Tartu Library developed their own file repository DSpace and the Academic Library of Tallinn University has a similar repository called E-Ait. In 2012, the Literary Museum established digital repository KIVIKE which includes different types of cultural heritage: documents, audio files, films, photographs as well as art, to a lesser extent. This means that different types of digital heritage are not preserved separately. After the implementation of the prioritising strategy of central repositories all digital cultural heritage – audio, film, photographic, document and print heritage – will be stored in four repositories (MUIS, DIGAR SAAGA, ERR). According to a survey conducted by the Ministry of Culture at the end of 2012, the total volume of all digital user copies and archives preserved at memory institutions was 1.2 PB (petabytes). The expected increase after the launch of the operational programme is 1 PB per year. International standards require that when huge amounts of data are archived, back-up copies must be made and held in various locations in order to minimise the risk of accidental damage and loss of data. For this purpose, a new application RIIGIPILV (State Cloud) is planned to be developed in the near future. This will open new opportunities, but the already existing databases and repositories of memory institutions also need to be developed further, taking into account the expensive investments made so far and the huge amount of data stored in such databases.

Priorities and the future of digitisation

In the past ten years, Estonian memory institutions have made significant progress in the digitisation of cultural

heritage. By the end of 2014, they had achieved good cooperation and coordination of activities. Selecting objects for digitisation is based on the following principles: 1) potential for use, 2) national value or value in terms of cultural history, 3) integrity of a collection, 4) existence of meta-data, 5) lack of copyright and protection of personal data; lack of other restrictions on use, 6) existence of a web-based user environment, 7) rarity.

When selecting objects from the huge collections of the Estonian memory institutions, the priority is given to those related to Estonia: by 2020, there are plans to make available as open data the materials concerning the formation of the Estonian state, from the national awakening in the 19th century to the annexation of the Republic of Estonia by the Soviet Union in 1940. The aim is to provide an opportunity to merge photographic, film, document and print heritage items to develop e-learning materials. Digitisation takes into account the specifics of each type of heritage: while automated mass digitisation is possible in the case of printed matter, artefacts and artwork that exist in a single copy can only be digitised separately. In such cases digitisation takes place at a memory institution to avoid damaging the objects during transport.

The abundance of databases containing the same type of data is an inevitable outcome of the digitisation work carried out in Estonia in the last decade. From the user's perspective, all necessary information should be available through a single portal. Based on the Estonian Research Infrastructures Roadmap, the development of the trans-institutional portal E-Varamu was started at the ELNET consortium in 2014. E-Varamu is a semantics-based search engine, which allows accessing related information in all databases of the Estonian memory institutions and research and development institutions. It is a single e-environment, the purpose of which is the long-term preservation and making available of the digitised resources of Estonian memory institutions – libraries, archives and museums – and to increase the institutions' digitisation capacity as well as to ensure the preservation of collections that are important for Estonia (<http://e-varamu.tlulib.ee/E-varamu>).

E-Varamu enables the Estonian digital cultural heritage to be made accessible through Europeana and other cultural heritage environments, such as the location- and period-based map application Google Field Trip (<http://www.fieldtripper.com>). At the national level, the portal Open Data was created (<http://open-data.riik.ee>). The purpose of this portal is to make available digitised cultural heritage and to ensure the publication of information through different channels.

The digital era has also taken science to a new qualitative level. Estonia has kept pace with international developments and a new area of education and research – digital humanities – is emerging. This requires fast access to huge amounts of data (e.g. text corpora and databases) which in turn will create possibilities for the introduction of new methods.

Another process brought about by the digital era is the joining of Estonian research collections with the international research database CrossRef (DOI), initiated by the University of Tartu Library in 2014. The database includes an open database of articles. A number of Estonian academic journals, such as *Folklore*, *Mäetagused*, *Methis*, *Interlitteraria*, etc. have joined the open access CrossReference (DOI) database (<http://www.crossref.org>).

4.6.3 E-books as part of cultural space

E-books are an integral part of the digital culture of the 21st century. As international data indicate, the use of e-books is steadily increasing: in the Anglo-American cultural space, the share of e-books on the book market was between 20 and 30 percent in the first half of 2013 (Vihalemm 2014: 435). In the field of scientific literature, the use of electronic resources, e-books and open-access databases has reached 90%. E-books are gaining in popularity also in Estonia, although more slowly. The findings of the survey “I. The World. The Media”, conducted in 2011 by the Institute of Social Studies of the University of Tartu, revealed that 5% of the population used electronic devices to read books and 23% would have liked to own such device (see Vihalemm 2014: 434). In the autumn of 2014, 9% of the population were already using e-readers.

At present, e-books are not competing with printed books but in a few years the situation may change, taking into account the rapid development of the field. We should stress that the use of e-books reflects the change in the reading habits of the Estonian population only partially – longer texts, fiction and cultural magazines can be read also by using library networks, as well as the Internet. What is more, the e-book concept is not interpreted uniformly and is much broader than the .epub format which is currently promoted in Estonia.

In its narrower meaning, e-book is a library term: an e-book is a digital version of a print book which is available under licence or openly accessible http://et.wikipedia.org/wiki/Vaba_juurdep%C3%A4%C3%A4shtp://et.wikipedia.org/wiki/Raamat.

In a broader sense, an e-book is any text-based work that is accessible digitally, irrespective of its electronic file format (.doc, .rtf, .pdf, .html, .epub). Audio books can also be considered to be e-books in the broader sense of the term.

The creation processes of e-books (in the narrower sense) and print books do not differ: both include high-level editing in terms of content and language, design, lay-out and proofreading. E-books are read with the help of dedicated software by using a personal computer, laptop or e-book reader. The dedicated software allows the reader to increase or reduce the text size (zoom in and out), search keywords, translate, highlight and add comments.

A major problem regarding e-books is piracy. Dedicated software has been developed (Digital Rights Management or DRM) to control or prevent copying and printing and to ensure copyright protection, taking into account the legislation of different countries. One way to protect an e-book is to use Social DRM – digital watermarking. Better protection is provided by internationally recognised software solutions (e.g. Adobe Digital Editions or Adobe DRM) that prevent transferring an e-book from one device to another and allow a (purchased) e-book to be accessed only in an authorised computer or e-reader. Adobe DRM offers the possibility of making an e-book available for a specified length of time. After the expiry of the licence the book cannot be accessed.

The creation, reading and selling of e-books became topical in Estonia in 2010. The first major e-book distributors emerged, such as Eesti Digiraamatute Keskus (EDRK) and Digira OÜ who started to promote e-books and e-readers. EDRK advertised their services on their website as an e-book revolution – a book only a click away.

Estonian libraries also quickly followed suit and started to distribute e-books. The technical literature department of the Tartu City Library was a pioneer in this field: they started to lend e-books (.epub-format) together with e-readers on 1 April 2011. In the first year, e-readers and e-books were borrowed 250 times. After that, interest in e-books has been steadily increasing (Leima 2012).

The Tallinn Central Library started lending e-books after launching a dedicated lending environment ELLU in 2012. While the Tartu City Library offered e-books together with e-readers, the Tallinn Central Library made e-books available online through ELLU. Both libraries lent books for a specified period of time and with a limited number of copies. In 2012-2013, the total

number of e-loans in the Tallinn Central Library was 14,037 or 0.6% of all loans. The number of titles borrowed through the ELLU environment increased in 2012–2013 from 412 to 662; the library also offers classic literary works free of charge (the project is supported by the Ministry of Culture). The biggest problems of e-lending are related to licence fees: after 35 loans, a new licence has to be bought (see Seppam 2014).

It is obvious that a modern reader takes it for granted that all books, including the newest, are available as e-books. From the perspective of Estonian libraries and readers the most economical way would be to gather all e-lending into a single environment.

A major factor inhibiting the development of the field is Estonia's value-added tax (VAT) on e-books. While print books are taxed with a 9% VAT, e-books constitute, according to the applicable legislation, an electronic service and are subject to a 20% VAT. This means that e-books are not much cheaper than print books, despite the fact that the production costs of e-books are significantly lower. High VAT leaves the producers no choice but to charge higher prices for e-books. The average retail price of an e-book is EUR 7.53 or 68% of the average price of a print book. For buyers such prices are unacceptable. High VAT limits the spread of e-books and affects the reading habits of the Estonian population in the context of digital culture.

The Ministry of Culture started to support-free-of-charge distribution of Estonian classical literature, which carries the national cultural memory, in the .epub-format in 2012. Under the programme "Estonian Literature", a project competition was announced for the distribution of Estonian classical literature and literary works that are important from the perspective of national culture. The project was continued in 2013 and 2014. A priority of the project is "school literature", i.e. books that are required reading. Over the last two years (2013 and 2014), a major part of non-copyrighted Estonian-language fiction (starting from 19th century works) was published as e-books with the support of the Ministry of Culture. By the end of 2014, a total of 250 literary works were available for downloading in ePUB format. The project continues in 2015.

The ePUBs produced under the project of the Ministry of Culture can be downloaded free of charge from the digital archive DIGAR of the National Library. In the first year of the project (2013), Digira OÜ produced 163 ePUBs, and in 2014, 87 ePUBs from 35 authors were produced in a cooperative project between the National Library, the Literary Museum and Digira OÜ. In 2013, the first copyrighted classical literary works (by authors

who died less than 70 years ago: Betti Alver, Heiti Talvik, Karl Ristikivi, Marie Under, Artur Adson and Friedebert Tuglas) were made available.

The titles downloaded most frequently from DIGAR in 2014 the well known and most classical works of the Estonian writers A. H. Tammsaare's "Kuningal on külm" (2180 downloads), August Kitzberg's "Libahunti" (1753 downloads), F. R. Kreutzwald's "Eesti rahva ennemuistsed jutud" (1574 downloads), Eduard Vilde's "Mäeküla piimamees" (1033 downloads), A.H. Tammsaare's novel "Elu ja armastus" (965 downloads), Eduard Vilde's "Vigased pruudid" (960 downloads) and "Prohvet Maltsvet" (705 downloads), F. R. Kreutzwald's "Tark mees taskus" (700 downloads), Matthias Johann Eisen's "Eesti muistsed jumalad ja vägimehed" (675 downloads) and F. R. Kreutzwald's "Julge rehepapp" (600 downloads). Classical literary works were downloaded free of charge from DIGAR a total of 65,000 times in 2014. This figure is further increased by e-books purchased for EUR 0.00 from bookstore chains Apollo and Rahva Raamat, Eesti Digiraamatute Keskus (EDRK), Digira and other e-book distributors.

The EDRK sales environment contained 1,608 titles in 2014; they expect to sell 60,000 items by the end of this year. The number of books sold through EDRK increased by 12% in four years (2011–2014).

The national e-book programme needs to be reviewed and focus placed on the required-reading books for schools instead of the current project-based approach oriented to the free market. The exhaustion of non-copyrighted literary works in 2015 is also a problem. The national e-book programme should consider finding funds to pay royalties in the future: the majority of required-reading books are protected by copyright.

Memory institutions also need help with preparing licence agreements and creating a database of copyright holders or their heirs. At the moment, memory institutions are left on their own and have to cope with any problems arising in relation with e-books by themselves, while the public has high expectations of reading valuable Estonian literary works, including those published in the Soviet era, in the e-book format.

The number of e-books in Estonia is increased by the digital book creation service EOD, which offers print copies of e-books for a fee. The development of the service was initiated by the National Library under an international cooperation project. If a book is not protected by copyright, a digital copy is made available in e-catalogue ESTER. The University of Tartu Library has also joined the EOD service.

Making e-books and printed matter electronically

available has a direct impact on cultural consumption and increases opportunities for cultural participation. Converting the traditional forms of printed material into a digital environment is crucial from the perspective of the preservation of national cultural memory. A challenge of the 21st century – the emergence of electronic literature and the production and distribution of e-books – means that the functions of libraries in modern society need to be reviewed. Libraries are changing from places where printed materials are preserved into versatile information environments that give readers access to virtual bookshelves.

Conclusions

Digital culture as part of the Estonian cultural space is closely related to other major areas of culture. The digitisation of cultural heritage has enriched our cultural space, facilitated the distribution of knowledge and directly affected the development of education, culture, research and business in Estonia. However, the issues related to copyright and data protection in the digital environment have become more prominent.

The impact of the digital era on culture is expressed at a number of levels and in various forms. The function and role of memory institutions has changed: besides collecting and preserving the national heritage, memory institutions collect, disseminate and make available information about the national heritage as well. The digital revolution of the 21st century has forced national memory institutions to adapt to new requirements that have emerged in a principally new cultural situation that is oriented to active cultural participation.

Digital cultural heritage has huge and socially important potential in the field of education, as explained in the previous chapter (4.5). While the call for “substituting the learning materials that pupils have to carry back and forth to and from school with government-financed e-textbooks and e-workbooks”, and the need for an e-schoolbag may have seemed to be bold ideas in 2011 and 2012 (Felt 2012), by 2014, the creation of e-learning materials has become a necessity and a national priority.

All types of digitised cultural heritage can be used for developing new generation learning materials and digital learning environments. The resources of the digital cultural heritage enable the flexible development of learning materials for different levels of education and facilitate the integration of subjects. The digitised cultural heritage – films and works of art, literary works and manuscripts, historic records and audio carriers –

can be used to develop new forms of learning targeted to active young users. The choices made by memory institutions as to which works should be digitised must be based on the needs of e-learning (besides the preservation of endangered museum artefacts).

The fact that the role of memory institutions has changed is also demonstrated by the fact that over the last decade such institutions have transformed from passive collectors of information to active disseminators of digital cultural heritage. The creation of digital cultural resources and the development of new e-services by memory institutions should be supported and directed by the government, taking into account the development of other important areas. Cultural heritage that is available digitally and on the internet is used by a larger number of people – a prerequisite for the viability and sustainability of culture.

Taking into account that Estonian memory institutions are increasingly involved in cooperation, we have a good opportunity to introduce our cultural heritage and disseminate it internationally as well as make it accessible through international information environments and databases.

The biggest obstacle to making digital cultural heritage available is that our legislation on proprietary rights and copyrights is outdated. The legislation needs to be reviewed and amended. Solving those issues is complicated by the fact that more often than not there is no information on authors (heirs, contacts, etc.). Regarding films, it is often difficult to establish their physical location.

At this moment all memory institutions have a common problem – where to find the money required to pay the staff members who are dealing with digitisation. The support received from the Structural Funds cannot be used to cover labour costs related to digitisation. Although the technical capacity has significantly improved over the last ten years (scanners, servers), finding the labour force required for digitisation remains a major problem. So far, labour costs have been covered from other sources. However, in the long term this is not a sustainable solution. The field is developing rapidly and the gap between the needs of users, the expectations of society and the capacity of memory institutions is growing.

Until 2014, digital cultural heritage was created mainly within ad hoc projects. The current trend shows a shift from single projects towards mass digitisation. This means that we need national level decisions and strategies that are in line with other similar instruments (Information Society Strategy). The development plan

“Culture 2020” prepared by the Ministry of Culture is not sufficient. The Operational Programme for the Digitisation of Cultural Heritage 2015–2020 is a step forward in addressing a number of issues and gets closer to the key issue - cooperation between the Ministry of Culture, the Ministry of Education and Research and the Ministry of Economic Affairs and Communication.

This moment in time is characterised by the fact that the impact of information technology on human activity and culture is intensifying and changes are accelerating. New technological platforms have made new technology accessible to a huge number of users. The current change means that, besides the development of new technologies, the number of their users is increasing rapidly. The digital environment has become a norm in both social and cultural terms. These are the changes that allow us to include the ‘digital turn’ in the list of the cultural turns of the 20th century (see Tamm 2011). Estonian researchers of digital culture were among the first ones who introduced the notion digital turn into international cultural analysis (see Pruulmann-

Vengerfeldt et al. 2013).

The changes caused by information technology are related not only to the technological field. They can strongly affect people’s perception of the world. While the earliest hypertext theories dealt with establishing connections based on associative thinking, the current domination of the networks of multi-linear connections may result in a situation where changes start to affect the way how people think. The skill of creating linear connections would be replaced by a fragmentary and discursive way of thinking that is based on free associations. This may create the risk that people lose the ability to perceive the connections between the causes and effects of various processes. In turn, this may result in major changes in human culture, changes which are yet to be examined. (Re)producing traditional forms of culture in digital format, the digitisation of cultural heritage and its dissemination through electronic channels would help to compensate for such changes.

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CONCLUSIONS

► MARJU LAURISTIN

The notion of cultural space allows us to view culture as a spiritual environment of human activity, a source of values and meanings upon which depends not only cooperation between people and the coherence of society, but also people's well-being and a successful economy, as well as our relationship with the natural environment. When speaking about the sustainability of the development of Estonia, we think, in particular, about whether and to what extent is the historical spiritual environment which has developed in Estonia and which we associate primarily with the Estonian language and traditions able to reproduce itself and give a meaning to life and things also for future generations. The rapid shift from the print era to the Digital Age over the past ten years has brought this question into particularly sharp focus.

As the data and analyses above indicate, the Estonian language and cultural creation, which represent the Estonian historical and life experience, perception of the environment, sense of beauty and traditions, are thriving. Survey findings lead us to hope that the Estonian language will be able to reproduce itself and advance itself internationally relatively successfully in the context of the globalising world and encroachment of new technology. Despite the fact that the number of Estonian users is decreasing, in particular duet to emigration, the status of our language is still relatively stable. The number of users of Estonian for communication by the Estonian population whose native language is other than Estonian is also growing, albeit at slower rate than desired. At the same time we are witnessing the encroachment of English in education, science and consumer culture and the proportion of young Estonians who have started to prefer English to Estonian both at work and in entertainment is increasing. Despite considerable efforts to increase the level of proficiency in Estonian among the Estonian population with a different native language, the use of Estonian by such people in everyday communication as well as their participation in Estonian social and cultural life is less active than expected. Contacts and interaction between different cultures, which in theory should enrich cultural life, do not seem to happen in Estonia and dif-

ferent language communities continue to live in different cultural spaces. The limited progress of the integration process is the main reason for inadequate social cohesion in Estonia. The decreasing number of Estonians due to emigration and slow natural population growth, weak outreach to the population whose native language is other than Estonian, the spread of English and the reluctance of a certain segment of expatriate Estonians to teach their children Estonian indicate that there is no reason to be unconcerned about our language.

The best motivator to get people to learn and use Estonian is the richness and attractiveness of the Estonian culture. For such a small nation and country, Estonian culture has achieved remarkable international renown and recognition. The works of Estonian authors, composers and performers are reaching international audiences; also, the Estonian-language culture is sufficiently flexible to adjust to the possibilities offered by new technologies. Estonian song and dance festivals are gaining worldwide fame but what is even more important is that the tradition is becoming increasingly attractive to the younger generation of Estonians who are growing up immersed in social media and technology. Great efforts are made to make the cultural values created on Estonian soil accessible through virtual environments both at home and abroad.

While the government spending on culture in its narrower sense, i.e. on artistic creation and making culture accessible, is considerably higher than in Europe on average, the Estonian public has expressed concern and insecurity about the future of our culture and dissatisfaction with the current status and funding of culture. The role of culture has changed in the conditions of the free market economy. It is increasingly displaced from being a central focus of the nation's life to being a mere entertainment. Cultural stratification is increasing and serious culture seems to be becoming more and more the interest of the more educated part of society. The role of culture as a source of the quality of spiritual life, creativity, innovation, welfare and ability to develop is not sufficiently appreciated. Due to the small size of the domestic market, the majority of creators find it diffi-

cult, and some even impossible, to earn a livelihood by selling their works. Therefore, national cultural policy has perhaps even too great an impact on the day-to-day functioning of culture. While the Cultural Endowment of Estonia has been considered by the rest of Europe to be a very effective way of funding culture, the resources at its disposal are too limited to ensure the financial independence and security of top creators in different fields of culture. The reason is that cultural activities are too project-based, which is disruptive to creative processes, and that the incomes of creators have fallen behind those of other professionals. Important cultural institutions and activities – such as public broadcasting, libraries, museums, publishers, clubs and community centres – are underfinanced, which causes the incomes of professional cultural workers to be well below the national average.

Unlike a couple of decades ago when people with lower educational levels were also highly interested in culture, such as in reading books and magazines and attending cultural events, there is a growing number of people who consume hardly any form of culture in its narrower, professional sense, and whose intellectual development and spiritual horizons are as a result diminishing. Partially this can be blamed on the prices of books and cultural events, which have multiplied many times over, giving a reason to speak, besides social and financial stratification, also about spiritual stratification. However, spiritual stratification is caused not just by lack of money. Cultural deprivation is all too often seen

also in well-to-do neighbourhoods. A syndrome that requires special attention is the increasing cultural deprivation of young people.

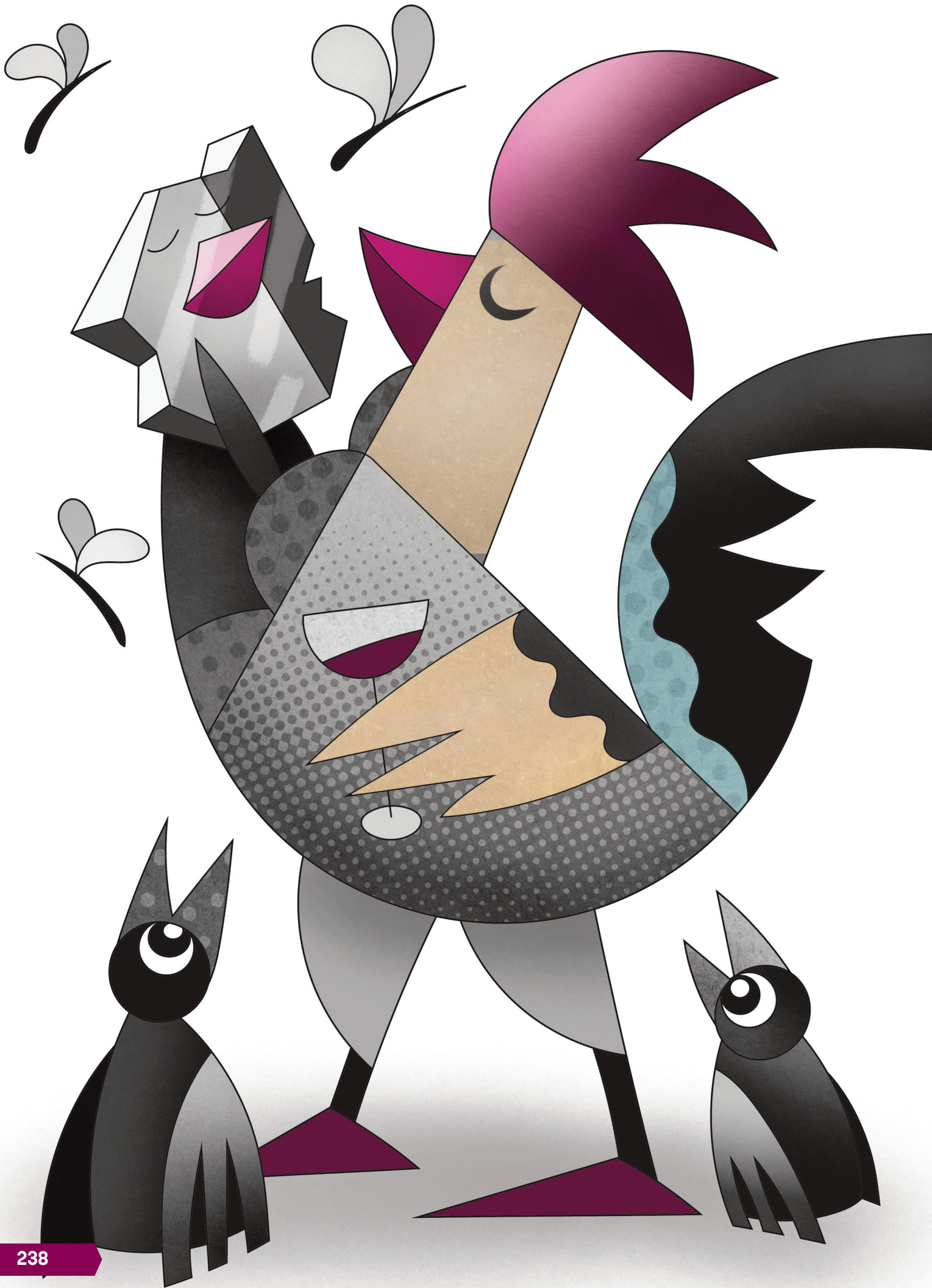
The transition from traditional cultural media to the Internet, and social media becoming the primary communication channel for the younger generation, has raised the issue of the digital gap that is manifested not so much by differential access to computers, as by a differential in digital skills and their use. The younger generation has already adopted the rule: if you cannot click on it to open it, it does not exist. Therefore, making Estonian-language cultural heritage and more recent cultural production available on the Internet is crucial to the sustainability of the Estonian cultural space.

Preserving our cultural heritage in a digital format has, however, a more important meaning: it is essentially the process of translating old cultural codes into the language of modern technology, which, according to Valdur Mikita (Mikita 2014) is as important from the perspective of preserving Estonian cultural roots as was the collecting and archiving of oral folklore by Jakob Hurt.

It can thus be said that while the vitality and development capacity of the Estonian culture is remarkable, given the small population size, sustainability is not something to be taken for granted. It requires greater attention by the government and personal responsibility and dedication by each person who speaks Estonian. ■

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SUSTAINABLE POLICYMAKING

5

ESTONIAN HUMAN DEVELOPMENT REPORT 2014/2015

INTRODUCTION

► GEORG SOOTLA

The purpose of this chapter is twofold. First, to illustrate the specifics of the development and implementation of government policies in Estonia. Second, to analyse the implementation of the central premises of the The Estonian National Strategy on Sustainable Development – Sustainable Estonia 21 (SE21) – the policy strategy based on open networks and learning – and identify obstacles to bringing them to fruition.

This Chapter comprises two parts. The first part will give an overview of the challenges to the policymaking processes at the central government level.

The introductory text “Developing sustainable policies in a small, globalising country” seeks to answer three essential questions of policymaking, in an attempt to explicate the three central trends of today’s policymaking: the trend towards openness, i.e. the inclusion and empowerment of all parties concerned; the trend towards network-type organisations (as opposed to hierarchies); and the trend towards learning, i.e. towards the capacity to adapt policies to changing circumstances.

The subchapter “Centre of government in the policy process” attempts to explain what kind of organisation of the political process could ensure the performance of the different parties as a single orchestra and as a learning organisation at the government level, without creating the hierarchy trap.

The subchapter “The role of state budget strategy in the execution of fiscal policies” shows the coordination and learning processes in the development of one of the main national policies – the fiscal policy – and what the potential advantages of an open policy might be.

In truth, there is no consensus among researchers and experts about what the best direction to take might be for the improvement of public governance today, because the crises of

the two major paradigms – the traditional welfare state and the neoliberal hollow state – forces us to look for new efficient solutions. Some experts believe that the solutions for Estonia are to be found in trends of governance: integrated and coordinated, network-based, with purposeful and effective functioning of all agencies and participants at different levels and in different sectors (joined-up government) and the division of authority between different governance levels and agents based on the principle of subsidiarity, i.e. through the empowerment of different agents. Others, however, see the solution to the overloaded public governance system in Estonia in its optimisation (i.e. reducing the number of redundant activities) and in giving the right of decision and responsibility to more competent and capable agents. The subchapter “In pursuit of efficient public administration: Reform proposals for the public sector” is based on this conception. We would like to give our readers an opportunity to participate in the debate and to evaluate the pros and cons of different strategic visions.

The second part of this chapter focuses on how these elements of governance are taking root in the governing of Estonia (which is unfortunately happening slower than we would like).

The subchapter “Learning Europeanisation in Estonian Education Policy” describes how the imitation of policies from abroad in the 1990s transformed gradually into learning to adapt the recommendations of Europe and the experiences of other countries to the Estonian context and its needs.

The subchapter “Interest-Based Policy: Opportunities, Threats and Balances” shows how the ability to influence policy decisions allows increasing both the efficiency and legitimacy of a policy, if those influences are balanced and transparent. The government has a central role in ensuring this. A participative, open policy does not necessarily mean

the reduction of the role of the government; it means that the government is focusing on the tasks that only the government can perform effectively.

The subchapter “The role of institutional context in sector policies: regional public health system reform as a case study” demonstrates how a “balanced hierarchy” and networks are really formed and how they function in the development of policies that involve a great number of agents, and the implementation of which depends on governance at a grass-roots level (local governments) and on citizens themselves (healthy lifestyles). This also provides a good example of a sectoral policy, the implementation of which is hindered by delayed administrative territorial reform.

The subchapter “Innovation and the Single Government

Approach: Who is responsible for research, development and innovation policies in Estonia?” explains that a prerequisite for innovation is governance in which the executive branch functions in a horizontal network rather than a hierarchy, and the parties to innovation are organised as a network of interdependent agents (and not as a linear chain of input and output).

The last text “Sustainable and democratic governance the feasibility of implementing the vision of SE21” summarises the chapter based on one case study, analysing the implementation of the core objectives of SE21: open and network-based governance. ●



Coordination of the policy-making process

Developing sustainable policies in a small globalising country

► GEORG SOOTLA

Introduction

Politics are often spoken about as a competition between political parties with the objective of coming to power. Less interest is shown in what is done with this power – how those who are in power arrive at the result that the voters expect. The question “What makes policies effective?” which, at first glance, seems simple, is actually quite difficult to answer from the viewpoint of both the voters’ expectations and the effectiveness of the result. However, the answer determines how appropriately we can assess the activities of our politicians and officials and the successful development of society as a whole. It could be said that the Estonian electorate as well as its politicians (and officials) still live, to a great extent, in a world with normative models (expectations) of democracy. The unattainability of these

expectations has caused, on the one hand, pessimistic assessments by the citizenry of the effectiveness of the government, and on the other, the politicians to prefer simpler choices. Today, more pragmatic realism is needed in the assessment of Estonian policy-making. The goal of the introduction to this chapter is to try and concisely provide the Estonian reader with a realistic understanding of the possibilities for shaping and implementing policies and to highlight the factors that determine the success and effectiveness of the policy-making process. Based thereon, the authors of the articles in this chapter try to provide their assessment of the execution of the Sustainable Estonia 21 strategy, approved in 2004, and its prospects for the future.

5.1.1 How much influence do policies have on society?

How much can the makers and implementers of policy actually influence the societal processes they are supposed to direct? To what extent and under what conditions can we hope that, for the most part, the will of the government is realised? To what extent and under what conditions must it be acknowledged that the processes that policies are intended to systematically change actually evolve spontaneously according to their own logic, a logic that is not well understood? As paradoxical as this seems, as the capability of the state has increased in the late 20th century, so has the scepticism about how much the government can do to actually change society in the desired direction. What then hinders government from choosing the best means for influencing developments in the desired direction, or choosing a new direction, when it turns out the chosen path is wrong? There are various factors. On the one hand, developed democracies have become open societies, but the interweaving and interdependence of life in different countries has also increased. What happens in Estonia, as a small country, is greatly dependent on what happens outside, including the choices that are made by the European Union and/or by other large countries. The interdependence of various fields of activity has also increased. For instance, educational policies are closely related to and dependent on labour, transport and regional policies, on ICT development, and the educational life in other countries. In this context it is difficult to predict what result a specific educational innovation in Estonia will produce.

Secondly, when decision-making started to be explored it became clear that, due to significant cognitive and temporal restrictions, it was essentially impossible to thoroughly analyse all aspects of a policy problem. The more politicians try to engender change in the behaviour of individuals – who often act irrationally – the greater and more fundamental these restrictions are. The principle of “bounded rationality”, articulated by the Nobel Prize-winning psychologist Herbert A. Simon, states that the priority in decision-making should not be determining the best solution but should rather be discarding the unacceptable solutions and choosing the first satisficing solution. Instead of an all-embracing mapping – which is expensive and subject to becoming quickly outdated, but which is very popular in Estonia today – simplified analytical and forecasting methods should be used, such as comparisons with previous solutions, the trial-and-error method, brainstorming by experts, etc. (Parsons 1995)

Thirdly, it should not be forgotten that democratic policy-making should be based on a dialogue between social groups with different and often conflicting worldviews and social values. Therefore, a political decision is often not the best or worst alternative, but it is the common ground that has been created from various understandings in the course of discussions. Rational arguments are often not the criterion for determining this common ground, but rather the fact that the majority supports this decision and that it can be accom-

plished with minimal risks to society. Political decisions try to rely on past experiences rather than finding the most optimal solutions; at the same time, they are easier to implement if they are supported and understood by constituent groups. It's true that politicians are often tempted to focus on appealing to certain groups of voters when making political choices, or appeasing the more vocal of them. This style of policy-making is a sign of weakness in government. Sooner or later, these governments end up being dependent on some powerful interest group, and the policies start to intensify the gap between the beneficiaries and losers. At the same time, an unrealistic expectation should not be created that policy-making can be led by nonpartisan experts.

5.1.2 Can government cope with the most important issues? And if so, how?

Since the citizenry is more organised and active than ever before, the pressure increases on the government to expressly deal with “our problems.” This has resulted in the overburdening of the government and carried with it the risk of failure (similar to failures in the marketplace). Government must constantly make difficult decisions regarding what to deal with and what not to. In policy output, mechanisms have to be designed that balance the needs of society and the capability of the government. Below we list three basic filters and balancing mechanisms.

Firstly, the problem-screening filter. The problems that do not affect a sufficiently large or active social group, or which require solutions that are too costly or too complicated, are left aside to wait for better times. If the problems are not among the ruling elite's range of interests, or the discussion of which could threaten the stability of the political regime, an attempt is made to neutralise them. Thus, the notable element in the political process is “non-decision making” (Bachrach, Baratz 1963). The theory of “policy streams” (Zahariadis 2003) shows that most policy issues have been identified a long time ago and many of the solutions have already been worked out. The percentage of policies that have been implemented as expected is not high. Unsuccessful policies initially recede to the level of reform rhetoric or just talk, and are then forgotten (Brunsson, Olsen 1993). And as time passes they are presented again as new policies and solutions (Hood 1998). It has also turned out that many politicians have borrowed “fashion trends” from their neighbours.

Secondly, the getting-the-policy-on-the-agenda filter. Today, the key issue related to effective policies is no longer working out the substance of the policy programme but rather convincing the politicians when a “window of opportunity” develops, i.e. when the government's policy should be put on the agenda. If this is not done convincingly, then well-developed and potentially very effective policies will end up back in the bottom of the drawer. Modern policy-making

draws upon political communities that are comprised of the representatives of interest groups, citizens' associations, experts, etc. In Estonia, there is a considerable number of political communities – doctors, teachers, environmentalists, etc. They possess the preponderance of the knowhow in their field; they are well-integrated thanks to their common professional backgrounds; and they keep an eye on the developments in their field. It is estimated that 70% to 80% of the issues in the government's work schedule are not proposed by politicians, but by the officials-experts in the fields related to the political communities. In order to get the policies onto the government's and Parliament's agenda, these leaders – they are called policy entrepreneurs – use specific public relations tactics, which try to point out the attractive facets and possibilities of the new necessary policies. Thereby, public relations (and also manipulation) become a natural part of the political process (Zahariadis 2003).

Thirdly, in democratic countries, a chain of veto points is deliberately created – the right of various institutions to block political proposals – in order to make it as difficult as possible for less necessary, risky or simply poorly-prepared draft policies to reach the final decision-making phase. The greatest number of these institutional veto points has been introduced into the political process in the U.S. (and other Anglo-American countries) as well as the Northern European countries. As a result, in these countries many political initiatives do not reach the final decision point. The policies that do get that far are well-thought-out and have the firm support of all the parties, which ensures that they will be implemented. In Estonia, an attempt was made at the end of the 1990s to prevent the establishment of similar veto points – such as various commissions, coordinating agencies, etc. A strong collegial government facilitates quick and at the same time politically well-enough considered decisions. This is one reason why Estonia became the flagship of reform. However, in the early-2000s, the collegial government started to transform into a splintered Council of Ministers-type of structure. As a result, it is too easy for policy initiatives to get on the government agenda through the party's coalition agreements, and dealing with them has been under the very attentive control of the coalition parties. At the same time, due to the weakness of a collegial cabinet and other discussion arenas, a pattern of extremely autonomous (splintered) policy fields has developed, which has started to prevent the policies that would require cross-sectoral cooperation from being worked out and implemented. (See the article by Uudelepp and Sarapuu in this chapter) Instead of an effective pattern of veto points, a mechanism whereby policies on the agenda are neutralised or allowed to fade away has developed. For example, many policies that are in the decision-making phase are just not actively processed either in expectation of elections or in between elections when the coalition changes. A good example is the proceedings to pass the Civil Service Act, which took more than 15 years. Such a mechanism does not significantly reduce the government apparatus' policy-making workload, but does reduce the motivation of the

members of the political community (including the civil service) to actively participate in the development of domain-specific policies.

5.1.3 Who is responsible for the results of policies?

Until the welfare state crisis of the 1970s, so-called “universal” policies that were intended for all citizens predominated in the developed democracies. In them, the policy-makers (deciders) were clearly differentiated from the executors (officials) and passive beneficiaries-citizens. The inclusion of the citizens within the framework of these policies was more of a democratic gesture than an instrument necessary for effective policies. The circle of players was sufficiently clear, as were their responsibilities. During the last decades of the 20th century, starting within the framework of the New Public Management doctrine, the role of the state in making decisions related to public services was significantly reduced and the role of the citizens was increased. This strategy was developed further within the framework of various democratic governance practices (Bevir 2010), the slogan for which became: “The government should steer (the policy process), and the citizens row (implement it).” (Osborne, Gaebler 1997). The policy output oriented to effectiveness and citizen participation, or openness, exponentially increased the percentage of policies that focused on satisfying the needs and preferences of small target groups. Thereby, the pattern of the policy participants started to change fundamentally. Simultaneously with top-down policies, interactive policy networks started to take shape (Sørensen, Tofing 2007) and create policies directed at and organised by small target groups networks (Hudson 2004). In the case of policy-making networks, which were also the focus of SE 21, it is important to avoid three illusions.

Firstly, since none of the parties can constantly dominate the network, to say nothing of having the right to unilaterally make decisions, then a legitimate question arises about the role of the state in the policy networks. It is often assumed that the traditional governmental institutions will cede their place to the bottom-up networks. This position is also apparent in the text of SE 21. It is true that when the networks develop, many of the policy-making functions that they are better able to perform, such as information feedback and analysis, communication with the citizens, achieving a consensus, implementing the decisions at the target-group or local-government level, are delegated to the network actors. However, this means that the government has the opportunity to focus on the functions that it, thanks to its authority, is able to perform best, i.e. the government and politicians can become authoritative moderators, balancers and controllers of the participants in the networks (Jessop 2011).

Secondly, policy networks are not some magical tool compared to traditional policy-making, as people often contend. Policy networks are a means of helping citizens and solving difficult problems, but they create an unstable and less effective

tive governing structure. With the development of networks, the state takes on a new extremely important role – to be the “shadow of the hierarchy” – in case the networks fail (Scharpf 1993).

Thirdly, a limited number of actors participate in policy networks. Often they do not even represent their own field, not to mention the citizenry as a whole. Therefore, these actors can have few responsibilities to the citizens. The rules of communication established by them often result from the pragmatic agreements of a narrow group, which may discriminate against less active citizens (Hughes, Rowe 2007). Therefore, networks can be at variance with fundamental principles of liberal representative democracy. Tying networks to the values and logic of liberal democracy i.e. their “democratic anchorage” (Sørensen, Torfing 2005) is one of the central challenges of sustainable and open policies.

In conclusion

One can say that, as a result of the promotion of democracy and the sophistication of society, a much larger circle of actors participates in and influences the results of today’s policies than did so traditionally. The people who participate in the formation of policy are increasingly those whose problems the policies are trying to address.

Today, unfortunately, the prevalent view still holds that for effective policy the decision-makers must be given a de-

tailed (and verifiable) analysis, so that on that basis the politicians can develop the best strategy. However during the last few decades, a consensus has been reached that the content of a policy, i.e. the question “what is to be done?” creates far fewer problems. And then the more critical question becomes “how do we do it?” – in other words it has become a question of the organisation and leadership role of the political process itself. This means that the central issue has become the policy’s sustainability. The central theme becomes the effective communication between parties with different identities and interests – less in the context of an exchange of information than of making oneself understood to others (Sootla 2002). ●

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5.2

Coordination of the policy-making process

Centre of government in the policy process

► ANNIKA UUDELEPP & KÜLLI SARAPUU

Introduction

The government that assumed office in the spring of 2015 is facing many difficult social and economic challenges. Several of them transcend the governing areas of single ministries and demand cooperation between different public agencies. Although the rapid development of information and communication technologies (ICT) has considerably increased the state's ability to cooperate, to collect and share policy information, significant coordination problems remain and the discussion about a "more coordinated government" has not been followed by noteworthy actions.

At first glance, the call for working towards a more whole-of-government approach may sound abstract or lacking in practical value to politicians and officials. However, in daily life it is easy to find examples of contradictory or fragmented policies that ignore certain significant societal problems, or do not use resources effectively. For example, for years the government has not been able to introduce a system for dealing with parents who do not fulfil their obligations regarding child support payments. And we keep hearing news reports about yet more cases of domestic violence under which are hidden years of abuse before becoming public. Approximately 480 people die every year as a consequence of a tangle of addiction and mental health problems¹. At the same time, the Estonian workforce is decreasing. The dependency ratio will increase from 55% of the population to 66% in the next 20 years (Statistics Estonia). Such socio-economic challenges require changes in many interrelated public policies.

These examples indicate that a different type of approach from the one where every agency confines itself to its own framework is necessary. A consciously-arranged agreement and implementation of common goals is needed. Other European countries are facing similar challenges. As was recognised within the "Governments for the Future" project involving Finland, Austria, Scotland, Sweden and the United Kingdom (Ministry of Finance of Finland 2013), horizontal cooperation and coordination together with evidence-based policy-making and public-sector innovation are not fads or luxury goods. On the contrary, these are essential tools helping the state to

cope with limited financial resources and to address difficult social problems. Increasingly, policy-making and implementation requires the balancing of various needs and interests, the formation of shared understandings on the nature of problems and management of socio-economic risks.

Centres of government have a critical role in this. The centre of government is usually defined as the units with the primary responsibility for supporting the work of the prime minister and the cabinet as a whole, and performing the horizontal functions transcending the administrative system (e.g. budgetary policies, civil service, and law-making). Usually, the Ministry of Finance and the government's secretariat (i.e. the Government Office of Estonia) are the ones that must ensure that the administrative organisation and the domain-specific policies are integrated into a comprehensive whole. It is important to ask what role and resources have been given to these institutions in Estonia and whether the current division of responsibilities helps to ensure adequate coordination of policy process.

5.2.1 The centre of government in Estonia

For historical reasons, the factors shaping administrative development have combined in favour of specialisation over coordination in Estonia (Sarapuu 2012). Because of this, a fragmented administrative model has emerged where the central role in policy-making and implementation is played by the line ministries, while the Ministry of Finance and the Government Office (as well as the Ministries of Justice, the Interior, and Economic Affairs and Communication) function with

¹ During the last five years, ca 250 people per year have died of poisoning (narcotics and alcohol) and ca 230 people have committed suicide. <http://pub.stat.ee/px-web.2001/Dialog/Saveshow.asp>.

restricted mandates and resources for central coordination. At the same time, a fragmented system with decentralised decision-making demands a balancing power bringing the domain-specific views together. In other words, an effective centre of government is needed. However, in Estonia, central coordination is still usually seen as a disruption and duplication of the activities of individual ministries. The horizontal coordination instruments that have emerged are mostly “soft” and non-structural and often depend on the leadership of individual officials or politicians. (See [Randma-Liiv et al. 2015](#)).

The 2011 Organisation for Economic Co-operation and Development (OECD) report on Estonia’s governance indicated that our centre of government is weak and recommended the strengthening of horizontal coordination ([OECD 2011](#)). Concrete solutions were left to Estonia itself to decide upon. Nevertheless, an understanding of the importance of coordination has increased in Estonia and a central role in this has been played by participation in the European Union’s decision-making processes. The capability of the centre of government to integrate the administrative system has improved over time – the importance of strategic planning, establishing budgetary policy, coordinating the civil service, developing the legislation process, harmonising uniform quality standards and information systems, etc. has become much clearer than it was ten years ago. At the same time, it has also become obvious how limited the levers of the central coordinators are for harmonising the public administration system and sectoral policies. Consequently, the Government Office and the Ministry of Finance should consider how Estonia could gradually move towards more structured horizontal coordination. Reliance on central coordination has been alien to the Estonian administrative culture thus far; however this kind of organisational innovation demands strong leadership.

5.2.2 Possible paths for future development

The search for solutions to increase the effectiveness of the centre of government can only be successful if the need for this is acknowledged on the political level. From the viewpoint of the government, the question is whether it has levers enabling it to address complex cross-sectoral policy problems and to fulfil the pledges given to the electorate. The existence of a coalition government should not mean that ministers have the sole right to make decisions in their governing area, nor that interference in the other ministers’ issues be considered “bad manners”. It is necessary to consider both at the political and administrative levels how to develop governance processes and coordination instruments that would systematically reduce ministry-based thinking (“silo-thinking”, so to speak) and how to make cooperation between different ministries easier and more natural.

The experience of other European states shows that there is no single perfect solution for structuring the centre of government and determining its functions. The practice differs

quite significantly from state to state ([Dahlström et al. 2011](#)). Although the centre of government functions at the intersection between administration and politics, it cannot be too dependent on political cycles. Systematic coordination needs a sufficient level of continuity and stability. Also, in most countries the centres of government have undergone significant changes over time. During the last few years, the general trend has been toward (re-)strengthening central coordination and centres of government. One of the reasons for this has been the so-called “centrifugal effect”, arising from the creation of many specialised agencies ([Bouckaert et al. 2010](#)). A similar effect can be seen in the Estonian public administration – more than 300 different organisations are involved in policy-making and implementation at the level of the central government ([Estonian Cooperation Assembly 2014](#)). It makes it difficult to manage the whole picture to achieve the desired societal impact and to effectively implement political priorities. In order to balance such a centrifugal effect many states have introduced new horizontal coordination instruments and strengthened and/or revised the existing ones ([Dahlström et al. 2011](#)). Broadly speaking, these instruments can be divided into two types – administrative and policy-related. With the first ones public administration is harmonised so that the people in various organisations perceive themselves as part of a single system, sharing the same values and role-perceptions. With the help of the latter, the coherence between policy areas and alignment according to political priorities is ensured.

It could be said that the levers available to the centre of government must help to ensure the success of the government by fostering the state’s “strategic agility”. [Doz and Kosonen \(2014\)](#) have defined the main enablers of strategic agility as follows (see [Figure 5.2.1](#)):

- 1) Strategic sensitivity – the early awareness and accurate perception of incipient trends, converging forces affecting the state’s development, the recognition of the risks of discontinuities, and the real-time assessments of strategic situations as they develop and evolve;
- 2) Resource fluidity – quick mobilisation and (re)deployment of strategic resources or funds, people and competencies providing the operational underpinning for strategic agility (money, human resources, skills);
- 3) Collective commitment – the ability to make and implement decisions that mobilise multiple units and counterparts to sustain and integrate collaborative action.

Today, Estonia can be characterised more by strategic numbness, resource imprisonment, and domain-specific commitment. During the last decade, Estonia’s political leaders have quite clearly depreciated the need for formulating a future vision or strategic priorities. In the line ministries, almost 60 strategies are implemented diligently, but their connection to the government’s decision-making process remains weak ([Riigikontroll 2012](#)). In the coalition agreements, detailed

promises for the next four years are settled in a matter of weeks, although it may in fact be more appropriate in this rapidly-changing and complex environment to initially set the main priorities and leave enough flexibility for adaptation in the details. The state budget is inflexible and dominated by ministry-based management logic, and the budgetary process is still weakly linked to the strategic planning framework. (see [article 5.4 in this report](#)) The consolidation of support services has begun, but so far this has neither increased the integration of the public administration nor improved the capability to reallocate resources flexibly ([Tammel, Raudla 2014](#)). The organisational rearrangements have been based on sectoral views and have not been coordinated from the whole-of-government perspective ([Sarapuu 2013](#)). Significant progress has been made in the formulation of the government's human resource policy, but the central levers for promoting the common identity and cohesion of the civil service have remained limited. Although the training and development activities for the central government's top executives are devised centrally using the respective competency model, this has not spilled over to the next level of managers ([Sarapuu et al. 2011](#)). Instead of collective commitment, "ministerial ping-pong" can be observed, where line ministries are focusing on the promotion of their sector-specific objectives.

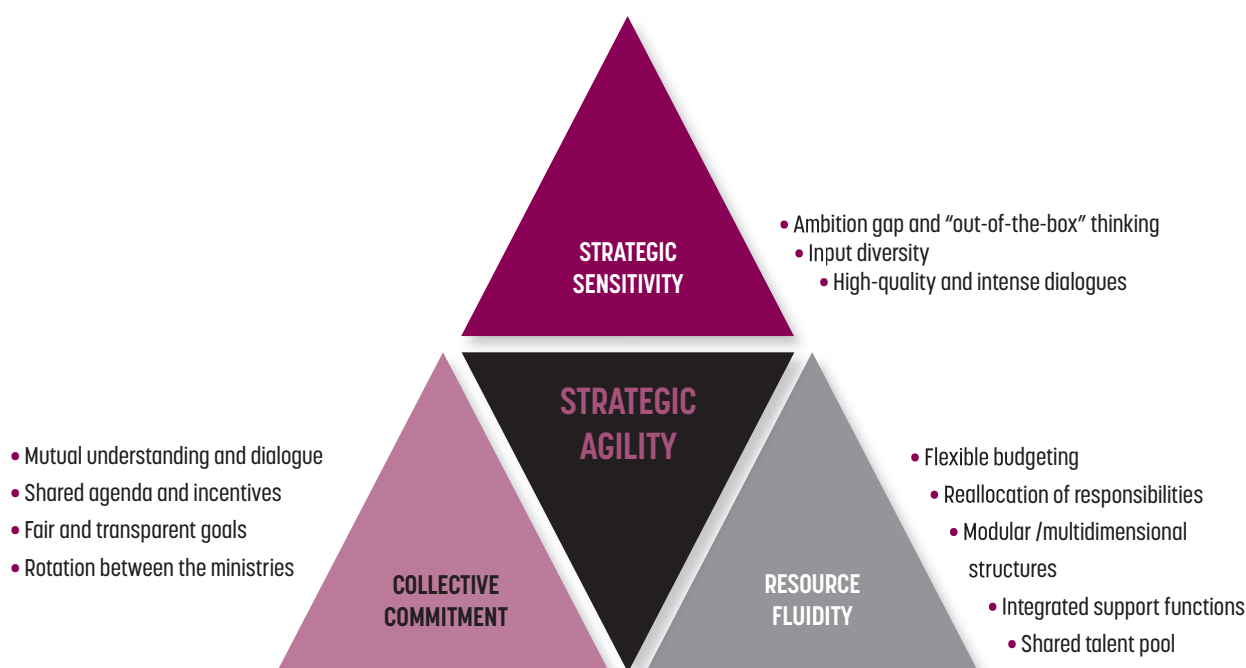
5.2.3 How can the coordination capacity of the centre of government be improved?

In light of the above, we propose a set of ideas for strengthening the centre of government in Estonia. These ideas are related to the working procedures and rules which shape the functioning of the government. In their essence, the proposals deal with two kinds of problems – administrative barriers, in which case the existing structure needs to be analysed and rearranged; and the gaps that still need to be filled in.

First, in order to eliminate the administrative barriers, the existing strategic planning and budgetary framework should be turned into a functioning forward-looking management instrument. Along with the current ministry-based view, more priority- and goal-related views need to be introduced. The updating of the strategic management system has already begun, but it needs time, significant further development and consistency in implementation, including upgrades in the information systems and improvement of analytical capacity. Also the rigidity of the state budget needs to be reduced, by creating opportunities for continually adjusting the annual budget (taking into account the boundaries of the approved state budget) in order to achieve the cross-ministerial goals together.

Second, it is necessary to amend the Government of the Republic Act so that the general coordination of

FIGURE 5.2.1 Factors enabling strategic agility ([Doz, Kosonen 2014](#))



policymaking, the formulation of strategic objectives, and the responsibility for leading the implementation of the strategic plans are clearly formulated as tasks of the Government. Also, the Act should include the obligation to cooperate in the fulfilment of shared goals which require the commitment of several ministries. Currently, the Act does not make mention of any obligation on the part of top executives (such as the prime minister or other ministers, the state secretary, the secretary-general, the director-general) to cooperate or to contribute to the achievement of common objectives.

Third, it is necessary to review the tasks, priorities and procedures of collaboration for units responsible for the central training and development activities of the civil service (the functions that are currently divided between the Ministry of Finance and the Government Office), in order to ensure common foundations for the development of the skills and capabilities of central government officials, and to support the achievement of the state's strategic objectives. It is also necessary to continue the harmonisation of support services in order to promote smoother inter-organisational cooperation.

In addition to eliminating these barriers, it is also necessary to focus on the creation of connective elements to promote the unity of the Estonian government. Until now, the development of the coordination capacity of the centre of government has not been dealt with in a conscious and systematic way. Among other things, this means that the government should look at the fundamental principles of its own functioning. These proposals can be divided into two broader issues.

1. Conceptualising the essence of the government, governance and the centre of government.

1.1. Have an in-depth discussion on the essence of governance today and update the underlying principles of the Government of the Republic Act. The cabinet is not a set of autonomous ministers; rather it is the state's top leadership team which, supported by public administration, is responsible for creating a good living and economic environment in Estonia. Fulfilling this responsibility requires coordination and cooperation. The roles of the individual ministers, the prime minister (the leader of the government, not just a chair of meetings) and the state secretary (the top official with a role to support the government's strategic agility) need to be reconsidered.

1.2. Assign a greater role to the government committees. A government committee should be a substantive work format for the government for addressing complex issues at the highest level. Through functioning government committees, agreements could be reached concerning the priorities and necessary activities planned, with specific ministers taking leading roles and responsibilities for achieving the results. Consequently, a fresh look needs to be taken at the government committee as a coordination

instrument, including asking such questions as when should the committees be established and who takes responsibility for delivering specific results (for example, in the form of assessment reports with proposals for future development and detailed reform plans).

1.3. Think through and clearly formulate the role of the centre of government organisations (primarily the Government Office and the Ministry of Finance, but also other ministries with horizontal functions). The task of the centre of government is to promote a problem-based view and to integrate other institutions' views, if necessary. The centre of government can balance ministries' sectoral perspectives deriving from their professional and organisational identities. In order to increase strategic sensitivity, the centre of government organisations can endorse long-term goal setting as well as stimulate the discussion about the state's strategic aims. For this, it is necessary to continually work on the prioritised strategic directions, assure robust analysis of problems, develop foresight capacity and establish indicators for monitoring the real changes and impact of the government's work. The latter provides input for the preparation of various policy documents (strategies, plans of action, etc.), the updating of legislation as well as making budgetary decisions.

1.4. Develop the capacity for foresight (instead of forecast; see [Doz, Kosonen 2014](#)) in the centre of government and around it so that this knowledge is consistently used in decision-making. The foresight information must be thoroughly accessible and serve the broader public, not just the prime minister and/or the ministers. Since the ultimate goal is making smart policy choices, it is important that foresight reaches both the coalition and opposition parties. The capability to constantly and systematically work with foresight will create a good basis for identifying Estonia's development needs and future trends. Moreover, it will help to assure that different policy agents operate in a common knowledge space. The latter is also important for achieving collective commitment.

1.5. Focus on the state's strategic objectives. When forming a coalition government, the political parties should focus their negotiations on the strategic objectives to be achieved during the next election period and on the principles of making the policy choices within the coalition (e.g. how much the general tax burden can change, the fundamentals of budgetary policy, the grounds for state intervention etc.), and not on detailed policy choices. These strategic objectives would then provide input for the compilation of the government's detailed action plan, with the centre of government providing support for its implementation by keeping the shared initiatives in focus, by analysing the progress and by providing feedback.

2. Development of coordination instruments and analytical capability.

2.1. Establish means within the state budget for financing different coordination and collaboration initiatives. First, it is necessary to ensure steady financing of joint work formats (e.g. government committees, task forces², etc.) in order to initiate and to lead reforms in priority areas as well as to induce policy innovations. Second, means should be allocated for specifically stimulating collaborative initiatives. For example, the submission of a joint action plan or a partnership agreement can be a prerequisite for providing funds. Such measures could be expanded to cooperation agreements crossing the borders of the public sector. This proposal requires the amendment of current budgetary rules.

2.2. Enhance the engagement of different policy stakeholders so that the discussion about societal problems and future needs may be lively, critical, open and honest. This proposal does not only apply to the engagement of societal partners and the public in general (in this regard the awareness has increased), but comprises also strengthening the dialogue within the public sector. In this regard, the centre of government can promote discussion on the most relevant topics and provide procedural support. The communication capability of the centre of government plays an important role in reducing information asymmetry and in mediating the conflicts resulting from the lack of knowledge or misunderstanding. Good communication is a precondition for stakeholders to participate in the public policy discussion and to contribute their knowledge and skills to solving the societal problems.

2.3. Increase the analytical capability of the centre of government. The analytical capability becomes evident most of all in the ability to synthesise inputs from various sources (such as statistics, research, foresight, the needs and expectations of various stakeholders) and in conceptualising it for decision-making. Of key importance is what kind of knowledge is generated in the centre of government, the ways it is used and with whom the knowledge is shared. For example, it is necessary to strengthen the impact analysis of the state's budgetary choices in the light of foresight knowledge and strategic priorities. The centre of government could publish its impact evaluation on the potential budgetary choices for the achievement of the state's strategic objectives (e.g. increasing employment, raising productivity, etc.). In addition, functioning monitoring systems must be built into the strategic management framework and the budgetary process in order to assure movement toward strategic objectives and the implementation of key initiatives. Increasing the analytical capability of the centre of government demands both strengthening the existing human resources as well as creating an effective cooperation network with experts outside of government.

2.4. Analyse the current experience with task forces and other innovative collaboration initiatives. The life cycle of the task force, as a novel coordination instrument, should be

elaborated further in order to assure that collaboration does not end with the formulation of the policy proposals. For instance, issues to be considered might concern whether and how a task force's working procedures could be altered in the process of addressing the policy matter; shifting of the responsibility for cooperation between the centre of government and a line ministry; and monitoring the implementation of the policy proposal after the work of the task force is completed. Adequate support is necessary for all these work phases and it may come in the form of substantial know-how, analytical capability, and/or as technical support.

2.5. Establish public sector rotation schemes for increasing mutual learning, enhancing joint understanding and deepening the commitment to common goals. It could be of great benefit to institutionalise the practice of rotating people between the line ministries and the centre of government organisations. The experience of recruiting centre of government officials through rotation is there and we must now think how to make this a customary practice.

Conclusion

Looking at the current arrangement, the implementation of the list of proposals presented above would presume a considerably stronger Government Office, especially its Strategy Unit. Today, a large share of the Strategy Unit's work is comprised of briefing the Prime Minister and preparing necessary background papers. However, the fulfilment of these undoubtedly necessary functions should be supplemented with work on long-term policy goals. Furthermore, the collaboration between the two central institutions at the centre of government – the Ministry of Finance and the Government Office – needs to be improved significantly. This need applies both to the way they work together as well as to their ways of cooperation with the line ministries. In order to drive the Estonian state towards functioning in a more joined-up and influential way, it is essential to introduce systemic coordination instruments for the development of strategic management, budgetary processes, regulatory impact analyses, regional development and the state's personnel policies.

To summarise – in order to ensure that different government units in Estonia form a well-functioning, effective and thoroughly integrated structure, we must think more broadly about the organisation of government and its fundamental values, dismantle the current barriers to cooperation, introduce new coordination instruments and increase the centre of government's analytical capability. Then, the units of government can confidently step up to address complex societal challenges and ensure that Estonia is a good place to live. ●

² Taskforces are a welcome initiative, especially for addressing new or complex issues and grey areas. To date three taskforces have been employed by the Government Office: the Skills Taskforce (from 2012 to June 2014), the Injuries Taskforce (from 2013 to 2014) and the E-health Taskforce (started work in 2014).

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5.3

Coordination of the policy-making process

In pursuit of efficient public administration: reform proposals for the public sector

► KÜLLI TARO

Introduction

Public governance was one of the issues that dominated the 2015 general parliamentary election debates. Nearly all the political parties competing for votes in the parliamentary elections suggested ideas for improved public administration and local government organisation. A great deal was said about what the government should do (in the fields of education, taxes or social policy), how government decisions should be prepared and implemented as well as how the public sector should be structured. Once again, after 15 years, the nuts and bolts of public administration became an important issue.

It was not only a narrow circle of people who expressed their dissatisfaction with public administration. Public administration has come under harsh criticism from researchers, representatives of employers and employees, entrepreneurs, opinion leaders, advocates for non-profit organisations and former government members. In 2011, a debate was initiated by Jüri Raidla, who talked about horrendous administration and overemphasis on the drafting of legislation (Raidla 2011). Mart Laar expressed it figuratively: “the head of our country has grown so big that the feet are no longer able to support its weight” (Laar 2012). Public servants themselves recognised the need to improve cooperation and coordination, the quality of impact analyses, etc. (e.g. Lemmik 2015). Many are convinced that something must be done. However, the visions of what is the right course for the Estonian administrative system differ greatly.

The Estonian Cooperation Assembly, among others, proposed a plan for the organisation of public administration so that it would improve life in Estonia, help the Parliament and Government to promptly and in the best possible way achieve their objectives and consolidate democratic governance (Estonian Cooperation Assembly 2014a). The Estonian Co-

operation Assembly scrutinised the existing analyses and proposals concerning public administration and local government, filled the gaps in those analyses and prepared feasible proposals for changes in public administration from which Estonia would benefit. They tried to avoid the myths established over the years and habitual beliefs in certain solutions that have met with little success.

A myth that persists in the organisation of public administration and local government reform plans is a widely held belief that following the example of foreign countries will automatically guarantee success. What is more, the reform proposals are imbued with the belief that the existence of a central ‘independent’ institution or ‘right’ structure would solve many problems.

5.3.1 Foreign role models and international consultants

A proposal included in the development strategy “Sustainable Estonia 21” for the creation of a permanent National Development Network is largely based on the Finnish experience. Singapore was also cited as an example. The Public Governance Action Plan approved by the Cabinet in 2011 was based on the recommendations in the Organisation for Economic Cooperation and Development (OECD) Public Governance Review. In 2014, that strategy document was renewed and supplemented under the title “Action plan for developing administrative capacity and implementing the recommendations of the OECD Public Governance Review”. Public administration reform plans are also permeated by references to the practices of other countries.

Learning from other countries’ experiences is a natural

part of the policy-making process. When building the Estonian state, we have followed the example of other countries and received advice from the consultants of international organisations. This concerns both the overall legal system and the public service sector (Madise 2003; Randma-Liiv 2005) as well as policy choices (e.g. see Tavits 2003 about the pension system; Toots and Loogma on educational policy, in this report). The advice has been both sought and offered; however, the choice of role models has not always been well thought through (Randma-Liiv 2002; 2005).

While learning is important, policy transfer from other countries is not inevitably successful. Sometimes, policy transfer may fail, even if the same solutions work in donor countries. Political researchers have warned that any universal models should be assessed critically. The factor that determines success is the whole context, not a specific policy solution. If the transfer process is incomplete or inappropriate, the policy transfer may fail (Dolowitz, Marsh 2000; Evans 2009). Many public administration models have been developed based on the experiences of large countries and may not be suitable for a small country (Randma-Liiv 2002; Taro 2013). In any case, extolling the model of other countries should be avoided (Jacoby 2001).

While the main reasons for policy transfer are the desire to find solutions to similar problems, to achieve positive results by quicker and easier means or to keep pace with general progressive developments, the examples of other countries are also used for rhetorical purposes to add impact to arguments or to pursue other political objectives (De Jong, Mamadouh 2002). In such cases, information may be presented tendentially and subjectively. For example, there have been complaints levelled against the OECD for uncritically spreading public policy trends which can more appropriately be called viruses, rather than cures (Richardson 2001). The OECD Public Governance Review commissioned by Estonia in 2011 is based on the concepts of joined-up government or whole-of-government. These concepts emerged as a reaction to the New Public Management (NPM) reforms, on which many public sector initiatives were based. In Estonia and elsewhere NPM reforms were also introduced following the example of other countries and advice from international organisations (Nõmm, Randma-Liiv 2012). The cooperation and coordination issues, which are relevant also in Estonia, are seen as the negative effects of the NPM reforms, because the fragmentation of the public sector is associated with a higher degree of specialisation, autonomous public agencies and the separation of policy-making and implementation. Political control weakened, while liability remained the same. Performance management led to rivalry between agencies and was not conducive to cooperation. However, there has been no solid evidence that whole-of-government solutions have a positive effect on cooperation and policy coordination. Rather, it is very difficult to assess the effect of such solutions (Finnish Ministry of Finance 2013). Therefore, the whole-of-government philosophy is seen as a fad in the rhetoric of public administration reforms (Christensen, Lægheid 2007; O'Flynn et al. 2011).

5.3.2 Faith in the right structure and central institution

The strategy Sustainable Estonia 21 proposed the establishment of a National Development Network. The National Development Network was envisaged as a politically independent body of strategic development planning outside of political parties, which would be both developing long-term programmes and harmonising the strategies of different sectors and monitoring their implementation. The establishment of a body to lead society in strategic self-management was referred to as a key precondition for moving towards a knowledge-based society.

A yearning for an independent and neutral, yet broad “council of wise men” was reflected in a suggestion by Siim Kallas to establish a second parliamentary chamber (Kallas 2014). The OECD Public Governance Review and its updates highlight the idea of establishing and strengthening a centre of government and stress the need for further development of innovative forms of cooperation (OECD 2011). The election platforms of several political parties in the general election of 2015 also emphasised the role of the government in improving cooperation and coordination between public agencies. The administrative reform plans proposed previously by the Minister of Regional Affairs were also seeking a “right” administrative structure, focussing on territorial administrative reform.

The majority of the ideas that were presented as innovative have actually been implemented in the past. However, no explanation has been provided as to why the existing centres and structures have not lived up to expectations. In 2006, after the approval of the strategy for sustainable development, the Estonian Development Fund was established which could have met the criteria of such a “body”. The Government Office has a strategy unit and there are also several task forces. The Government has established dozens of government committees. Only recently, several coordinating duties of the Government Office (e.g. the organisation of public service and legislative drafting) were delegated to the relevant ministries. Now there is talk of consolidating the Government Office and the need to centralise the handling of horizontal issues.

Coming back to the experiences of other countries: there are very few convincing examples of successful management structures and centres. Instead a consensus is arising that no management model that fits all exists. Purely administrative measures that are not supported by political commitment and a good communication culture are rarely successful. Neither is there a single infallible coordination formula that would help to cope with competing interests and make complex policy choices. The attempts to develop different coordination mechanisms may have a significant adverse effect on the responsibility of the Government. Complex systems would dilute responsibility. (Christensen, Lægheid 2007; Finnish Ministry of Finance 2013; O'Flynn et al. 2011).

5.3.3 The way forward for the public sector

The Estonian Cooperation Assembly proposed a public sector reform programme that is based on the conviction that the existing public governance model is out-of-date, is a burden on the state budget and prevents Estonia from providing public services in the best possible way, efficiently and sustainably for the benefit of society and its citizens. The labour force is shrinking, the number of dependants is increasing, while expectations of better public services and a more efficient state are increasing. We also need a new approach to the organisation of state affairs and local life.

The reform plans are built on earlier surveys and analyses, updating where necessary and filling the discovered gaps. Identified problems and proposed solutions are divided into five areas: democracy (involvement), local government, public administration, the Government of the Republic and the Parliament.

The proposals for developing democracy are seeking to replace formal inclusion with the substantial participation of stakeholders and to integrate components of participatory democracy into the model of representative democracy. Countering the widespread belief that a permanent “council of wise men” can be established to address each social issue, there is a realisation, instead, that different expertise is required for addressing different social issues and such expertise should be used according to the specific need.

The future of public governance is determined by the need to achieve the same outcome with fewer people. In the context of a shrinking population, the public sector is also forced to cut human resources to avoid becoming a burden to society or draining the labour force from the private sector (Estonian Cooperation Assembly 2014b). We must work differently, more wisely and probably also less than we do now.

The everyday work of public servants often includes tasks that neither create any added value to the Estonian population and businesses nor improve the quality and accessibility of public services. There is not enough time or resources to prepare properly and implement political priorities. The same projects are featured in work plans for years; nothing gets done and no decisions are made to give up the initiatives.

Therefore, the work plans of ministries should be reviewed critically. For example, legislation should be amended or replaced only if an analysis of the implementation practice shows that there are no other options. Often the problem is not the poor quality of a piece of legislation; it has more to do with training, guidelines and implementation practices. The work plan of the Government should be based on the needs of real life: immediate solution of problems as they occur, participation in the legislative activities of the EU, and the implementation of the government’s priorities. These actions cannot be planned a long time ahead but they are paramount. In preparing the state budget, we should abolish the project-based approach, stop rewarding the formulation of new tasks and pay more attention to the immediate providers of public

services (internal security, education, culture, health, etc.). Performing the main duties of the state is not a project-based activity. The existing approach, which stems from the concept of performance management, does not support an administrative culture that is based on the proper performance of basic duties and a focus on cooperation.

Ministries must become the centres of policy-making again. If an analysis is subcontracted or conducted in another area of administration, a ministry will lose competency and responsibility. Just placing and receiving orders does not constitute substantive work. We should avoid creating new structural units and must decide that no additional private agencies will be established for the performance of the main duties of the state; this would obscure the clear line of management and the chain of responsibility.

At the government level, the addressing of issues that go beyond the area of responsibility of one minister or ministry is not satisfactory. Information exchange, assisting each other and teamwork are not occurring as they should, and are not facilitated by the budgetary policy that is based on the interests of each agency. Successful cooperation depends primarily on whether all parties are performing their duties properly (i.e. they have the necessary knowledge and time) and whether the ministers heading the relevant ministries wish to achieve a common goal and have set it as a priority for the staff of their ministries (including planning work time and evaluating the results). In order to solve problems and facilitate better cooperation, consideration should be given to the idea of giving the Prime Minister the right to decide on an issue that belongs to the areas of administration of several ministers if (and only if) the ministers fail to agree on the solution, the deadlines for the development and implementation of a solution, or on personal responsibilities.

The stalemate that has developed in the organisation of local government could be ended if we recognised one fact: there is and will not be a single, equalising and fair criterion on the basis of which we could say which local government in Estonia is “efficient” or “right”. Local governments will continue to be different in terms of their capabilities and the majority will struggle to perform all their duties efficiently. The population of Estonia is simply too small to achieve an economy of scale for many public services, even if we formed large local governments of the sizes of today’s counties (Estonian Cooperation Assembly 2014c). Only a solution that takes into account the different capabilities and resource needs of local governments can be successful. Voluntary merging in regions where several local governments form a single community and functional region should be supported, but this solution cannot be extended to the whole country and all problems of local governments.

Local governments should be exempted from obligations in which they have no right of decision or which are already performed by the central government. The purpose of a local government is to enable local populations to decide on local issues, where the solution depends on the needs of local people and must take into account local conditions. If a service has

to be ensured at the same level and in line with detailed rules across the country, it is not a local issue any more. Stronger local governments can be assigned extra duties on a contractual basis by linking performance with the funding provided for it. Active participation in community life and voluntary work should be encouraged more.

No matter how intensive the merging of local governments is, they still need to cooperate systematically when performing public duties. First of all, this means that gaps in legislation must be filled in order to enhance cooperation. This will allow local governments to help themselves without losing their identity and disappearing. Local communities will preserve the right to decide on the organisation of local life. The implementation of such decisions would be organised more expediently financially at a level where the necessary competence converges. Function-based cooperation allows a definition of a specific service area for each service. Areas of function differ pragmatically according to the work to be done. Therefore, cooperation is needed even after local governments have merged.

The status of the Parliament as compared with that of the Government has weakened over time. However, it should be the Parliament that makes policy decisions, scrutinises the work of government agencies and exercises parliamentary supervision. Besides a strong Government we need a strong Parliament. In order to avoid an excessive increase in the number of government employees, top specialists should be involved in the work of parliament committees.

The problem is exacerbated by the restrictions on the members of Parliament concerning other professional work, resulting in some continuing their former activities covertly, and others risking the loss of their professional qualifications. This may discourage experienced and recognised professionals from standing as candidates for the Parliament. In order to enable the members of the Parliament to continue their professional activities, the work of the Parliament needs to be reorganised: the majority of the existing restrictions need to be abolished and only those that are important from the perspective of the separation of and balance between powers should be preserved; there needs to be more flexibility in the work hours of the Parliament; and use of remote working and e-solutions should be further encouraged.

Conclusion

The proposals made so far for improving public governance have not worked, so we need to look for other solutions. Is it reasonable to continue with something that has not met with success? Trailing behind other countries along the paths chosen by them will not put us into the lead. Estonia has achieved success thanks to ambitious and original solutions. It is important to distinguish systematic errors from poorly performed or undone work. Before establishing a new structure or administrative hub, the existing one should be improved so that it can function properly. A good solution addresses an issue clearly and takes into account the specifics of Estonia and the restrictions arising from its small size, scarce resources, constitutional order, geopolitical situation, etc.

Furthermore, we should not forget that the whole-of-government rhetoric, which has been successfully sold to Estonia, is related to a continuing stream of public-sector reform trends that attempt to correct the faults of previous ones (often even using the same methods). And there will definitely be new fads that will be actively promoted. However, following every trend can be expensive. The skeleton of the state must, however, function efficiently and should not become a burden to the rest of society. If it does not function properly, preventing people from focusing on their everyday duties, modern solutions will be of no use. ●

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5.4

Coordination of the policy-making process

The role of state budget strategy in the execution of fiscal policies

► RINGA RAUDLA

Introduction

The goal of this sub-chapter is to analyse the role of the state budget strategy in the development and implementation of fiscal policies in Estonia and to make proposals on how to use this policy instrument more effectively. The state budget strategy is one of the main coordination instruments in the development (and communication) of budgetary policies in the Estonian public sector. Numerous changes have occurred in the structure and content of budget strategies during the last 10 years and how the State Budget Act affects the role of budget strategy in the budget process. This chapter provides a closer examination of the following questions: How well has the State Budget Strategy (SBS) fulfilled its goal in the promotion of medium-term goals and the shaping of fiscal policies? What have been the most important advantages and shortcomings of this policy instrument? How can we make the role of the State Budget Strategy in fiscal policies more effective, considering also the experience of other countries?

5.4.1 Budget strategy as a policy instrument

During the last few decades, the use of a budget strategy, i.e. a multi-year budgetary framework for the budget process, has been one of the most popular reforms in the field of public sector financial management and is currently being used in many countries (e.g. Australia, the Netherlands, France, Sweden, Finland, Great Britain) (Brumby, Hemming 2013; Floden 2013; Harris et al. 2013; Schaechter et al. 2012). The use of a multi-year budgetary framework has fostered medium-term planning in the allocation of budgetary resources and allowed the consideration of the impacts of changes in laws and policies on the budget. The line ministries have much more certainty in planning their activities if they have a multi-year overview of the available resources. The use of multi-year budgetary frameworks has fostered the utilisation of fiscal policies for stabilising the economy in several countries (Ljungman 2008). A significant challenge in the use of budget strategies has been the inaccuracy of economic forecasts. In-

accurate predictions of expenditures, revenues and other financial indicators can undermine the legitimacy of budget strategies and turn them into documents that are not followed in reality and that have no real impact (Brumby, Hemming 2013).

5.4.2 Budget strategy in Estonia

State Budget Strategies have been compiled in Estonia since 2000. Officially, the obligation to prepare the SBS for the next year and the subsequent three years (i.e. on a rolling basis) came into force in 2003, pursuant to the amendments made to the State Budget Act. Pursuant to the new State Budget Act, which came into force in 2014, budget strategy also plays an important role in the budgetary process: the goal of the budget strategy is to highlight the main directions of the fiscal policies, to reflect the general objectives of the Government of the Republic and plan the funds for implementing them¹.

The budget strategy is approved by the government at least eight months before the start of the fiscal year, and based thereon the state agencies prepare their budget bids. The Government of the Republic presents the budget strategy to the Parliament immediately after its approval. The process for the preparation of the budget strategy is regulated by the State Budget Act, but the pertinent provisions are rather terse. They prescribe only that the budget strategy is to be prepared by the Ministry of Finance and that the “Ministry of Finance

¹ Pursuant to the State Budget Act passed in 2014, the budget strategy must include the following by year:

- 1) the state fiscal policy objectives, including the with regard to the budget position of the general government sector and the amount of debt;
- 2) the provisional budget position of the sub-sector of the general government sector or its entities and other financial information together with significant changes in the financing and financial management principles;
- 3) the state economic situation analysis based on the macroeconomic forecast and the financial forecast;
- 4) the maximum volumes of funding permitted to the area of government of a ministry for the budget strategy period (hereinafter cost ceilings).

shall have the right to receive the necessary information from the Ministries and the persons belonging to the general government sector for the preparation of the budget strategy.” (§ 22)

The implementation of the State Budget Strategy in the early 2000s was definitely a necessary step in modernising the budget process. It allowed the introduction of a medium-term perspective in the planning of state resources and encouraged the state agencies to look further into the future, beyond just the one-year budget act. It also enabled state agencies to learn how to formulate their goals, choose performance indicators and establish performance targets when planning their activities for four years.

During the last 14 years, the content and structure of the state budget strategy has varied considerably from year to year. This attests to the fact that there has been a concerted search for the most useful format for the SBS document. The most important changes in the content of the SBS occurred during the crisis of 2008–2009, when (in addition to other public sector expenditures), the length of the SBS and the number of subjects it covered were slashed, especially in regard to performance information. Performance information includes the objectives of the activities, performance indicators and targets². The uncertainty during the crisis period regarding the amount of revenues that the state could collect was also accompanied by uncertainty in planning expenditures, and therefore the expediency of establishing very specific goals, performance indicators and targets was questioned. After the crisis was over, more performance information again started to be presented in the SBS. For example, the 2010–2013 SBS was only 36 pages, but the 2015–2018 SBS was 137 pages.

In Estonia, just as in other countries, the most important problem related to the functioning of the SBS, as the government’s main strategic document, has been the inaccuracy of the macroeconomic forecasts, and the resulting miscalculations in projected budget revenues and expenditures. This has, to a great extent, been caused by an unstable external environment, but partly also by shortcomings in analytical capabilities. The inaccuracy of the forecasts (especially before and during the crisis) made the medium-term planning of resources impossible. The budget was still prepared based only on a one-year perspective; during the height of the crisis in 2008 and 2009, it was even amended several times during the year with the help of supplementary budgets. The government’s unwillingness to use more of the accumulated reserves and to incur debt meant that as revenues declined, the planned expenditures had to be cut. As a result, the ministries were uncertain about the amount of resources they would have at their disposal during subsequent years.

5.4.3 Discussion about the state budget strategy: should it take place in a wider policy-making arena than before?

To date, preparing the budget strategy has been a relatively closed process within the executive branch, in which the central role has been played by the Ministry of Finance, which has prepared the SBS based on macroeconomic forecasts and ministerial development plans. Since the budget strategy is one of the government’s most essential documents, encompassing almost all spheres of activities, its preparation should be a more open and inclusive process. The discussion related to the preparation of the budget strategy could also involve social partners (i.e. representatives of the trade unions and employers), the recently-created Fiscal Council and the Parliament³.

In Estonia so far, the SBS has offered few explanations for why one or another fiscal policy course was chosen. Involving a larger circle of stakeholders in the preparation of the budget strategy would allow for a more extensive and diversified debate about the main directions of the fiscal policy. As a result, the SBS could include the different alternatives that were weighed and discussed in connection with fiscal policy, and the explanations about why the final choices were made. The openness of the budget strategy process and the involvement of a broader circle of participants in the preparation process would help to mitigate the tendency for fiscal policy to be relatively “automatic” and passive rather than active. An “automatic” fiscal policy has meant that a reduction in revenues is followed by the cutting of expenditures (even in the middle of the fiscal year), while an unexpected increase of revenues leads to a positive supplementary budget (see Raudla, Kartel 2011). This has had a procyclical impact on the economy, meaning that it has amplified the economic cycle rather than mitigating it. An active fiscal policy means that an attempt is made to smooth the fluctuations in the economic cycle by increasing state expenditures during an economic downturn and by curbing the increase of expenditures if the economy overheats. An active fiscal policy would also give the government’s strategic development plans a more realistic content and the assurance that during the next recession, expenditures necessary for implementing strategic goals will not be cut, and that the arguments over fiscal policy will not take the form of simplistic statements as “we have money” or “we don’t have money”.

The involvement of a wider circle of participants would perhaps encourage the government to include more information about fiscal policy in the SBS: for example about possible alternative courses of action, including for what and under what circumstances it would be sensible for the state to incur

² For example, in connection with law and order and internal security, the 2015–2018 RES established the following general objective: “To ensure greater safety of persons and property and to maintain constitutional order, internal peace and stability in Estonia.” The indicators used for this objective include: “proportion of crime victims among residents”, “the value of Transparency International’s Corruption Perceptions Index”, “the number of deaths by unnatural causes”, and “average estimated durations of criminal, civil, misdemeanour and administrative proceedings”.

³ For example, in Sweden the independent fiscal council plays an important role in the development of the public discussion related to fiscal policy decisions and has enriched the debate (Floden 2013).

debt. For example, the 2015–2018 SBS does generally point out whether the fiscal policies of the recent past or the immediate future are procyclical or countercyclical⁴, but the reasons for choosing these courses are not explained. In the budget strategies to date, there has been relatively little information about the fiscal policies themselves. Most of the document is dedicated to the goals and activities and performance indicators of the various areas of government. Information about the longer-term fiscal risks should certainly be included in the SBS and it should suggest possible solutions for various risk scenarios (see Anderson, Sheppard 2009).

In order for the budget strategy to have greater legitimacy as a document, it should definitely be discussed by the Parliament before being approved and, ideally, it should be approved by the Parliament⁵. To date, the Parliament has been a passive “consumer” of the budget strategy. If the choices related to budgetary policy and the government’s priorities were dealt with by the Parliament before the strategy was approved, the performance information presented in the budget strategy (e.g. the government’s goals, the established performance targets and chosen performance indicators) could have broader resonance. To date, the Parliament has paid rather limited attention to the performance information presented by the government – because, for a variety of reasons, the Parliament members have perceived that all the choices related to fiscal policy are made in the executive phase of the budgetary process and the impact of the legislative body on the budget tends to be limited (see Raudla 2012).

5.4.4 Budget strategy as a strategic planning instrument?

The involvement of the Parliament and other stakeholders (including social partners and the Fiscal Council) in the discussion of the budget strategy would allow this instrument to become a “living” document. It would also prevent, among other things, the compilation of the SBS from being just an annual process of “copy/pasting” information from the previous year’s budget strategy by the Ministry of Finance (especially with regard to goals, performance targets and indicators). The reform attempts of the Ministry of Finance during the last few years have been characterised by a wish to establish a fixed structure for the budget strategy (especially when it comes to dividing it into various performance areas and their related goals). However, both the formulation of strategic goals and budgeting are by nature deeply political processes. Therefore, attempts to rigidly subject the process to technocratic planning can change the budget strategy into a document that follows the same structure year after year, and highlights the same goals but which cannot actually influence and direct the state’s developments. In a worst case scenario, such a static document, in which the regularisation of the structure and its elements is valued over its content, could undermine the democratic legitimacy of the budgetary and strategic planning processes and reduce their ability to react to societal changes. As mentioned above, during the economic

crisis the SBS had a rather different format. Although having an SBS structure that remains unchanged would make it easier to compare its contents year by year, the possible dangers of excessive rigidity are not outweighed by the benefits.

During the last few years, the performance targets that should be achieved during the next four years have been stipulated in great detail. For example, the 2015–2018 SBS promises that the average estimated period for processing civil matters should not exceed 135 days and the number of loans from public libraries should be 11 million books annually by 2018. When defining the role of the SBS, it is important to ensure that the achievement of the performance targets does not lead to negative consequences. In many cases, the performance indicators are defined relatively narrowly and the yardsticks are chosen with a view to which statistics are most readily available, and not according to what data would be the most useful to quantify. Therefore, the indicators included in the budget strategy should be treated more as communicative and informative reference points and not as some kind of “Five-Year-Plan” directives outlining performance targets that must be accomplished no matter what the cost or the impact on other activities. If the achievement of performance targets starts to be monitored dogmatically and sanctioned financially, it is probable that the quality of the performance information will actually decrease, because the agencies will then have a motivation to manipulate the information (Perrin 1998). In the worst case, this can result in a situation where the state agency focuses exclusively on the attainment of the established targets, and neglects other activities (which are nonetheless important for the functioning of the state) (see Raudla 2013). Therefore, the performance targets and indicators in the budget strategy should not be “carved in stone”, as something that must be adhered to from now until forever. Rather, when establishing goals, there should be a readiness to change the targets and indicators, if this seems reasonable.

5.4.5 Binding expenditure ceilings – is it an appropriate fiscal rule in the Estonian context?

An important change that came into force with the new State Budget Act in 2014 is the binding nature of the multi-year expenditure ceilings for the areas of government. Although previous SBSs had also outlined multi-year financial plans for the governing areas before, these were not mandatory according to the previous framework law.

The stipulation of expenditure ceilings is definitely one of the most important “trends” in the field of fiscal rules. The passage of these rules in Estonia and other EU Member States

⁴ The 2015–2018 RES states that “the Estonian fiscal policy of coming years will be countercyclical, except for 2016 when the GDP gap will become positive (the GDP level being higher than the potential level) but the fiscal y policy will be more lenient, i.e. is procyclical.” (p 59), but does not explain what the reason is for choosing this course.

⁵ E.g. in Sweden the budgetary strategy is approved by the parliament (Ljungman 2007).

has been influenced by European Union recommendations (Schaechter et al., 2012). At this point, it would be fitting to ask: how appropriate are binding expenditure limits in the Estonian context?

On the one hand, the imposition of multi-year expenditure ceilings could be viewed as a means of stabilisation, which can help to prevent the pro-cyclical cutting of expenditures during an economic recession and the sharp increase of expenditures during an economic boom (Anderson, Minarik 2006; Ljungman 2008; Schaechter et al. 2012). Considering Estonia's fiscal policies to date, one could say that, although in many other countries expenditure ceilings are seen as excessive restrictions on fiscal policies, in the Estonian context, they could actually have a beneficial effect on countercyclical fiscal policies, i.e. fixed expenditure ceilings could enable economic cycles to be smoothed rather than amplified. If the expenditures established for areas of government for the next four years are seen as binding, it means that if the economy falls into recession and tax revenues decrease, expenditure cuts would not automatically follow. Instead, other opportunities would be sought for financing the expenditures and the possibility of taking loans could be weighed.

Therefore, in the future, it is important to ensure that the fixed-expenditure ceilings do indeed perform a stabilising role and that they do not start intensifying the amplitude of the economic cycle, especially in the context of an economic recession, in which additional (discretionary) spending by the state is usually necessary to reinvigorate the economy⁶. The State Budget Act prescribes the following:

The information concerning the coming years provided in the budget strategy for the previous period shall be amended upon the approval of the new budget strategy only

in case the general objective of a performance area, the action programme of the Government of the Republic, the main directions of the state fiscal policy, the macroeconomic forecast, financial forecast or legislation have materially changed.

Therefore, in the light of these aspects, a broad-based debate should be conducted in the course of compiling the budget strategy, as to whether the established expenditure levels are justified considering the economic needs, or should they be corrected.

In addition, a broader discussion is required about which expenditure categories should have four-year ceilings, and which should not. In many states where binding multi-year expenditure ceilings are in place (e.g. Sweden, Finland, the Netherlands), investments are treated somewhat differently than other budgetary expenditures (Ljungman 2008). Whether the multi-year expenditure ceilings should necessarily apply to investments or whether they could be exempt should also be considered in the Estonian context. Since investments are generally easier to cut than other expenditures, if spending ceilings also apply to investments, and other expenditures increase unavoidably (e.g. due to mandatory transfers required by law), it is investments that may end up being cut, which may weaken the long-term competitiveness of the Estonian economy.

The existing studies on the use of the expenditure ceilings in budgetary policy have emphasised that their efficiency depends to a very significant degree on the accuracy of macroeconomic forecasts (see Ljungman 2007; 2008). Therefore, in the Estonian context, the capacity of state agencies to more accurately forecast expenditures, revenues and macroeconomic indicators should be developed. ●

⁶ For example, in Finland, where they use expenditure rules, the state budgetary expenditures that depend on the economic cycle are not covered by expenditure ceilings (Ljungman 2008).

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Towards open and evidence-based policy

Learning Europeanisation in Estonian Education Policy

► ANU TOOTS & KRISTA LOOGMA

Introduction

This chapter will attempt to show how the European Union has affected Estonia's education policy, a policy field that has been traditionally considered to be within the competence of a nation-state. The EU views education policy primarily instrumentally, in relation to the needs of the labour market and economy, but the instruments for education governance have changed over time. Support for a simple bilateral mobility has been gradually replaced by a multilevel system, the provisions of which are not legally binding, but which seem impossible to opt out of nonetheless. This is a central dilemma for the EU member states: should the European guidelines be simply adopted wholesale, or should they be adapted to their country's culture and needs?

5.5.1 The Open Method of Coordination, or the Politics of "naming and shaming" in Education

EU law says very little about "soft" policy sectors, such as education, because the national interests of the member states are so strong that it is not possible to impose binding rules. Thus, a need arose for the EU to experiment, and today, this

experiment in governance is known as the Open Method of Coordination (OMC). One of the central ideas of the OMC was to have the member states develop their own policies, not by implementing laws and directives, but through learning. This means that the EU guidelines and the experiences of other countries should not only be taken into consideration, but should also be adapted to the circumstances of each nation. The learning-based policy model was officially launched at the 2000 Lisbon Summit, and since then, learning has been seen as an intrinsic component of EU governance in its policy documents (Radaelli 2008).

How should the policy-learning of the member states be governed? In other words, how can things be organised in such a way that, through the process of learning, the member states, and the EU as whole, will move toward the common objectives defined in the Lisbon Strategy? For this purpose, the EU has designed an entire toolbox of governance instruments (Table 5.5.1).

Since member states feel a relatively strong need to follow their own pathways, not all of the OMC instruments (e.g. action plans; Commission recommendations) are put to use (Radaelli 2008). However, this does not mean that the states are free to make their own choices concerning what the "best practices" are. The learning framework was established at the Barcelona Summit (2002) with the adoption of the EU

TABLE 5.5.1 The Open Method of Coordination instruments

- establishment of common objectives, indicators and benchmarks
- periodic monitoring of progress and evaluation vis-à-vis benchmarking
- naming and shaming - publicising the best and the worst in reports.
- promotion of best practices, including via networks
- guidelines and EU Council/Commission recommendations for the member states
- common action plans and national action plans

Common objectives in education and training 2010 (ET2010) strategic framework, which was updated for the next decade (ET2020) at the 2009 Summit.

The generally-accepted position is that both EU law as well as learning coordination demand a certain degree of standardisation, or Europeanisation, of the policy contents of the member states (Ladrech 2010). More recent research claims that Europeanisation may also be seen in the policymaking process, including the unification of the governance instruments and the positions of the policymakers (Radaelli 2008; Graziano et al. 2011; Toots 2009; Toots, Kalev 2015). Below, we will analyse how Europeanisation has taken place in the making of Estonian education policy during the last couple of decades. We will examine three periods, which can be characterised by an initial movement from an uncritical adoption of policies to a discursive Europeanisation, and then transforming into meaningful reflexive learning.

5.5.2 Importing the “best” education as a horizontal policy transfer

After the re-establishment of Estonian independence, the educational situation was complicated from the standpoint of policy-learning, since there were no suitable experiences, experts, knowledge nor money for building a new system. In the late 1990s, when Estonia was taking part in accession negotiations with the EU, the latter had yet to develop its own principles of education governance. Therefore, Estonia sought “best practices” from other countries. As could have been expected, Finland was the first place we turned to for learning. Regarding general education, the focus of learning was the new national curriculum (Ruus 2004). Experts from the Finnish Board of Education served as consultants during its preparation and the 1996 National Curriculum (NC) included such Finnish features as the granting of autonomy to schools for the creation of their own curricula and the definition of educational outcomes (Ruus et al. 2008). As a follow-up in 1997, the state examination system was also adopted from Finland – a system which was supposed to make the learning out-

comes defined in the NC measurable. This turned out to be a significant event in the context of Europeanisation, because a short time later, the Finnish peer review of the Estonian National Curriculum (FNBE 1999), as well as the OECD report (2000), criticised the vague wording of the stated learning outcomes, which apparently made the measurement of learning outcomes difficult. Measurement had become one of the main instruments in education governance at the turn of the century, and the Estonian Ministry of Education and Research (MER) started to manifest an increasing drive to follow the recommendations from abroad concerning this issue.

In the early 2000s, the Ministry of Education wanted to more or less completely adopt the Finnish curriculum (Alajõe, Ginter 2008). However, interest groups comprised of education experts (e.g. The Estonian Education Forum) were opposed to the plan, since they believed that this would preclude our learning how to create a curriculum (i.e. policy) on our own (Ruus 2005). The plan to “purchase” the Finnish curriculum was abandoned due to the altered domestic policy agenda and the ratification of the EU’s Lisbon Strategy. The latter marked the arrival of a new era in education governance, which changed the arenas and methods of policy-learning and created the basis for the growing influence of the educational bureaucracy.

Tendencies similar to the ones encountered in general education can also be seen in vocational education. Between 1990 and 1995, the state’s coordination of this field was quite marginal, because there were no institutions at the national level that were responsible for it (Neudorf et al. 1997) and the social partners were too weak to intervene (Loogma 2004). The bilateral development programmes with Denmark, Germany and Finland were narrowly directed at the training of vocational teachers, the adoption of new vocational curricula (e.g. commerce, banking, electronics, computer graphics) or finding partner schools.

In the second half of the 1990s, policy-learning became more coordinated. In 1996, the Vocational Education Reform Foundation was established, along with the National Observatory of Vocational Education and the Labour Market. The National Observatory was created by The European Training Foundation (ETF), an EU agency which managed the Observatory’s network of the post-Socialist states. In addition to the horizontal exchange of information between the members, the ETF also organised training, seminars, and conferences for the National Observatories, and in that manner influenced the reform of vocational education in Central and Eastern Europe. In 2000, on the initiative of the National Observatory, an agreement was signed with the social partners, which symbolically recognised the joint responsibility of the partners for the development of Estonian vocational education.

In higher education, learning from foreign experiences was quite a bit less coordinated, and was limited to EU donor programmes (such as The Programme of Community Aid to the Countries of Central and Eastern Europe - Phare) which was directed towards the development of individual curricula. There was no nationally-established development framework and the reforms occurred at the discretion of the institutions

for higher education (Kübarsepp 2011). The direction taken in the early 1990s toward neoliberal competition-based higher education resulted in considerable autonomy for the public universities and a boom in the establishment of private universities. In 2002, there were 49 institutions of higher education in Estonia (including 23 private establishments) which competed more than they cooperated. This fragmentation resulted in the higher-education interest-groups becoming weak partners for the government. However, as with general education, there was a rush here as well to introduce ideas from abroad. In 1999, the Estonian Minister of Education and Research signed the Bologna Declaration, which was not a legally-binding document. The declaration united the higher education systems into a voluntary network that had as its objectives the facilitation of studies abroad, the creation of course structures more favourable to the needs of the labour market, and the harmonisation of quality standards.

However in Estonia the Bologna Declaration quickly became an imperative with legal force, based on which the 2001 plan for the reform of higher education was drawn up. Based on Bologna principles, all the significant legislation regulating higher education was amended in one year – the Universities Act, the Institutions of Professional Higher Education Act, and the Standards for Higher Education. Among other things, the 4+2 year higher education that was in use was replaced by the 3+2 system. The main goal of the 3+2 system for the Continental European states that initiated the Bologna Declaration was to make university studies more flexible and to accelerate the transition of young people into the labour market. This was not really a problem for Estonia, though, then or today.

In the policy transfers of the 1990s, the aspiration to be “European” slowly became dominant and replaced the initial desire to adopt the “best” education policy from abroad. On the whole, the 1990s witnessed a more or less direct transfer of policies, in which the imported experience was not adapted and its “goodness” was not questioned.

5.5.3 EU education strategies and discursive Europeanisation

In 2000, the EU adopted the Lisbon Strategy, with the goal of developing the community’s global competitiveness. Education and a qualified workforce were seen as important keys to competitiveness. Therefore, it was not surprising that the general Lisbon Strategy was followed by framework documents relating to the main areas of education (Table 5.5.2).

These framework documents established specific goals for the national education policies, such as creating a uniform qualification framework, ensuring the quality of education, but also expanding the target groups and increasing the percentage of participants in education. The governance of the Bologna, Barcelona and Copenhagen processes is based on the Open Method of Coordination. Shaped by these guidelines, it was development plans, implementation schedules, handbooks of “best practices”, etc., that became the most influential documents defining national educational policies, instead of laws and regulations. These formed the basis for the allocation of resources and the measurement of progress; they also introduced their own communication style, keywords and terms. The EU’s influence on the content and communication style of the policy documents is called discursive Europeanisation (Radaelli 2008), and this type of learning can also be found in the Estonian education policy of the 2000s.

The literature shows that the new EU Member States tend to adopt the goals established by the EU faster and more uncritically than the older ones (Alexiadou et al. 2010); similar tendencies have also been manifested by countries in the European periphery (Gornitzka 2006). This also seems to be true, generally speaking, of Estonia. Thus, the officials at the Ministry of Education started to support Estonia’s participation in international education surveys because many of the ET2010 indicators (e.g. share of low achievers, achievement disparities, share of students with higher-order thinking skills) were adopted from the The Programme for International Student Assessment (PISA) and The International Association for the Evaluation of Educational Achievement (IEA) surveys. The

TABLE 5.5.2 European framework documents on education policy

YEAR	NAME OF THE DOCUMENT	THE AREAS AFFECTED	SUBSEQUENT SIGNIFICANT DEVELOPMENTS
1999	Bologna Declaration	Higher education	European Standards and Guidelines for Quality Assurance (ESG), Bergen, 2005
2000	Lisbon Strategy 2000-2010	Connection between education and the economy	Follow-up strategy Europe 2020
2002	Education and Training 2010 (ET2010), Barcelona	All areas of education	ET2020, 2009
2002	Copenhagen Declaration	Vocational education	European Qualifications Framework (EQF), Bruges, 2010

horizontal adoption of “best practices” from Finland still played a catalytic role in this regard. Since, based on the PISA 2013 results, Finland had risen to the top of the world, the study trips to Finland undertaken by teaching professionals and policymakers continued with even greater frequency (Aarna 2005). However, only some features of the Finnish education system were adopted by Estonia (such as greater autonomy for schools and the individualised approach to the students), while others, which the Finnish experts saw as key factor for their success in the PISA survey, were ignored (such as free school lunches, social pedagogical support and smaller socio-economic gaps). In addition to Finnish models, some ideas were also adopted from EU documents, since they were well-suited to Estonia’s neoliberal governance approach (Vanttaja, Rinne 2008), which made it possible to legitimise (difficult) domestic decisions. However, the role of Finland in the policy-learning arena started to decrease in the mid-2000s and the role of Brussels started to increase. Therefore, Finland played its role as the catalyst for the Europeanisation of Estonian education policy for only a fairly short time (Toots 2009).

The increased role of Brussels resulted in the goals and target levels of the EU strategic framework being transferred to our national development plans and domain-specific strategies. The main impetus for the changes in vocational education was the move toward a uniform, transparent vocational education space, set by the Copenhagen Declaration. If there were few references to EU guidelines in the first Vocational Education Development Plan for 2001–2004, the subsequent ones are clearly based on the principles presented in the Lisbon Strategy, the Copenhagen Declaration and the Maastricht Communiqué (MER 2005). Among other things, a shift occurred to an emphasis on greater social responsibility, which assumes the inclusion of disadvantaged groups (e.g. learners without basic education or with special needs) in vocational education.

The General Education Development Plan for 2007–2013 also reflects the increasing importance of the EU; the keywords and style of the ET progress reports are used, and direct references are made to the Lisbon Strategy (MER 2006). The development plan for the jurisdiction area of the Ministry of Education, called Smart and Active People 2009–2012, which was adopted a year later, makes even more direct references to ET2010 and the EU education framework. In higher education, the point of departure for reforms became the Bergen Communiqué (2005), which focused on quality assurance and was adopted within the framework of the Bologna Process. By this time, the quality of higher education had become a priority at the European level, which enabled the Estonian policymakers to “download” the European agenda at home (Börzel 2002) and use it to legitimise their own reforms. The reform package that was prepared in 2004 culminated in the Estonian Higher Education Strategy (2006) and the Internationalisation of Higher Education Strategy (2006). Both documents provide for more active government interventions (such as those based on the establishment of statistical benchmarks and target levels) into the previously laissez-faire higher-education land-

scape, and for more rapid integration with the European Higher Education Area (EHEA).

Toward the end of the 2000s, the EU educational indicators started to be more closely tied to domestic policies, which also resulted in a revision of the indicators that had been in use. For example, the domestic debate had previously focused on the dropouts from the 6th to the 8th grades; the EU, however, used the percentage of 18- to 24-year-olds who leave school early. Starting with the Smart and Active People development plan, the EU indicator was used. The officials that prepared the development plan stated that, as an EU Member State, we should comply with the uniform objectives and should not do things “our own way”. The indicators, which Estonian officials also helped to design, were considered to be an important tool in determining Estonia’s rating (Toom 2007). Thus, policy-learning had resulted in the development of a new administrative identity based on data utilisation (Moreno, Palier 2005; Ozga et al. 2011). While in the 1990s, the adoption of policies was dominated by arguments of ideological fit, in the 2000s arguments related to administrative compatibility have become dominant.

This uncritical, compliant identity is starting to diminish today. The Estonian Lifelong Learning Strategy 2020 (ELLS 2020), which was adopted in 2014, has already demonstrated the next level of policy-learning. While previously it was typical that the specific European indicators or keywords were transferred, the ELLS has adopted the main concepts that accord with national developmental needs as revealed by domestic analyses. Both the ET2020 and ELLS2020 are comprehensive strategies relying on the life course perspective of educational provision. The European and Estonian strategies also use similar wording for the general (social) objective of education policy. However, in terms of the strategic objectives (see Table 5.5.3) and key indicators the documents differ.

The ELLS defined eight key indicators for measuring the progress towards objectives, of which only three coincide with the ET2020 indicators (the numbers of participants in lifelong learning, the percentage of young people not in employment, education or training (NEET), and the employment rate of recent graduates) (MER 2014). The remaining ELLS indicators are related either to Estonia-specific priorities (e.g. the digital competence of the population), or to shortcomings which appeared in previous analyses (such as the high percentage of adults without vocational skills, the low share of top-performing students, the limited impact of education on salary levels) (The Five Challenges of Estonian Education 2011; HDR, 2012/13).

5.5.4 The institutional changes that accompanied Europeanisation

The principal objective of the European common education framework, which is to ensure the quality of education, is also reflected in the development of the administrative institutions. As mentioned above in connection with general

TABLE 5.3 The objectives of the EU Education Strategy and Estonian Education Strategy

ET2020 STRATEGIC OBJECTIVES	ELLS STRATEGIC OBJECTIVES
To make lifelong learning and educational mobility a reality	Individual approach to development of learner’s capabilities
To increase the quality and efficiency of education	Competent and motivated teachers and school administrators
To promote equity, social cohesion and an active citizenship	The conformity between lifelong learning opportunities and the labour market
To improve the learning of creativity, innovation and entrepreneurship at all levels	Developing digital culture in lifelong learning
	Equal lifelong learning opportunities for everyone

education, initially, the ability to measure the quality of education in Estonia was highly variable. While in general education the issue was solved by introducing state exams (1997) and participating in international education surveys (IEA 2002; PISA 2006)¹, other instruments were required for vocational and higher education. The solution was offered by the European qualification standards, which were adopted in Bergen (2005) and Bruges (2010), and which were used to manage the accreditation of curricula and the granting of teaching rights.

Concerning the vocational education, the Estonian Qualifications Authority (Kutsekoda), established in 2001, have had the responsibility for developing the local occupational qualifications system and performed the role of a national information and coordination centre for the implementation of many EU standardisation measures, as well as the Europass and the European Qualifications Framework. The Innove Foundation, created in 2003, incorporated the development and monitoring of vocational education, and also cooperated with the corresponding EU institutions, such as the European Centre for the Development of Vocational Training (CEDEFOP) (which replaced the previous ETF network). Innove also started to coordinate the EU structural aid programmes for development of vocational education.

In higher education, the final development of the quality assurance system, i.e. the assessment of study programmes or study programme groups, took almost 15 years. From 1997 to 2003, the accreditation process was coordinated by the Higher Education Accreditation Centre, the certification decisions were made by the Higher Education Quality Assessment Board consisting of University officials (KHN); the Ministry of Education did not interfere directly in this process. Although the centre developed the general guidelines for compiling the certification reports, the universities compiled the reports in their own way; there were no comparable standardised indicators, because reliable databases did not exist. This situation changed in 2004, when the Estonian Education Information System (EEIS) was established, followed in 2006 by the Estonian Research Information System (ERIS). After only a few years, these databases administered by the Ministry, became the most authoritative tools for assessing the higher education institutions. Since then the schools do not submit the accreditation data themselves; rather these are taken from the ERIS and the EEIS. When the data was brought under the control of the

government, the (quality) weaknesses of many schools became apparent, and they had to close down. This is a good example of education governance by the open method of coordination (Ozga 2011). The small private educational institutions were not banned by law, but they failed to meet the high quality standards set and strictly enforced by the government. However, this standardisation also had some disadvantages from the perspective of policy learning. The accreditation process became more civil servant-oriented and the academic communities were left in the background. While in the first stage of accreditation (1997–2003) self-evaluation reports were compiled by faculty members, now their role was only to meet the team of evaluation experts, if the school visit took place at all.

Summary

How has Estonia managed in the multilevel-governance situation in which domestic education policy must take the EU objectives and guidelines into account? We have tried to analyse to what extent the ideas and practices of the EU and other foreign countries are simply adopted or whether they are adapted to meet domestic needs. The timeframe of the analysis begins in the mid-1990s. The main messages could be summarised as follows:

The nature of policy-learning has changed significantly over time. From the mid-1990s to the mid-2000s, it was typical to adopt the “best” education policies, which due to their presumed “goodness” were not critically analysed or adapted. The mid-2000s were characterised by “compliant” learning (Bulmer et al. 2007), whereby the European guidelines and standards were adopted as quickly and completely as possible. There was also little self-reflection here, rather a wish to quickly integrate into the structures of the democratic West. By the 2010s, the self-confidence of Estonia’s policymakers had significantly grown; concepts and approaches are being adopted from Europe, the details however are decided domestically. Yet, this is still an emergent practice.

¹ Estonia has been a member of the International Association for the Evaluation of Educational Achievement (IEA) since 2002; the CIVED 1999 and TIMSS, 2003 were the first IEA surveys that Estonia participated in.

The intensity of the policy-learning process has been directly correlated to activity at the European level. The most active period was in the mid-2000s, when Estonia joined the European Union and many epochal documents were adopted at the European level. The latter significantly affected the vocational and higher education reforms in Estonia at that time. The impact on general education was (and still is) smaller because the national curriculum, which is the main instrument of general education governance, is within the competence of the individual nation-states and the EU only defines single (primarily quantitative) indicators.

The parties involved in education policymaking have adapted to learning Europeanisation differently.

The activism and successful adaptation of the executive institutions has been noteworthy. Firstly, policy-learning has resulted in the development of a new administrative identity that is based on the use of data; secondly the educational bureaucracy has used the information in its possession and its analytical competence to direct policy. At the same time, the open method of coordination as a governance mechanism amplified the tendency towards a strengthening bureaucracy, a trend which Allison (1971) and Niskanen (1971) predicted a long time ago. Policies “with a bureaucratic face” have been accompanied by relatively rigid standardisation, in which experts primarily legitimise data-based decisions, while their potential to influence decisions has decreased considerably.

Europe does not provide a “formula for success”.

Regardless of whether it is a case of a simple transfer of best practices or a true learning process related to conceptual issues, success is not a priori guaranteed. The pursuit of European standards can indeed make Estonian education more transparent, understandable and comparable, but it may not help to resolve such socially important educational issues as the discrepancy between students’ acquired qualifications and the needs of the labour market, the high percentage of dropouts and low-achievers, and the limited innovation ability of the students and the teachers. The success of a policy does not depend only on good strategy, but also on whether the policies’ target groups and concerned parties are even interested in these policy solutions. Why should a teacher (or top student) be interested in whether poor students stay in school? What does a student gain from having a competent school administrator? What difference does it make to university students whether they study in the programme with fixed-term or open-ended accreditation? In an understanding of the participants’ true personal interests, which are embedded in questions such as these, lies the real meaning of citizens’ involvement and empowerment. Strategies and development plans that fail to motivate the parties involved in the education process to contribute to their implementation remain only documents with “a bureaucrat’s face”. ●

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Towards open and evidence-based policy

Interest-based policy: opportunities, threats and balances

► OTT LUMI

Introduction

This chapter examines the current state of Estonian policy-making and the challenges presented by interest-based policy. Managing the balance of interests can increasingly be viewed as a key challenge for democratic politics in the context of a knowledge-based society, and to this end the Estonian National Strategy on Sustainable Development, Sustainable Estonia 21 (SE 21) was formulated as an ideal paradigm. At the centre of a knowledge-based society are the learning organisations that must base their actions and plans on reflexive logic. As noted by Lauristin (Lauristin 2006), the role of the massive and non-reflexive institutions of classic representative democracy is decreasing, and spontaneous movements, problem-related working groups and dynamic think tanks are emerging. Along with parliamentary policy, the development of society will start to be shaped increasingly by issue-centred pressure groups and movements, non-formal expert groups and civic associations seeking solutions to their concerns.

This chapter will try to show that, in 10 years, the architecture for influencing policies and the nature of inclusion

policies have changed significantly. At the same time, we can see that the framework of sustainable policies has created new and often complicated challenges.

5.6.1 Challenges and choices involved in creating a balanced field of influence

The 2011 Organisation for Economic Co-operation and Development (OECD) Public Governance Review notes that, on the one hand, the Estonian government has insufficient capability to use and synthesise various information sources in the decision-making process. On the other hand, it is difficult for the government to involve various interest groups, and therefore, further promote the participation of citizens and interest groups in policy-making, as well as evidence-based decision-making.

The OECD criticism can be summarised by the observation that shortcomings exist in our efficient management of

interests, in policy input (the formulation of the problems and information that form the basis for decision-making) as well as output (who decides and how). Therefore, a future challenge of the sustainable policy process is hidden in the state's ability to elucidate its own altered role and that of others in the general mechanism of state governance (see the introductory article of this chapter). Increasingly, the assignment of the state and its institutions is meta-governance – i.e. making rules and monitoring their compliance; determining how associations, organisations and citizens can influence policy; the translation and interpretation of the “language” used by various types of organisational cultures for the concerned parties; and balancing the power relations between the influential parties that affect power (Jessop 2011).

During the last decade, the Estonian governance system has experienced the kind of crumbling of the existing hierarchical and closed-governance practices that Western Europe has experienced during the last 25 to 30 years. And this has changed the limits and roles of the rulers and the policy-influencers. On the one hand, it is important how the institutions of representative democracy are able to adapt and conform to the new discourse arenas and post-modern democratic mechanisms. On the other hand, new balancing mechanisms must develop between the decision-makers and the increasingly skilful and forceful advocacy and interest-protection organisations.

The concept of an interest group is becoming increasingly difficult to define unequivocally (Jordan, Maloney 2007). Firstly, the development of modern interest and pressure groups is increasingly based on choices and needs, while long-term loyalty-based group affiliations are playing an ever-decreasing role (Norris 2002). Estonian politics of recent years are also filled with examples of how the political reality is formed by strong pressure groups based on ad hoc problems. These pressure groups are able to influence public opinion and

apply great pressure on the elected representatives. We recently witnessed this in the debate over the Registered Partnership Act in the autumn of 2014. A change in communication channels also plays an important role in the mobilisation and formation of interests. For example, the Estonian Renewable Energy Association, which stands for Estonia's transition to renewable energy, has become an influential interest group in the last few years. This interest organisation has eleven institutional members and three who are private citizens, but the organisation has 1,200 followers on their Facebook page.

Below, we examine the main challenges for the policies regulating Estonia's advocacy and interest groups through the simplified dimension of four fields that influence policy (see Table 5.6.1).

5.6.2 Mobilisation of interests

The optimistic view believes that the forming of interests constitutes a “school of democracy”, where the winners are always different. However, the classic sceptical view presumes that narrow special interests dominate over broader public interests in this process, because concentrated special interests (e.g. business interests) are always easier to mobilise than the dispersed general interests of the citizenry (Olson 1965).

Undoubtedly there are Estonian policies from the last decade that have also caused a great deal of speculation because laws and standards have been adopted based on narrow social grounds, but supposedly in the interests of the dominant individuals or groups. There are no universal solutions for balancing the capabilities of various interest groups for influencing policy. Perfect balance is utopian in the social sphere. On the one hand, the possibilities for better balance lie in the development of civil society. But the idea that the organisations of civil society can form a united front against the

TABLE 5.6.1 The process for shaping interests and lines of influence in politics (author's table, based on Lowery, Brasher 2004)

PROBLEM OF REPRESENTING INTERESTS	Inequality	Disproportionality	Lack of transparency	Policy catexis/ obstruction
FOCAL ISSUE	Mobilisation of interests	Power relations between the interest groups	The decision-making process	Result and success of the policy
OPTIMISTIC VIEW	Interest groups as a natural “school of democracy”	Significant interests will rise to the fore	Public discussion and public control ensure open policies	The sensible balance between interests ensures the right results
PESSIMISTIC VIEW	Some parts of society have greater resources and a better position	The bias benefits elite	Public policy is for sale	The stronger ones block change

Source: Table by the author based on Lowery, Brasher 2004.

advocacy of business circles is not realistic for many reasons. Firstly, in many cases, it is not apparent that civil society organisations can be viewed as the carriers of public interests. In many cases, what appear to be formal civil society organisations may mask the fact that they are actually fighting for business interests. In the broader sense, it is doubtful whether a clear differentiation can even be made between the carriers of public interests and private interests, or whether common interests can be treated as superior to others interests. Thirdly, as a fundamental of post-Communist society, the role of civil society organisations as independent balancers of the business sector is also questionable, because civil society has to date been very dependent on public authority. Often, the “neutral interest of the citizenry” is not expressed through various nonprofits but rather they mutate into a form of quasi-etatism. (Käsper 2014).

The successful mobilisation of interests directed toward policy change in order to influence policy depends on how open the channels for influencing policy are. The importance of including interest groups in policy-making has been constantly emphasised by Estonian governments and parliaments during the last decade, and a series of practical steps have been taken to make this inclusion more effective. Currently, policy inclusion is specified by ten different statutes of national legislation (Kübar, Hinsberg 2014). The legal framework specifies quite a large number of entry points into the policy-making process that enable interest groups to participate in the decision-making process. The civil service has started to understand the importance of inclusion and to analyse and develop inclusion practices. (Peipsi Center for Transboundary Cooperation – Environmental Investment Centre 2008; Government Office 2009).

However, in Estonia today we cannot speak of a functioning and efficient system of inclusion, and most importantly, one that would be characteristic of a small state. The principal challenge is to achieve a change in the view of the policy-makers toward inclusion. Today, an understanding predominates among policy-makers that inclusion is an activity separate from the policy-making process (Kübar, Hinsberg 2014), which they are “obligated” to undertake from time to time when they chose to. The practices of the ministries and their agencies related to inclusion and consultation also vary to a great degree (Praxis 2010). Often inclusion is only a formal legitimising mechanism for a policy that has already been decided on. Often, inclusion is portrayed as a semi-open meeting of a narrow and closed-policy community (e.g. the deputy secretary-general of the domain and a few policy-related opinion leaders). The inclusion process of the Parliament also raises questions. The law prescribing the Parliament’s rules of procedure and work organisation does include some principles that recommend inclusion. Nevertheless, the practices of the committees vary greatly (Corruption-Free Estonia 2014).

5.6.3 The inner hierarchy of interest groups – differentials in capability to affect the agenda

The one who determines the political agenda also dominates the remaining stages of policy-making. Since the interest groups competing in the development of the agenda cannot contribute equally to its development, the political agenda may not reflect the moods and attitudes of society in the proper proportions. Studies of the agendas of various U.S. and European representative bodies and governments (Baumgartner, Jones 2002; Jennings et al. 2011) confirm that the impact of public opinion on the political agenda is very strong. Because of this the media, as a shaper of public opinion, is greatly responsible for activating the process of policy-making.

A 21st-century governance system must be orientated towards leading and managing a knowledge-based political agenda (Dunn 2011). First, this assumes that the government is capable of monitoring the “weak signals” (problems that are not yet, but are about to become, acute) that come from the interest groups. And second, to make sure that the interest groups have balanced access to the development of the agenda. The differences in the capabilities of the interest groups related to the development of the political agenda are affected by how open and clearly regulated the policy process is. The former – openness – can be increased by the predictability of the development, processing and implementation of policy-making plans, and the latter by clearly defined analyses of policy impacts.

The government’s Rules for Good Legislative Drafting and Technical Regulation prescribing the requirements for planning and conceiving policies, conducting impact analyses and follow-up evaluations, were supposed to be completely implemented by 1 January 2014. However, as initial surveys indicate, the implementation of the rules often creates problems in reality (Praxis 2014). For example, the forecast for the long-term impact of the oil shale sector on environmental fees, which was confirmed in the autumn of 2014 based on a proposal from the Ministry of the Environment, is not based on any serious analysis (National Audit Office 2014).

A separate and always topical issue is how closed (corporative) and hierarchical the system of interest groups is. In Central and Northern Europe, with their strong corporative traditions, some organisations that represent domain-specific or professional interests are given a monopoly or at least a privileged role in representing the domain in negotiations with the state (Eising 2004). More than anything, this is fostered to achieve a greater emphasis on and representation of certain basic interests (such as capital and labour). At some point, an excessive sense of corporativity, or the reliance of decision-makers on only a few closed interest groups, starts to

hinder open governance (Clawson 1985: 16-17) because a decision-making process that is based on the representation of selected interest groups is in greater danger of becoming dead-locked or creating only the illusion of a political discourse. Estonian state political traditions and current governance structures also have significant neo-corporatist traits. In many policy domains, the state has granted the role of privileged partner to certain category-protection or institutional interest groups by law or administrative practice. This is normal, in and of itself, and the policy framework of the European Union generally promotes it. However, the ideals of a framework of open governance do not promote the further intensification of neo-corporative inclusion and consultation practices and this is not a promising direction for policy-making. For example, a proposal reflecting the latter path was initiated by the SDE faction in 2012 (still being processed), which seeks to give the Parliamentary Committees the right to choose interest groups that would have the preferential status of a “permanent partner” (Constitutional Committee 2014).

5.6.4 Transparency of the policy-making process

The more equality that interest groups are granted to have their interests included in the political agenda and in their ability to advocate, the greater the transparency in the policy-making process will be. In the Estonian context, there are two topical questions in this regard: the transparency of political party financing and the consensual and legal rules for the policy-influencing field.

A substantively greater change in the financing system of Estonia’s political parties came into force in 2004, which tripled the state budgetary grants to the political parties, but at the same time banned business contributions to political parties. Stable state budgetary support has accelerated the institutionalisation of the Estonian political party landscape and has also, to a certain extent, served as an effective anti-corruption measure. On the other hand, during the last decade, the media has repeatedly raised the question of secret contributions. It is also clear that a regulatory framework that promotes the development of a secret relationship between decision-makers and interest groups is not sustainable. The establishment of a committee to monitor the allocations for political party funding is definitely a useful step toward more transparent policies. From the viewpoint of a sustainable policy framework that takes interest groups into account, a topic of discussion for upcoming years could be allowing the financing of political parties by businesses and organisations to a certain extent (possibly together with the freezing of state budgetary grants for a certain period), which could counter-balance the recent quasi-nationalisation of partisan politics.

The issue of lobbying rules also requires a broad-based public discussion. The fundamental questions in the regulation of lobbying activities are the following (see Table 5.6.2): 1. Is self-regulation enough or should compulsory regulation be implemented? 2. Are the policy-influencers or the policy-makers to be regulated? Or both? 3. Would the rules apply to the executive or legislative branch? Or both? Two facts have become clear as a result of the international discussion related to the regulation of lobbying. Firstly, the discussion of this topic is itself important because it fosters greater public control; and secondly, the hope that regulation alone will be the

TABLE 5.6.2 Popular means of regulating lobbying activities (author’s table)

	VOLUNTARY	MANDATORY
LOBBYISTS, ADVOCATES	As a stronger measure - a voluntary registry (the registry may provide privileges such as access to committee meetings, materials, etc.) Possibility of governmental and parliamentary registries. As a softer measure - behavioural guidelines and a code of ethics for advocacy associations.	Both governmental and parliamentary registries. State certification system. Monitoring and sanctioning system.
DECISION-MAKERS	A governmental or parliamentary code of ethics that is not legally binding.	Obligation to report meetings with interest groups, restrictions on working for interest groups after leaving office

Source: Table by the author.

magic wand that ensures that interest-group politics is totally transparent is not very likely (Greenwood, Clive 1998; McGrath 2008). However, in Estonia's current political model, it is not sensible to copy solutions from others. For example, the Nordic countries have a clear political tradition that does consider it proper to regulate lobbying by limiting the freedom of speech or activity of interest groups or citizens. Secondly, there are many examples of post-Communist states that have tried to implement Anglo-American lobby regulations, with varying success (Lumi 2014).

5.6.5 Fluidity vs. paralysis of the policy process

The principal enduring question related to the debate on policy results is whether policies can be bought with money – not in a corrupt sense – but just because the more powerful interest groups have a greater ability to influence policy. The extensive sociological studies of the last decade, which have sought to examine the connections between money and results, have mostly arrived at the same conclusion, i.e. the interest groups that have more material resources are generally not more successful at influencing policy (Baumgartner et al. 2014). These studies are lacking in Estonia but would be extremely necessary.

Rather, the fundamental problem of contemporary western democracy is the threat of policy processes ending up in stalemate, i.e. getting caught in the status quo. The stronger the interest groups that defend the existing situation in some policy domain become, the more complicated it becomes to enact policy changes. However, as a rule, we see that over a period of time, the commitment and capability of those who maintain the status quo and those demanding changes in policy are equalised. In the case of frontal confrontations between such interest groups, the political and administrative decision-makers prefer to support the status quo, because the risks associated with change cannot be totally predicted. During the last decade in Estonian politics similar policy disputes have been increasingly apparent, in which the proponents of the existing system and their opponents, those striving to change it, are equally strong and this has resulted in the policies being stalemated. An example of this is the administrative territorial reform that has been on the political agenda for at least 15 years, as well as the debates concerning the pharmacy market and alcohol-related policies, which have continued for approximately ten years.

In upcoming years, we must increasingly count on impasses developing in such domain-specific policies due to the collision of strong interest groups. Naturally, this does not mean that the political system will totally stagnate, because an entire series of other trends will produce policy changes over the long term. From time to time, greater policy changes can occur via the new governance plans that result from elections, as well as from the framework of interest-group politics, where along with cosmetic policy changes, cases of so-called “punc-

tuated equilibrium” occur that result in an unexpected change in the position of those defending the status quo, and fundamentally change policies (Baumgartner et al. 2014).

Conclusions

Policy-influencing factors and the functioning of interest groups are playing an increasingly important role in contemporary interactive democracy. In summary, two principal issues related to policy sustainability emerge – the legitimacy and the quality of the policy decisions. The legitimacy of decision-making has been at the centre of the political discussion in Estonia during the decade following the SE21. The legitimacy shortcomings of traditional institutions are apparent to the public and they have become the focus of media attention and public debate. This has primarily been expressed in the debate between the political parties and other policy-influencers. Of course this is not a phenomenon unique to Estonia. The so-called “legitimacy debate”, i.e. civil society's accusation concerning the progressive cartelisation of the political parties, which culminated in the People's Assembly (Rahvakogu) movement in 2013, actually marks the somewhat belated arrival in Estonia of a debate that had already occurred in Western Europe (Katz, Mair 1995). One can be quite sure that the search for the balancing point between representative and participatory democracy within the so-called “post-democracy” framework of the Estonian governance system (Kalev 2011) and in the interests of the legitimacy of policies will continue into the next development period. We are probably seeing that a whole series of new policy-making formats have developed or are developing (e.g. the opening up of the work process of the Parliamentary Committees, the weakening of the entry-barriers for establishing political parties, the legitimisation of civil initiatives, etc.). Naturally the new formats will not totally replace the policy mechanisms of representative democracy. However, in the name of legitimacy, the roles of the existing institutions and functionaries will simply be redefined and new balancing points will be found.

At the same time, we can assume that, during the next decade, the issues of policy sustainability will focus increasingly on the quality of the political decision-making process. Ensuring (improving) the quality of decision-making presupposes the continual re-evaluation of the roles of the governance institutions in the context of interest-based politics. When needed, the institutions must be able to establish their agendas independently, to formulate and implement policies, and resist strong and conflicting pressure from interest groups when necessary. Secondly, and in the context of Estonia as a small country with limited human resources, it is essential to find new possibilities for the greater integration of the knowledge and skills of the interest groups involved in the political process in order to achieve significantly better policy results. Finally, to date, interest group politics has been underrated as an innovative domain in state governance. Based on the successful implementation of online voting, the online tax board

and other online services and functions, one can assume that Estonia, as a small country with highly developed information technology, can provide new IT solutions for improving inclusion, as well as increasing the traceability and rationality of the political process. In addition to the growth of the sustainability of Estonian domestic policy, these successful applications would undoubtedly have obvious potential for knowledge transfer abroad. ●

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5.7

Towards open and evidence-based policy

Civic organisations and social cohesion: a perspective of collaboration

► ERLE RIKMANN, MARKO SÖMER

Introduction

Civic organisations are considered important for the establishment and regeneration of so-called “thick” social relationships. In 2014, a research group at Tallinn University conducted a study of civic or non-governmental organisations across Estonia (1000 respondents). This was a repeated study, conducted for the fourth time (see Rikmann et al. 2010). The study was financed by the National Civil Society Foundation. This article will present some of the findings of the study, focusing on the activities of the organisations from the point of view of cross-sectoral social cohesion and cooperative relationships.

Academic interest in the collaboration of various sectors of society has expanded since the mid-1990s, and is still growing today (see Bielefeld et al. 2010; Rivera-Santos, Rufin 2004). The term “cross-sector collaboration” usually refers to partnership between two or more partners from distinct sectors of society (civil society, government, business sector) that functions with the purpose of clarifying and attaining goals in a non-hierarchical manner (Van Huijstea et al. 2007). Collaborative relationships among non-governmental organisations (NGOs) are valued if the attainment of more complex goals requires joint effort and consolidation of resources from various parties and groups within the society (see Thomson et al. 2009; Bollen, Hoyle 1990). In the attainment of goals, trusting relationships play an important role, as the agreed-upon objectives could not be achieved without them. Analysis of the results of joint activities is complex and therefore various approaches are used. For example, collaboration can be studied in terms of transmission of knowledge and experience (Argote et al. 2000; Lambooy 2004), or viewed rather as a transformative interaction (Hardy et al. 2003), where meanings and behaviour patterns are implemented together, thus shaping the social environment and creating cohesion. It is the latter approach that we have taken as well. Nuances in

meanings of various concepts denoting working together (like “collaboration”, “cooperation”, “networking”, “partnership” etc.) have been discussed in the English language literature, all of which are related to various types of partnerships and alliances (Vigoda-Gadot 2003). In Estonian, the intersectoral collaborative relationships of organisations have not garnered much attention to date, especially from the perspective of NGOs.

5.7.1 Collaboration Partners of NGOs in Estonia: the General Picture

Collaborative relations are not an objective valued for their own sake in civic activities; rather they are established as instrumental for attaining certain goals of a more general nature. We were interested in the institutional structure of collaboration between Estonia's NGOs. In our study, we asked NGOs to name their collaboration partners: regular or strategic partners as well as any other instances of collaboration taking place in the previous year. We found that 82% of the respondents had had collaborative relationships with other organisations and that 75% of the NGOs have at least one long-term collaboration partner. While in the case of short-term collaboration, the situation has not changed compared to five years ago, a significant decrease can be seen in strategic partners: in 2013, the number of NGOs that could report long-term collaboration relationships with another NGO or a local government was almost 20 percentage points smaller than in 2009.

In general, the main strategic partners of NGOs today are other NGOs and local governments (Figure 5.7.1). The existence of long-term partners adds resources at the disposal of

the parties, since it enables the use of each other's resources in a mutually complementary and useful way. Also, it is in long-term collaborative relationships that the transformative potential of these partnerships can be realised, often resulting in increased social cohesion.

The decrease in strategic collaboration partnerships has been caused by the joint impact of several factors. First, the recent economic crisis is likely to have had its impact on these collaboration indicators. Second, against the background of long-term processes taking place in the realm of civic activities, it can be said that general developments of the last decade have been moving towards a more "project-based" approach (Papakostas 2003). In an environment of project-based activities as organisations tend to base their choices on short-term needs, having long-term partners is no longer efficient. Also, building up long-term collaboration relationships takes time, experience, determination and other resources that Estonian NGOs, considering their average youth and size of membership, tend to lack. The results of the study confirmed that older and larger organisations have more regular collaboration relations, both in- and cross-sector.

Older organisations have established more stable collaboration relationships not only with other NGOs, but also with state institutions, media and higher educational establishments. Local authorities, companies and general schools are also likely to be partners for NGOs of medium age (up to 14 years) or older, while younger NGOs (up to 5 years), which generally tend to be less networked, have more collaboration relationships with the business sector. This latter trend of new, start-up NGOs cooperating more with businesses is also recent, and has not been discerned in earlier studies.

There is no significant trend of decrease in one-time joint ventures and collaboration – 58% of respondents have

cooperated with other NGOs in 2013, and 52% with local governments (in 2009, the number was also 58%). The "ranking chart" of partners has not changed much either, with the top 5 being other NGOs, local authorities, academic or vocational schools, businesses and media organisations. Before the economic crisis, according to the 2009 study (data from 2008), collaboration with the business sector was a bit more widespread and collaboration with schools a bit less, while in the 2014 study (data from 2013) the business sector and schools have exchanged places in the frequency chart.

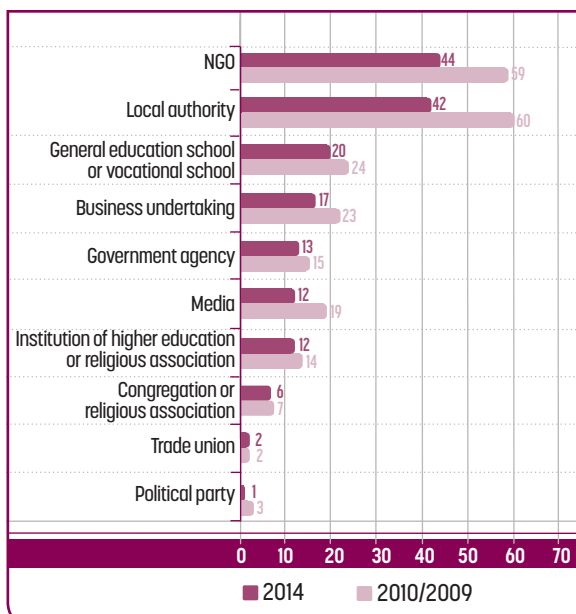
To summarise, the collaboration activities of NGOs have decreased during the last five years mainly at the expense of long-term joint ventures. The decrease is largest in long-term partnerships with local governments and other NGOs. There is also a significant decrease regarding businesses and media. One-time joint ventures have not grown at the expense of regular partnerships. These numbers have remained largely the same as earlier, although there is a slight decrease in collaboration with local governments.

5.7.2 A Typology of the Collaboration Orientations of NGOs

Social scientists in Estonia have been monitoring the networking and collaboration patterns of NGOs since 1997 (see Lagerstetz et al. 2002; Lagerstetz, Rikmann 2008; Rikmann et al. 2010 etc). While the main research questions have somewhat changed during the years, the ability of civic organisations to "thicken" society has remained an important subject. However, there are still more questions than answers. What are the main objectives of collaboration? In what areas or fields of activity is collaboration more frequent, and where is it less frequent? How does access to various sources of funding and other resources affect the collaboration ability of organisations? To find answers to these questions, we compiled a typology of collaboration orientations of NGOs. The typology clarifies the basis for understanding and comparing collaboration patterns as compared to an analysis of individual indicators.

We used the latent class model (LCM) for finding a typology for the collaboration orientations. LCM analysis, like cluster analysis, enables identification of groups (classes) that have maximum inner coherence on the basis of certain indicators, while differing from each other to a maximum extent. In other words, LCM lets us find systematic patterns with their underlying structural differences. We based our model on nine different, most often recurring collaboration partners for NGOs, i.e. so-called directions of collaboration (plus the absence of

FIGURE 5.7.1 Regular collaboration partners named by NGOs, by %



Data presented in this article are taken from the study "Institutionalisation of Citizens' Initiative in Estonia 2014" conducted at Tallinn University in 2014. In addition to the authors of this article, Kristina Lindemann, Eve-Liis Roosmaa, Liisi Keedus and others also participated in conducting the study.

collaboration). According to the existence or non-existence of these nine directions of collaboration, six different collaboration-direction patterns emerged, describing six types of collaboration orientations. The following **Table 5.7.1** presents an overview of the typology.

5.7.3 Collaboration Orientations and the Contents of Collaboration

Although collaboration relationships with local governments have decreased in the last years, they are still an important partner for civic projects. Collaboration with local authorities is characterised by several collaboration orientations, but it is most important for the first group of NGOs. Locally-oriented (first orientation) collaboration includes primarily joint projects with local governments, as well as financial and material support from them. **Figure 5.7.2** shows activities that are important for the general development of society and analyses them across the collaboration orientations of NGOs. We see here as well that the main activity of the first group of (local collaboration) organisation is furthering local welfare. Other activities include, to a certain extent, representation of the interests of members and providing public services. These collaboration patterns characterise a bit less than one-third of Estonia's NGOs. Geographically, the number of local-orientation NGOs is the smallest in large cities. The size of the membership of these organisations has remained comparatively stable and as a rule, the financial means at the disposal of these organisations does not exceed 6,500 Euros annually (see **Figure 5.7.3**).

Approximately a quarter of NGOs are characterised by broad and wide-ranging social collaboration (second group). The main output for this is also joint projects and for these organisations also, financial support resulting from the collaboration is important; public services are often provided or expertise shared for this support. However, this orientation is also characterised by proactivity: developing joint viewpoints, new initiatives etc. The organisations representing the wide-based collaboration orientation are strong integrators of society – significant increasers of cohesion. As their activities include other civic organisations, as well as various sectors of society, these NGOs are social transformers, accelerating the interaction processes of various kinds of knowledge, behavioural patterns, organisational cultures and values. The wide-based collaboration orientation tends to characterise organisations working in larger cities, but not exclusively. Thus, this type has highest representation numbers in Hiiu-maa, Pärnumaa, Tallinn and Tartumaa. It is least present in Lääne-Virumaa and Saaremaa. The membership numbers of wide-based collaboration NGOs have been quite stable in recent times, or grown a little (in the case of about one-fifth of them). The yearly turnover in about 70% of this type of organisation is less than 32,000 Euros.

The third group, the NGO-centred collaboration orienta-

TABLE 5.7.1 Typology of collaboration orientations (indicators have been rounded to whole numbers)

- ▶ **THE FIRST** orientation is characterised most of all by collaboration with local governments. 100% of the NGOs in this group cooperated in this direction. There was also some cooperation with other NGOs (50%) and educational institutions (32%). Other collaboration partners were represented marginally. **Collaboration with local governments characterizes 29% of NGOs.**
- ▶ **THE SECOND** orientation has the widest collaboration orientation. This is the orientation where NGOs cooperate in all the directions analysed. The most often recurring ones include other NGOs (94%), local governments (87%), general educational establishments (73%), mass communications media (67%), and businesses (64%). There was collaboration to a lesser, but still significant (especially when compared to other groups), extent with government institutions (44%) and universities (40%). **24% of NGOs belong to the wide collaboration orientation.**
- ▶ **THE THIRD** has the most coherent, but also the narrowest orientation. All members of this group are characterised by cooperating only with other NGOs. **The NGO-centred collaboration orientation includes 9% of NGOs.**
- ▶ **THE FOURTH** orientation is oriented towards cooperating with businesses (100%), to a lesser extent also with local governments (52%), and other NGOs (49%). **The orientation to collaborate with businesses characterises 9% of NGOs.**
- ▶ **WITH THE FIFTH** orientation it is impossible to determine a definite collaboration orientation. Various orientations are represented to a greater or lesser extent. This is a group for the NGOs that don't fit into a specific collaboration pattern; it is rather the various marginal tendencies that are collected here. This orientation also includes NGOs whose collaboration relationships have not yet been established because they have existed for too short a time. In our presentation of the results of the study, we refer to this group as the eclectic collaboration orientation. **10% of NGOs belong here.**
- ▶ **THE SIXTH** group does not collaborate. **There is no collaboration in the case of 18% of NGOs.**

tion, is primarily characterised by collaboration with other NGOs in carrying out joint projects, aimed at furthering local welfare or representing the interests of the members. These organisations are also relatively focused on their own members or their field, so that their communications with other NGOs may be limited to a field-specific umbrella organisation. Because of a small supporting network and limited integration into social activities, these organisations are relatively vulnerable. They tend to have limited sources of income and a small turnover (less than 6,500 Euros yearly for two-thirds of the NGOs) and retaining their membership may be a problem. These organisations have an important role from the point of view of social cohesion, as they bring together and represent social groups that have little exposure and voice in the public sphere, and they help bring actual grass-roots-level experience to the umbrella organisations. The NGO-centred collaboration orientation is more common in Tallinn and the counties of Valgamaa and Viljandimaa, where the prevalence of this type of organisation may be explained by the recent decrease in collaboration between local governments.

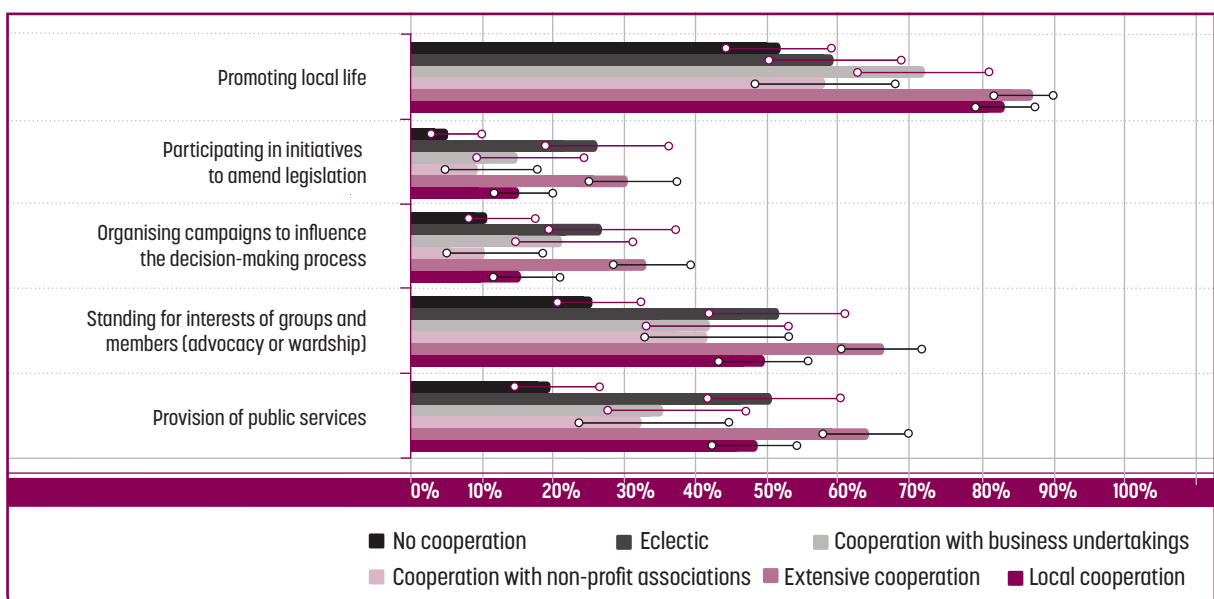
The fourth group, the orientation towards the business sector, is distinguished from the other orientations by its clearer focus on material benefits. For the organisations belonging in this group, gaining financial and material support plays an important role. Collaboration often takes place on a local level and is focused on the welfare of the local region/community. NGOs that have closer relations with the business sector are often active in the fields of religion, heritage protection, fishing/hunting or healthcare. By location, NGOs integrated with businesses are more common in Raplamaa, Lääne-Virumaa and Hiiumaa. Pärnumaa, Põlvamaa and Viljandimaa stand out as regions where this orientation of

collaboration is not very common. The turnover and income of NGOs of the fourth type do not reach the levels of those in the widely-based collaboration orientation, but are still in the more stable income stream. They also have more funding sources than average (2.6 times more - see Figure 5.7.4). About half of the NGOs cooperating with the business sector get by with a turnover below 6,500 Euros per year, with a turnover exceeding 32,000 Euros in the case of 10% (for the wide-based orientation, this number was almost 30%). Their membership numbers show a slight growth tendency.

In designing modern living environments and values, analysts often appeal to the possible symbiosis of civic organisations with businesses as a conceivable solution to the problems of a globalised economy as well as an alienated state (see Teegen et al. 2004). On the one side, civic organisations help to shape a more socially and environmentally conscious face for businesses, and on the other side, businesses provide alternative resources for NGOs to help them fulfil their functions (especially the socio-critical ones). Some studies seem to confirm that new values and a more sustainable social influence are born from mutual collaboration between partners; philanthropy as a unilateral activity is neither as sustainable nor as effective (Kourula, Halme 2008).

The eclectic collaboration orientation (fifth group) comprises NGOs of various kinds. Among them are young organisations with collaboration networks that are as yet undeveloped, while there are also older NGOs in the so-called transition phase, whose earlier collaboration relationships have been suspended and who are now looking for new opportunities. Thirdly, there are also NGOs that are working in a project-based manner and adjusting their lines of activity according to the available funding opportunities. Typical "eclec-

FIGURE 5.7.2 Collaboration orientations and fields of activity of NGOs. Proportions with confidence intervals (95% confidence level)



tics" account for about one-tenth of NGOs. Their characteristics include participation in various types of activities: initiation of new topics and issues; focus on "public life"; participation in patronage-related activities; legislation; campaigns; and providing services. Representatives of the eclectic collaboration orientation are more common among NGOs in places where there are more opportunities for participating in societal development, i.e. in larger cities. Regarding fields of activity, the "eclectics" are more common in the fields of education/research, natural environment, communications, agriculture and healthcare, where project-based activities and funding are widely used. Unstable funding has a negative effect on the sustainability of NGOs; the income of this group of organisations is below the average and comparable to that of the third orientation, i.e. organisations with an NGO-oriented collaboration orientation. In spite of the uncertain funding, these NGOs have retained their membership size. This can be interpreted in a variety of ways: either people have kept their enthusiasm, or there are few alternative opportunities in these areas, which are becoming more and more project-based.

The non-cooperating NGOs of the sixth group are often focused on serving their members. An NGO often operates solely on its membership fees, and some organisations do not even collect these. The turnover of these organisations is the lowest, exceeding 6,500 Euros only in the case of 11% of them. Non-cooperating NGOs account for slightly less than one-fifth of the total sample. In some counties, they are significantly more common than the average. For instance, 35% of the NGOs of Saaremaa and 24% in Harjumaa (excluding Tallinn) have the characteristics of this orientation. Obviously, the non-cooperating NGOs have smaller resources than the others. At the same time their membership size has not de-

creased significantly over the past years. Thus, the existence of a group of non-cooperating NGOs speaks of the diversity of the field of civic activity, showing that there is demand for this kind of inwards-oriented organisation as well.

5.7.4 Collaboration Orientations of NGOs from the Perspective of the Types of Organisational Behaviour

We also sought to analyse the general characteristics of NGOs, and specifically the correlation between their orientations of collaboration and their types of organisational behaviour. We looked at the characteristics of NGOs in different types/patterns. For studying this, we used factor analysis. Table 5.7.2 describes the characteristics included in the factor model and the corresponding factors or types. The analysis highlighted four characteristic types of NGOs.

Figure 5.7.5 shows the differences in types of organisational behaviour of NGOs (factor scores) across the typology. The distinction between the collaboration orientations of NGOs was clearest in "professionalism" and "focus on community". Both of these types of organisational behaviour are characteristic of the wide-based collaboration orientation, with their "focus on community" factor score being significantly higher for the wide-based collaboration groups than for other groups. Professionalism as a type of organisational behaviour is also high in the eclectic-collaboration orientation, but significantly lower in the local-collaboration orientation.

FIGURE 5.7.3 Proportion of annual funding ranges of organisations across the typologies of collaboration other NGOs

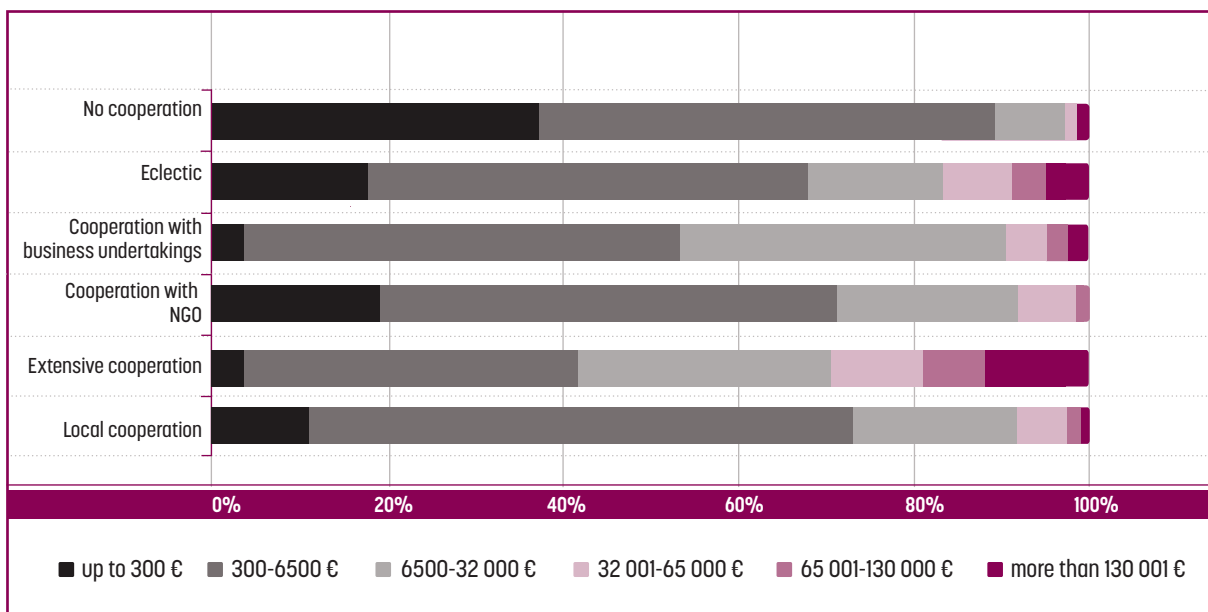
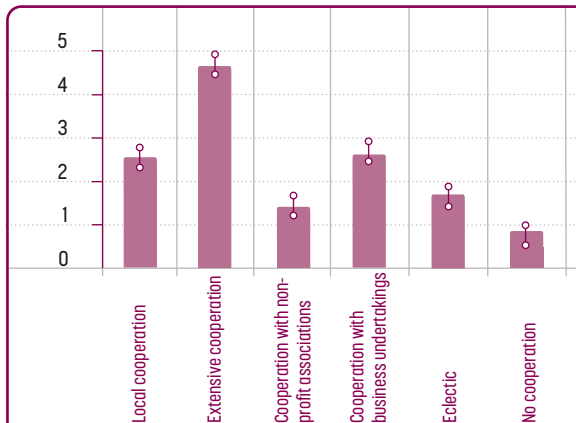


FIGURE 5.7.4 Average number of funding sources across collaboration orientations. (95% confidence interval)



tation and in the non-cooperating group. The groups characterised by collaboration with other NGOs and businesses remain within the mid-range limits in professionalism.

The community-focused type is also high in the case of the local-collaboration orientation, not only the wide-based collaboration orientation. For all other collaboration orientations, this factor is lower. Also in the case of community focus, the non-cooperating group and the group cooperating only with other NGOs stand out, with the characteristics being significantly lower than for others.

Regarding “scale” and “activeness”, only the no-collaboration group of NGOs differs from others to a significant extent. In this group all the characteristics of organisational behaviour are significantly lower than in other orientation groups.

Thus we can see that the best collaboration ability is characteristic of NGOs with a combination of professionalism and focus on community. Focusing only on professionalism, an organisation will drift away from the reasons why it was established in the first place. Relying too much on community-focus and local collaboration, an organisation may not be able to become sufficiently independent.

From the point of view of social cohesion, professionalism in organisations is needed for increasing the amplitude of interaction (especially cross-sector) and for presenting their views to society in general. Community focus, on the other hand, is important for shaping their viewpoints and for defining basic identities and motivations.

Conclusions

Activities based on civic initiatives play an important role in the functioning and cohesion of a contemporary society. The main mechanism for achieving this is the inclusion of members and groups of society in the active shaping of their living environment. Negotiations, taking differences into account, and joint actions encourage better mutual understanding and a sense of belonging together. This, however, will not happen by itself - it requires time and energy, especially in the stage of activation, where relationships are established. Looking more closely, collaboration is a complex social process comprising the creation of new structures, making choices about issues outside the realm of everyday activities, and shaping joint activities for surmounting problems. To achieve this, a set of rules for collaboration has to be established, for example answering questions like: who has the right to make decisions; which actions are permitted and which are to be limited; what information should be presented; and how should expenses/profits be divided. In citizens' initiative activities, especially those that concern several sectors of society, collaboration is complicated by the lack of traditional activity-coordinating mechanisms (hierarchies, established practices/standards, etc.) in the cross-sector field, as well as by the presence of different working and coordinating patterns in different types of organisations. This is further influenced by the fact that participation is voluntary and that participants are at least partially independent of each other (Huxham, Vangen 2005).

A collaboration relationship is a long learning process. The creation of certain cohesive values, generally believed to be generated in a society by civic activities, can be accredited to this long partnership requiring constant reflection. After all, the efficiency of collaboration depends on how well the potentially conflicting parties and situations, or in other words the partners' differences, are made to work together for achieving complementarity.

New orientations can be seen in the organised civic initiatives in Estonia, most clearly in a significant decrease of stable, long-term collaboration relationships. The decline is largest among the traditional collaboration partners of the NGOs: local governments and other civil society organisations, who perhaps have the most direct contact with solving problems on the grass-roots level. These tendencies can be seen most clearly among young and newly-created organisations, but they also apply to older and well-established collaboration networks. Old relations are disintegrating, while new ones replacing them are few, and they are more often oriented towards the business sector, being often essentially unidirectional applications for material support.

NGOs with an ambition to have a voice in social issues but lacking a partner outside the third sector, are the most vulnerable regarding their membership and organisational sustainability. They are unable to cross the threshold into professionalism, i.e. enter the level needed for establishing and retaining partnerships beyond individual civic initiatives.

TABLE 5.7.2 NGO types and the corresponding variables

TYPES OF ORGANISATIONAL behaviour	CHARACTERISTICS
Professionalism	Acting on higher than local levels Collaboration with government institutions Paid employees
Focus on community	Collaboration with local governments Number of regular collaboration relationships
Scale	More than 30 members Existence of an umbrella organisation Many members active
Activeness	Some members of the board younger than 30 General meeting more than once per year Electronic means of communication

FACTOR ANALYSIS: : principal component method based on polychoric correlation matrix. Rotation method: non-orthogonal Oblimin method.

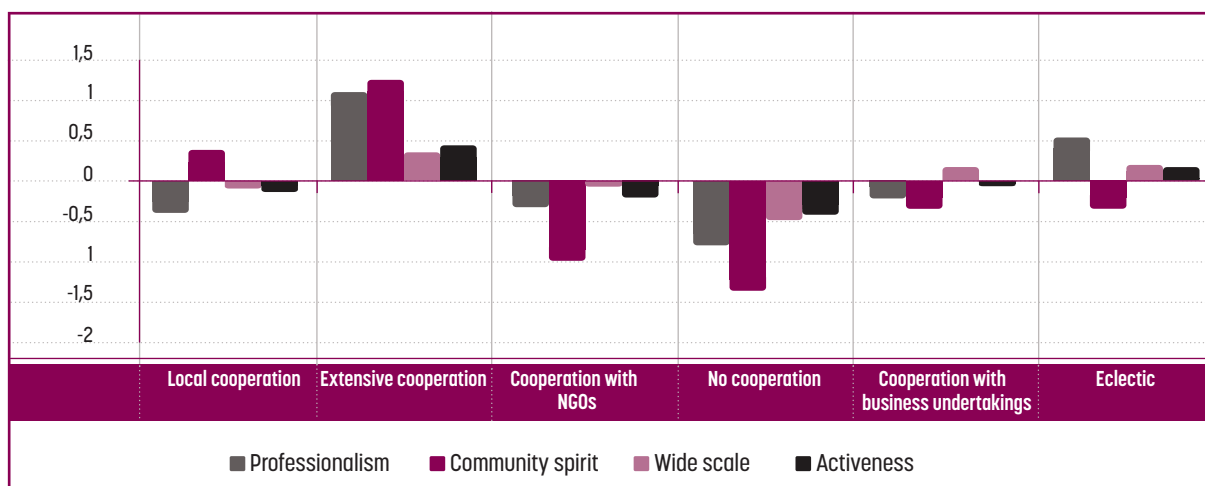
CODING OF CHARACTERISTICS: : All characteristics are binary, except the number of regular collaboration relationships.

There is not enough transformative impulse. Geographically, the decrease in collaboration is most marked for local-level organisations in rural areas with limited opportunities for finding new collaboration partners. Thus, cohesion is disappearing where it is needed most.

Another significant risk factor is the loss of a distinct identity for NGOs in a society that is becoming increasingly "project-based" and requires constant adaptation to the requirements of other parties. This risk seems to be especially relevant in the case of NGOs whose collaboration relationships are focused on material values, but it is also there for organisations with eclectic or exclusively in-sector collaboration types. In short, it concerns all those who are de facto not sufficiently independent in their identification process. Working from one project to the next may improve the technical capabilities of an organisation, but at the expense of its initial *raison d'être* and the representation of its interests.

Analysis of the orientations of civic organisations shows that the professional development of an organisation, which goes hand-in-hand with the strengthening of its identity and motivation to act, plays a crucial role in establishing sustainable and wide-based collaboration relationships, which are important from the point of view of social cohesion. In other words, an organisation must both belong somewhere – and have skills. Just being professional is not enough, and neither is cooperating and receiving support on a local, grass-roots level. Civic activities that bring members of the society together on a grass-roots level, increasing a sense of security, trust and shared values, as well as developing mutually-beneficial practices, help unite various social sectors and increase general cohesion through the increasing professionalisation of their activities. ●

FIGURE 5.7.5 Averages of factor scores for organisational behaviour type of NGOs by orientations of collaboration



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5.8

Towards open and evidence-based policy

The role of institutional context in sector policies: regional public health system reform as a case study

► LAURA AABEN

Introduction

Today, when a child is born in Eastern Viru County, his or her life expectancy is five years shorter than that of a child born in Tartu County. The projected disability-free life expectancy of a child born in Põlva County is 42 years, while a child born in Saare County will live a healthy life until retirement age, i.e. 23 years longer (National Institute for Health Development 2012). These facts confirm that highly significant health inequalities exist among the regions of Estonia. The health of the population does not improve or deteriorate on its own: it is profoundly affected by socio-economic, physical and institutional environment in which the people live. The environment must provide people with the opportunities to preserve their good health and limit the factors that may be threats to their health. Thus, if we want an answer to the question of what causes these great regional disparities in health, we need to examine the demographic and socio-economic conditions in the various counties and also the capacity of the local governments (LGs).

The LG's powers are of critical importance in the promotion of the population's health, since many effective instruments of public health policy cannot be implemented at the national level. For example, the state's alcohol policy may legally prohibit the sale of alcohol to minors, but the monitoring of the local shops to ensure that this ban is actually enforced is more effectively organised by the local government along with the local constabulary. Since a clear division of these tasks does not exist in Estonia today, we must recognise that over 70% of minors can get alcohol from stores without being asked to present ID proving their age (National Institute for Health Development 2011). In like manner the division of responsibilities between state and local governments inevitably influences the indicators of public health.

Regional inequalities, poor public health indicators, and

insufficient wherewithal on the part of the local governments are significant problems for Estonia, which are also referred to in The Estonian Strategy on Sustainable Development (SE21). The strategy emphasises the fact that the resolution of these challenges is of critical importance for the achievement of Estonia's development objectives (Parliament 2005). It is also noted that most of the challenges that are obstructing Estonia's development are closely interrelated. The authors of SE21 recommend that a knowledge-based development model be adopted as the basis for the advancement of living standards in Estonia. The core element of this model is governance based on knowledge and analysis, which entails the drafting of development strategies based on international best practices and dialogue, as well as the input of independent experts, local governments and non-governmental organisations. In this article, we will describe how following these principles has in fact succeeded in reforming the regional organisation of public health in Estonia. The basis for the article is the experiences of experts from the National Institute for Health Development in the preparation of the draft for the new Public Health Act.

5.8.1 The main principles of public health policy

The health of the population is a strategically significant issue in a state's development, since the success or failure of the activities in this sector determine to a great degree how healthy and able-bodied the people (including the taxpayers) are. The lengthening of people's disability-free life span is the main objective of the public health field and this is also pointed out in the Estonian National Health Plan 2008-2020 (Ministry of Social Affairs 2008). Although the given objective is very

clearly formulated and simple, its achievement is a complicated long-term process, which success depends on the competent cooperation of many agencies.

Already in 1978, the World Health Organization (WHO) declared that, in order to achieve positive changes in the health of the population, actions need to be taken in other domains besides healthcare (World Health Organization 1978). For example, the reduction in drug abuse depends on the coordinated activities of law enforcement, the healthcare and education sectors, as well as the success of child and family policies, i.e. the ability of at least four or five different ministries to work cooperatively. Another good example is the prevention of deaths due to injuries and accidents (drownings, traffic accidents, fires, suicides, falls, poisoning etc.), which requires the coordinated action of numerous different agencies. In Estonia (and Europe generally) this understanding has only taken shape during the last decade. The impetus for this arose out of the Finnish Presidency of the European Union in 2006, when the principle of Health in All Policies was formulated (Ståhl et al. 2006; Ollila et al. 2006). The Finnish Presidency helped to raise the topic of public health higher on the European Union's political agenda. It also helped to create a new paradigm among the decision-makers, according to which cross-sector cooperation is a precondition for achieving changes in public health. Today, the principles of Health in All Policies are included in all the key public health strategies of the European Union and the WHO.

Another important public health principle is evidence-based policy-making. In other words, decisions must always be based on documented facts. The priorities for action must be based on real needs and only the activities that are based on airtight theories and/or impact studies proving their effectiveness should be considered for implementation. In Estonia, a public health profiling methodology has been developed to implement this principle at the local level, which enables local governments to make systemic and fact-based analyses of the factors affecting the health of the residents in their area and, based upon this, make their decisions.

The third principle is community empowerment through involvement. The objective of this principle is to increase the readiness and skills of the community to develop their own living environment and means to wellbeing. The communities can be based on territories or interests. Thus, a community can be defined not only as the people living in the territory of a local government, but also as, for example, disabled people. Public health programmes are more successful when the communities they are directed at are involved in their preparation and implementation. In practice, this means network-based cooperation between residents, non-profits, service providers, LGs, officials and decision-makers – i.e. the main work does not take place in officials' offices but at the meetings of the various cooperation partners.

These principles have been taken into account in the reform of the regional organisation of public health in Estonia and in the preparation of the draft for the new Public Health Act. First and foremost, an answer has been sought to the

question of how to promote policies in the local governments that integrate various sectors and target the specific needs of a given community. The case presented in this article provides an opportunity to explicate the opportunities and problems encountered in implementing knowledge-based policies in the domain of public health

5.8.2 Current situation

The Public Health Act was adopted in 1995, and paragraphs 8 and 9 thereof have survived unchanged up to the present. Those sections prescribe the tasks of the county governors and the local government in the public health domain in very general language (Parliament 1995). In the years after the law came into force, corresponding jobs were created in the county governments; county health councils comprised of specialists from various sectors were formed; many in-service training programmes were organised; and every year, financial resources were allocated to the county governments for public health activities.

On the other hand, the local governments have been left in the background. The state has only provided training related to public health and unsystemically financed small-scale projects in a few dozen LGs. The text in the Public Health Act is so general that it is difficult to understand what the state expects of the local governments and how this task is related to the other tasks of the LGs.

International experts have also indicated the need to more clearly define the tasks of the local governments related to public health. Thus, one of the goals of the new Public Health Act is to more clearly describe the obligations and areas of responsibility of all the concerned parties in the protection of the population's health (Ministry of Social Affairs 2013). In order to prepare the amendment proposal, the National Institute for Health Development conducted several quantitative and qualitative studies. The analysis of the results showed clearly that the most significant problems were structural in nature – insufficient legislation, an unstable financing system, and the low capacity of local governments. The low capacity is expressed primarily in the limited skills and experience in strategic planning, the lack of specialists and financial resources, and the limited cooperation between local governments.

5.8.3 Searching for a sustainable development strategy

The search for more suitable development opportunities was based on the principle that the amendment proposals could not be developed in the office of a single official, but in cooperation with the people that will be affected by the amendments and whose task it will be in the future to implement the law. Thus, in addition to the officials from the Ministries of the Interior and Social Affairs, the active participants in the

discussion included representatives from the Association of Rural Municipalities of Estonia and the Association of Estonian Cities; the county governors; representatives from the county-based associations of municipalities; several heads of local governments as well as specialists. Also involved were experts from the Praxis Centre for Policy Studies and the Geomedia Consulting and Training Centre, who have long-term experience in the development and assessment of the strategies of state systems. It is important to note that in the inclusion process, “formal inclusion” was consciously avoided. This was promoted by the conviction of the leading specialists in the process that the local governments are experts in the local situations and therefore are the right people to provide the necessary input. The goal was to create amendments in laws that the local governments are actually motivated to and capable of implementing.

The knowledge-based development model for Estonia requires reliance on expert analyses and the best international experience, and the discussions were informed by these principles. The basis for the proposed amendments derived from thorough analyses executed by the National Institute for Health Development, including a comparative analysis of the experiences in other countries (**National Institute for Health Development 2011**). The countries chosen for comparison (Sweden, Denmark, Great Britain, Canada, Australia) have well-developed public health systems that in many aspects Estonia strives to emulate in the long term. Unfortunately, it had to be recognised that it was difficult to find states whose regional organisation and local government capacities matched Estonia’s, but who had experience in successfully implementing public health administration at the local level. Thus, we were forced to recognise that we need to find the most suitable solution here in Estonia on our own.

In the course of the analysis and discussions, it turned out that the local governments were fundamentally ready to play a more active role in public health, but they lacked not only the necessary resources (personnel, financing) but also the skills (skills for creating long-term strategies, skills for compiling cost-effective and efficient plans of action, skills for cross-domain cooperation, etc.). These challenges are not limited to the public health field – the lack of resources and skills is a problem in many of the areas of activities of the local governments.

It was also assumed that in order to ensure the sustainability of the regional-organisation model for public health, its development must conform to the general development orientations of the county and local governments. However, it turned out that the development orientations for the administrative organisation and regional development of Estonia are very ambiguous.

Officials from the Ministry of the Interior were also involved in the discussions related to the preparation of the draft for the new law. However, their contribution turned out to be quite modest, because they were not sure what direction the reorganisation of the administrative system in Estonia was moving in. At the end of 2013, the regional and interior

ministries had worked out an administrative reform plan and presented it to the government. However, the government changed in March of 2014 and the plan was again put on the shelf and one had to reconcile oneself to not knowing what would happen. This demonstrated that administrative reform is strongly tied to political considerations, and not to finding solutions to the real problems related to administrative development. Yet this circumstance prevents the development of sustainable policies in many spheres of activity important to the state’s development. Marju Lauristin has termed this “risk-averse political behaviour” – (see **“The political dimension of sustainability”, Lauristin 2006**)

The development prospects for the county governments turned out to be even hazier. As with the local governments, there was no long-term vision of the future for the county governments that could form the basis for planning the amendments to the law. During the process, some regional organisation models for public health were analysed that were based, for example, on the county-level local government associations and county development centres. It was considered possible that these models could be more sustainable for Estonia. But it was decided to leave them aside because it was found that it would not be sensible to develop an independent regional system in the public health sector that did not dovetail with the other regional administration systems.

A dead end was also reached in the search for additional funding for the LGs to perform the tasks related to public health. A consideration that needed to be kept in mind was that it was highly likely that the local governments would only be willing to go along with the proposed legal amendments on the condition that if they do, they would receive additional state funding. Consequently it was decided that the application for additional funding was necessary, even though all of the involved officials were convinced that the probability for receiving additional funding was very low. The reason was based on the preception that decisions to fund the local governments are based on political and ideological considerations which are very difficult for officials to influence.

5.8.4 Solutions in an ambiguous institutional context

Taking into consideration the rather vague and undefined nature of the development of the country’s administrative organisation, it was decided to create a proposal for amendments on the premise that the administrative organisation would not change significantly during the next five to ten years.

In the course of the discussion a consensus in understanding was arrived at on the part of all the participants as to what might be the responsibilities of the local governments in the area of public health. These were primarily the inclusion of public health topics in development plans (including the

principle of “health in all policies”), the creation of public health committees, and the analysis of the public health situation in one’s region. The tasks that assume greater financial capability and more specific skills on the part of the local governments were formulated as recommendations.

In addition to discussions concerning the amendment of the Public Health Act, the responsibilities of the state and local governments are subjects for discussion also with respect to other sectors of nation life. The reason for this is that, increasingly, various national strategies have directed the focus on prevention onto the local authorities. This is also reflected in the sector-specific strategies of various agencies, many of which specify increasing activities directed at improving the capabilities of the local governments related to preventive activities (e.g. see the Domestic Security Development Plan, and the Children and Families Development Plan). Following from this, several other agencies are also executing structural reorganisations. For example, the Ministry of the Interior has started to introduce a community-based model for law enforcement, and within the framework of the Children-at-Risk Programme the Ministry of Social Affairs is planning regional support units for the local governments. The objective of these changes is also to increase the capacities of local governments to resolve various welfare-related problems. As in the public health field, an understanding has been arrived at in other sectors as well that in order to realise positive changes in the wellbeing of the Estonian population, the contribution of local governments is necessary. However the achievement of this objective within the present situation, limited as it is by low administrative capabilities, is complicated. This circumstance has put the brakes on well-thought-out administrative reforms in very many sectors.

On the other hand, this situation has helped to gather specialists from various government agencies together around one table to think about how to find synergistic ways to deal with all these ambiguities. And as a result of this, today we have a network composed of officials from various government agencies (the Ministries of the Interior, Social Affairs and Justice, the National Institute for Health Development, the Public Roads Administration, Emergency Services, the Police and Border Guard, etc.). In their regular meetings they seek and find possibilities for unifying the activities of the different agencies in the agendas of the state and local governments, in the effective implementation of the national policies concerning prevention.

The network that was formed in the spring of 2014 has achieved very good results in a short time. Joint discussions have resulted in the formulation of a proposal to create committees in the county governments that would manage prevention work in various fields of activity, including the promotion of community security, the prevention of injuries, as well as the domains of public health and the welfare of children and families. This is a significant step forward compared to the current situation, where the health councils and separate injury councils that are part of the county governments,

focus narrowly on health and are often more formal than actual arenas for the development of prevention policies. The new committees will be better able to help in the implementation of the Health in All Policies principles at the county and local levels. This has been accepted as a new proposal to be included in the new Public Health Act.

In conclusion

In the process of working out the amendment proposals for the Public Health Act, it became clear that the ambiguous nature of the tasks assigned to the state and to the local governments significantly complicates the development of long-term and sustainable strategies in almost all the significant sectors of Estonian public policy. Thus, the excessive politicising of one nationally-important structural problem and its continuous exclusion from the political agenda also hinders long-term policy planning in other state sectors as well. The preparation of the draft for the new Public Health Act, which is dealt with here, is only one case among many. There is no reason to believe that health indicators of the people living in different areas of Estonia will equalise if the problems of regional development and increasing local government capacity do not become a priority in the political agenda. This is because a majority of local governments are not capable of planning and implementing effective prevention agendas. This low level of competence is also apparent in other areas concerned with public health, such as in the area of social and economic policy.

The current human development trends in Estonia provide a basis for believing that in 10 years, the disability-free life spans of new-borns in eastern and south-eastern Estonia will still be approximately 20 years shorter than elsewhere in Estonia. It is possible that the differences will be even greater, since the socio-economic and demographic situations in those areas will have further deteriorated and most of the population will be comprised of the elderly and of working-age people in poor health.

Under such conditions, it is difficult to alleviate the situation, since it is very likely that that healthier and more enterprising people have moved elsewhere in Estonia or abroad to find a better life. Attracting employers and creating jobs in the area will be made more difficult because the (healthy) workforce will be insufficient and the human and financial resources of the local governments will be spent mostly on caring for the residents. Thus, the local governments could turn into welfare service-providers rather than engines for regional development.

In order for the healthier and more enterprising people to stay in these areas, the local governments need to have significantly better skills for preparing sustainable long-term development plans. In addition, more competent officials and greater funding is needed to implement the planned activities

as efficiently as possible. The development of local welfare services, the creation of jobs and promotion of entrepreneurship, the development of a safe and enjoyable living environment – these are the local government tasks that can be better accomplished by more capable regional units. Today, most of Estonia's local governments cannot satisfactorily perform these tasks. Unavoidably this inability also affects the health of the population and other sectors of state governance.

Public health is a sector in which the need to cooperate with other sectors and interested parties is already pre-coded. Although the principles of the SE21 knowledge-based Estonian development model formed the initial premise for the development of public health policies, the indeterminate nature of

the institutional context of state governance has not allowed a sustainable policy to be created on this basis. The case analysed in this article is a good example of this problem. It is still too early to assess what the real and/or potential results and impacts of the regional reorganisation of the public health sector analysed in this paper will be. An assessment will only be possible after some years have passed. Until then, we should make an effort not only to assure that similar principles are also observed in policy-making in other sectors but, above all, to make sure that the lack of definition in the context of general institutional development does not continue to be the greatest hindrance to sustainable sector policies. ●

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5.9

Towards open and evidence-based policy

Innovation and the single government approach: who is responsible for research, development and innovation policies in Estonia?

► ERKKI KARO¹, RAINER KATTEL & VEIKO LEMBER

Introduction

The newest trend in research, development and innovation (RDI) policies is the open and inclusive governance of innovation ecosystems, which should ensure their better functioning and greater socio-economic impact. In European Union (EU) policies for the 2014–2020 period, this is expressed in societal challenges-oriented and smart-specialisation approaches. The former means focusing on solving “mega-problems” (e.g. aging, adaptation to climate change, energy security and environmental impacts) through RDI. In the case of the latter, the RDI policies need to be re-examined based on the better coordination and utilisation of local knowledge and economic capabilities.

These trends differ from the developments that have occurred during the last 20 years in the Central and East European (CEE) countries, as well as elsewhere in the EU. In those cases, non-intrusive RDI policies influencing the broader “framework conditions” of innovation were pursued, and these policies were narrowly assigned to the ministries that deal with economics and research. However, these institutions did not have direct control over several instruments – e.g. tax policies, the budgets and the competencies of the branch ministries, etc. – which could increase the efficiency of the RDI policies.

Knowledge-Based Estonia 2014–2020 (**Government of the Republic 2014; hereafter KBE-3**), which is the third Estonia’s RDI strategy, has adopted these new grand challenges and smart specialisation-oriented policy approaches, and established as one of its goals the development of better cooperation between the Ministry of Education and Research (MER), the Ministry of Economic Affairs and Communication (MEC), the branch ministries, businesses and universities.

In this article we provide a survey of the developments in the institutional design of RDI policies and the accompanying policymaking routines during the last ten years. We will demonstrate that relatively asymmetrical and fragmented RDI policy networks have developed, which hinder cooperation

between the concerned parties, as well as the development of a single governance of the innovation ecosystem. We also discuss the possibilities for changing these routines in the context of the goals established by the KBE-3 strategy.

By policymaking routines, we mean the everyday understanding, behavioural patterns and customs in the RDI policy arena that have grown out of the experiences related to policymaking and policy implementation. These routines determine the principal focuses for making and implementing policy decisions. However, we will not concentrate on the individual regulations, structures and institutions, but will try to explicate their combined impact on RDI policies, the functioning of individual organisations, and the efficiency of RDI policies (see also Karo, Kattel 2014a; 2014b).

5.9.1 Who is responsible for RDI policies?

Ten years ago, Sustainable Estonia 21 (SE21) established Estonia’s main goals in the development of a knowledge-based society. In SE21, a knowledge-based society meant certain values – research- and knowledge-based innovation, as well as a new approach to public governance and strategic planning. In this approach, knowledge and feedback as the basis of policymaking and implementation is not to be centred on the state or a single ministry, but on learning networks comprised of businesses, the state and civil associations (a so-called “national developmental network”).

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During the past ten years, attempts have been made to implement the ideas of SE21, and they have already formed the basis for three KBE strategies. For example, the Estonian Development Fund has been established, the activities of which – development of foresight capacities and related policy networks – were discussed as potential elements of the SE21 national developmental network. At the same time, many factors in the external environment – primarily the economic crisis and the significant growth of EU cohesion funding in Estonia’s RDI policies – along with developments in our research, entrepreneurial and governance systems, have created routines related to RDI policies which have made the observance of the SE21 ideas and the fulfilment of its goals increasingly difficult.

5.9.1.1. RDI policy routines²

Firstly, Estonia’s RDI policy formulations during the last ten years have been based, at least rhetorically, on a systemic approach to RDI, which includes constant mutual learning involving the state and the market as the main sources of feedback for policies. At the same time the policy measures, regulations, performance indicators, etc. have been based instead on a linear understanding, in which innovation is initiated by basic research that is followed by applied research and thereafter by the development of new practical applications/solutions for the economy and businesses.

This contradiction actually exists in most European states and also in EU policies. The dominance of the linear approach has emerged from a relatively limited understanding of the role of the state in research and innovation, which has presumed an RDI policy that is non-intrusive, influences primarily the “framework conditions” of the economic environment and has a high-tech focus. This type of policy is also based on horizontal policy measures that are in turn based on uniform rules and instruments for all the economic and technological sectors. The linear approach also presumes a traditional (hierarchical) system of design and implementation of RDI policies that has a clear division of roles and areas of responsibility and in which the more “scientific”, or quantitative and static, analyses of results and impacts play a more important role than the direct feedback received from the concerned parties (entrepreneurs, scientists, state agencies) in the course of implementing policies. (See also Karo et al. 2014b.)

Secondly, the parties involved in RDI policymaking have understood this linear approach quite differently, and this has resulted in asymmetric and fragmented policy networks.

On the one hand, scientists as well as the MER have focused primarily on the development of international excellence-based research. One of the significant features of this has been that the scientific community itself has assumed the leadership and decision-making roles in policymaking, through membership status in the decision-making boards of the grant-giving bodies and as a result of the autonomy granted to universities. This focus has essentially had a punitive effect on collaboration with local businesses (who tend to

have shorter-term interests), because the results of this type of research are neither publishable nor patentable; however the latter are considered to be the main performance indicators in excellence-based science policies.

On the other hand, the businesses and the MEC have focused on the other extreme of this linear logic. They assume that the R&D-based solutions should be immediately available (on demand) to businesses in the RDI system and/or that the companies themselves are capable of executing international knowledge and skills transfer. The latter has partially occurred, but the indicators related to the growth of productivity in Estonia’s economy indicate that this type of knowledge and skills transfer has been insufficient.

Overall, the scientific community has been developing and institutionalising its role and understanding of RDI policies since the 1990s; however, the issues related to innovation and the knowledge-based development of the business sector did not arise until the 2000s with the KBE strategies. As a result, the scientific community has achieved relatively more influence over RDI policies. Furthermore, the debates related to business-oriented innovation policy have occurred quite separately from debates about research policies (Karo 2011).

Thirdly, in addition to the influences of the scientific community and local businesses, the policymaking routines of the MER and the MEC have been even more affected by the EU through the Lisbon Agenda and the Europe 2020 strategies and related cohesion policy funds. Since the economic crisis, the latter have served as the main stabilising force (or brake on possible cuts) in the funding of Estonia’s RDI system. These EU policies have further legitimised Estonia’s linear RDI policy orientations, even though the fragmented nature of the existing policy networks and the limited ties between research and entrepreneurship have been identified as challenges during the formulation debates of all three KBE strategies. In addition, the rules for the administration of cohesion policy resources have assumed a clear distinction between the development and the implementation of policies, which has fragmented the policymaking networks even more (Suurna, Kattel 2010).

As a result of these factors, Enterprise Estonia and the Estonian Research Council have become the main channels of communication between the business and scientific communities. At the same time, sector-specific capabilities or networks have not been consciously developed within them. Therefore, the main mechanism for obtaining policy feedback has remained the general “statistics” which describe developments in the research system, and the financial indicators of businesses (e.g. the number of publications, value added per worker). The ideal basis for the RDI policy should however be a close and functional network-based cooperation between scientists, entrepreneurs and their (sector-based) representative associations, and needs to be focused on knowledge-based development, technological learning, etc.

² Based on Karo et al. (2014a).

Fourthly, the needs of the branch ministries, which, based on the Research and Development Organisation Act, must participate in the development of RDI policy in their areas of responsibility, are underrepresented in RDI policy-making. Thus, the potential importance of applied research work in their areas of responsibility and governance has been ignored. Further, the funding of applied research is not sufficiently supported by businesses, which tend to be increasingly integrated into globally-managed and steered value chains and lack the capabilities to fund and organise long-term research and cooperation with scientists.

5.9.2 The main paradox of RDI policy

According to the rules of the game of the RDI policy, the Estonian scientific community has been very successful (see Allik 2011). Today, the main problems related to research policy are partly related to the system's own success – increasingly, based on international assessments, the scientists conform to the criteria of excellence-based research and should receive funding, but there are insufficient resources in the state budget for this.

We could also say that Estonia's companies have become more innovative and knowledge-based – cheap-labour based subcontractors have increasingly become smarter and are striving to climb up the global value chains. However, by now the main challenge is making a qualitative leap within the highly-competitive global manufacturing and innovation networks, which assumes strong capabilities and the skills to move up the value chain.

Meeting these challenges requires more substantive cooperation between research and business, which should be in the interests of both parties and has already been addressed in three KBE strategies. At the same time, the described RDI policy routines have become ingrained in the relatively fragmented RDI system, especially regarding the relations between the state and the business sectors:

- Companies finance about 4% of the public sector's R&D activities and the public sector about 10% of the business sector's activities (see **Government of the Republic 2013**). Few research topics that are significant to both are included in both state and business funding priorities (also see **Karo et al. 2014c**).
- Although, depending on the year, Estonian businesses have financed about 50% to 60% of Estonia's RDI investments (it is also estimated that about 50 to 60 companies make 90% of the RDI investments made by the business sector), their main focus is on financing their own internal "experimental development". Universities and other R&D institutions financed by the state and the EU carry out most of the basic and applied research (see **EAS 2014; OECD MSTI database**).

Based on the above, the following central paradox of Estonian RDI policy can be formulated: In order to increase RDI

funding and improve its socio-economic relevance, the ties between science and business must be strengthened and the funding for and commissioning of applied research must be increased, and this should be primarily steered and funded by the private sector. However, the state currently plays the greatest role in financing basic and applied research and orienting the behavioural routines of the universities and scientists. Therefore, the state, through its own RDI policies, can direct the behavioural routines of the scientists, universities and businesses in such a way that applied RDI becomes "interesting" and "useful" for a broader circle of scientists and enterprises in the development of their competitive advantages and capabilities.

In summary, the KBE-3-based goals require a thorough audit of the routines prevalent in RDI policy today. This should not focus only on searching for new sources of financing and/or reorganisation of the current "money pots", but a systemic evaluation and reconstruction of the goals, roles and behavioural routines of RDI policy is needed. In short, the goal should be a greater focus on the "applicability" of RDI activities by the government and scientists, and the greater "scientific" orientation of the businesses. However, these changes cannot occur without more open and inclusive policymaking routines and broader development of the state's learning capabilities (e.g. regarding tax policies, regulations, public procurements, etc. as parts of RDI policy). However, this assumes broader and more open governance of RDI policies and the innovation ecosystem.

5.9.3 Who should be responsible for RDI policies?³

The KBE-3 strategy specifies that increasing the socio-economic impact of the RDI system can occur through smart specialisation and the development of a greater role for the branch ministries, and a strengthening of their capabilities.

The latter policy focus has emerged through a domestic experimental process based on Estonia's own experiences. However, smart specialisation is an ex ante conditionality, established by the EU for the utilisation of cohesion policy resources in the 2014–2020 period, that does not conform well to the policymaking routines and current economic context in many of the CEE countries (see **Karo et al. 2014c; Karo, Kattel et al. 2014b**).

In other words, both orientations presume a change in the policymaking routines: RDI policymaking should become more open and inclusive both in regard to the internal coordination of the public sector as well as in terms of the relations between business and society. What has been done to achieve these changes in Estonia and what are the first assessments of these attempts?

³ The following discussion is based on the research conducted within the framework of the Research and Innovation Policy Monitoring Programme (TIPS) (Study 5.3 TAI poliitika kujundamise ja juhtimise süsteemi analüüs), which is based on policy analysis, participation observation and discussion with policymakers. Karo, E. et al. (2014a).

5.9.4 The role of the branch ministries

Two solutions have been developed to ensure the promises formulated by the KBE-3, which are that “the state will be a smart customer for applied research and development” and “the organisation of the research conducted for socio-economic goals will be efficient”.

Firstly, using the EU cohesion funds, the MER is financing the work of research coordinators in some of the branch ministries (Ministry of the Environment and Ministry of Social Affairs). The original task of these officials was to participate in developing a better sector-based understanding of issues related to the internationalisation of RDI. Today, they are being assigned increasingly strategic tasks in the development of new RDI policy measures in the branch ministries.

These research coordinators are middle-level officials (advisers in the planning and analysis departments). However, experience shows that the development of the RDI policy capacities of the branch ministries is not just a matter of “re-planning” funding streams and single activities. Today, the agencies, rather than the ministries in various areas of government, have the monetary resources and meaningful domain-based demand for RDI, and therefore, the coordinators require greater legitimacy to steer and influence those agencies as well.

The development of the capabilities of the branch ministries assumes that the role of RDI is operationalised and that “innovation thinking” is developed throughout the ministry’s area of responsibility. Thus, the process of making and implementing public policies must be rethought, from the creation of advisory networks to the treatment of RDI as a possible tool for the fulfilment of the ministry’s core tasks. It is natural that in a public sector that is oriented toward cost efficiency, the development of such new routines can be a long and difficult process.

The MER’s funding of such work at the other ministries is an entrepreneurial step for the initiation of cooperation, coordination of activities, and change of existing routines. However, the branch ministries should respond to this proactively by assigning strategic importance to RDI issues in their own ministries and by consciously developing networks to support their own sector-based policymaking, e.g. the creation of task-force-type RDI or innovation councils (also see OECD 2011); or by learning from the experiences of the MER’s Research and Innovation Policy Monitoring Programme.

Secondly, the above recommendation is even more important considering the fact that the KBE-3 dictates the assignment of “creating an inter-ministerial cooperation platform for the additional financing of RDI and for better coordination between the areas of responsibilities between ministries, based on the principle that the main responsibility ... for R&D lies with the ministry responsible for that sector.” In implementing the 2014–2020 EU cohesion policy, the MER plans to share further its policymaking “tools” with other ministries. A policy measure is planned for increasing sector-based research capabilities, which would co-finance the RDI activities of the branch ministries.

This may again provide a significant opportunity to change the RDI policy routines, but this assumes that the branch ministries will develop a strategic view of RDI and will not simply view the money as having “fallen in their lap” and use it to cover existing “line item” costs. On the one hand, the sector-based RDI policy networks could offer significant support for the development of the ministries’ RDI policy routines and RDI demand. On the other hand, this would make it possible to make sure that the opportunities offered by the MER are not misused. However, it is very important that the representatives of the “old” routines (i.e. the scientists who are used to operating in global excellence-based competitive systems) do not dominate in the development of these networks and the RDI systems of the branch ministries.

In addition, the branch ministries should themselves create clear and reliable sector-based and applied RDI policy initiatives. These could be experimental and challenge-oriented RDI programmes that offer both the research institutions and businesses long-term certainty and motivation for the development of the capabilities and routines needed to conduct applied R&D. Individual short-term projects cannot provide the basis for the development of such routines, because other RDI funding, especially in the R&D agencies, is excellence-based and operates according to noticeably different routines.

In summary, these two “policy innovations” by the MER provide an opportunity for making meaningful changes in the RDI policy arena, thereby making it more inclusive and open, at least in the public sector. The attempt by the Ministry of Social Affairs to develop an RDI strategy in the healthcare field based on the KBE-3 goals and the Ministry’s own needs may turn out to be a good example of this (Terbishoiu T&A 2014).

5.9.5 Smart specialisation

As a second significant factor in increasing the socio-economic impact of RDI, the KBE-3 envisages that “RDI investments chosen and managed according to the smart specialisation method will promote the development of growth areas of activity at a heightened pace.” To achieve this, an applied research programme and several associated measures (scholarships for students, the development of demand-based innovation policies, etc.) are planned for the 2014–2020 period.

To date, the smart specialisation process has been led by the Estonian Development Fund, which has been the target of much criticism (see Karo 2014). After it was founded, the Development Fund was an organisation that reported to the Parliament and administered the state’s shares in Estonian Telecom, which politicised the organisation’s governance (Board) and distanced it from the everyday planning and implementation of the RDI policies carried out by the MEC and MER. In its initial form and despite its formal autonomy, the Development Fund was often seen as an extension of the central bureaucracy, since people with public-sector backgrounds were hired to work there and significant changes in RDI policies were not observed.

However, in the last few years, changes have occurred in

the personnel and strategic focus of the Development Fund. More people with private-sector backgrounds have been brought into the organisation and the problems related to business (primarily to start-ups) have started to receive more attention. Thereby, at least initially, the preconditions were created to develop a network that includes both the state and businesses.

Smart specialisation indeed assumes the creation of such networks for providing feedback on RDI policies not within the public sector, but primarily in cooperation with businesses. Yet, in order for smart specialisation to succeed, similar vertical and horizontal cooperation and coordination within the public sector is needed - on the one hand, in order to ensure the conformity of various measures and, on the other, so that the branch ministries (and organisations in their areas of governance) attach sufficient importance to the defined areas and needs related to smart specialisation.

To date, the Development Fund is still too far removed from the everyday functioning of the public sector to coordinate RDI policies and it has insufficient power and experience to influence the other actors. The smart specialisation process, currently on-going under the management of the Development Fund, may get caught in a trap created by the legacy of old routines and the time pressures associated with the implementation of EU cohesion policy. Thus, new policy-making routines should be developed across the public sector, as well as in its communications with business. However, today we have moved onto the “fast” specialisation track, by immediately seeking the “right answers” regarding smart specialisation (concerning what and how much to specialise). This is another example of the linear policymaking logic. Yet this is characteristic of most CEE countries, and precisely because, in its recommendations and guidelines, the EU has placed the emphasis on the results produced by the process rather than on the changes in policymaking routines that are presumed by smart specialisation (Karo, Kattel et al. 2014b).

Conclusions

At the beginning of the EU 2014-2020 financing period, Estonian RDI policy still faces many of the challenges already raised by SE21. The routines and networks related to innovation and applied research are still weaker and more fragmented than in research policies. An important challenge is still the creation of integrated “developmental networks” comprised of the state, business and the scientific community. In developing these networks, the main emphasis should not be only on changing and developing the public sector’s internal routines, which has been the focus of the MER and of research policies recently. When formulating the challenges of RDI policy and suggesting solutions (see more about recommendations in Karo, Kattel et al. 2014b), a greater role must first of all be assigned to the business sector (in the form of branch associations).

Estonia’s RDI policy is currently at the threshold of some quite radical opportunities. It could even be said that experimental RDI policymaking is on the verge of burgeoning in Estonia.

The experiences of the branch ministries related to the development of RDI capabilities and the organisation of smart specialisation processes, which are briefly analysed in this article, demonstrate that the independent and domestic RDI-context-driven formulation of policy challenges and the search for appropriate solutions create much greater possibilities for making the routines related to the RDI system and policymaking more sustainable than the rapid adoption of foreign ideas and EU regulations, without them being operationalised and flexibly adapted locally.

What the emerging experimental RDI policymaking needs the most – as was also understood by SE21 – is a supportive political and societal environment, which makes possible both experiments that may fail, as well as the unbiased acceptance of solutions that work, as well as increasingly stronger sector-based policy-making networks, which are already gradually developing. ●

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Towards open and evidence-based policy

Sustainable and democratic governance: the feasibility of implementing the vision of SE21

► GEORG SOOTLA

Introduction

The Estonian National Strategy on Sustainable Development – Sustainable Estonia 21 (SE21) – formulated as its objective the development of Estonia into a knowledge-based society, and articulated the strategic mechanisms for guiding the nation’s development. This was envisaged as a synthesis of three fundamental western political strategies – neoliberalism, conservatism and social partnership (social democracy). The synthesising strategy offered by SE21 assumed that today’s policymaking occurs in a context of relatively high ambiguity (complexity) and uncertainty (“risk society”), and would be legitimised through an open policy network. SE21 puts forth “a vision of an institutional system for ‘navigating’ as sustainably as possible in the space of an in-

creasingly complex external environment and conflicting development goals...” (SE21: 58)

The central idea of SE21 is that the government must increasingly incorporate the involvement of civil society. This idea corresponds to contemporary trends in policymaking, and primarily to the paradigm of democratic governance (See the introductory chapter, 5.1.). SE21 focuses on many key premises of democratic governance, such as negative feedback (bounded rationality) in decision-making, the legitimacy of policies in the sense of their being easily understood by the public, and the importance of communication. SE21 emphasises that “the knowledge society is the only development model based on reflective knowledge-based adaptation of the

society and state to changes in both the internal and external environment” (SE21: 54) and this will “result in an increased critical reflection capacity in the people and institutions” (SE21: 50).

This approach to the implementation of the strategy is however based to some extent on an simplistic linear (or “stages of growth”) perspective on development (see also the introductory article 5.1 of this chapter and the article on the politics of innovation 5.9). SE21 should have demonstrated more persuasively how a new policymaking format, such as open policy networks, can grow out of the traditional institutions of representative democracy and supplement them. Instead, SE21 set the following goals: “to replace an interest-based (and very lengthy) dispute between different partners with knowledge-based decisions” and “with strategic developmental management.” (SE21: 51) SE21 was based on the presumption that the existing mechanisms and institutions of representative government, such as providing policy input via interest groups or political parties, is no longer sufficient – which is true. SE21 also points out some specific steps for the development of existing institutions of representative democracy, such as the creation of a Parliamentary Development Committee (SE21: 63). However, the SE21 vision that policies based on interests and competition must be replaced by an approach that is based on the civil-society-centred “comparison and reconciliation of integrated ideas and visions” (SE21: 20) seems like a rather simplistic expectation.

SE21 is based on the assumption that “the ideal of the knowledge society is a society that rationally plans its development and realises the plans in a concerted manner” and “the subjecting of political decisions to rational calculation and feedback-based analysis” (SE21: 50). The National Development Network established for this purpose should become a new centre for working out decisions, and one that involves the institutions of representative democracy in the process. This idea of a strategic management process for development that transcends representative democracy tries to combine a “developmental” state with the logic of rational choice and open governance networks. Yet these are different paradigms based on rather different values. The actual ideal of a knowledge-based society in SE21 is not a synthesis of these different paradigms, but rather a wish to give the decision-making power to a new elite of strategy-makers that think rationally and in terms of universal interests. In this connection, attention should be directed to the fact that the EU’s Lisbon Strategy (2000), which sought to create a knowledge-based society in Europe, and upon which the Sustainable Estonia 21 vision was clearly based, have remained rhetorical to a large degree. The purpose of creating a mechanism for sustainable policymaking is much more complicated than was thought at the time.

5.10.1 The possibilities for democratic governance in Estonian policymaking: a case study

After the accession of Estonia to the European Union, policymaking in Estonia developed quite in the opposite direction from the SE21 vision. This is also confirmed by the recent reform proposals for the public sector (see EKK 2014, see also subchapter 5.3 In pursuit of efficient public administration: Reform proposals for the public sector). A crucial role in the emergence of this trend was played by the EU’s administrative practices and culture which draw largely on the administrative culture of developed Continental Europe and promoted by the administration of EU structural funds. It is also a reaction to the weak policy coordination capacity in Estonia in the 1990s, which was emphasised by the 2011 OECD Report. The collegial cabinet model, which ensured relatively effective coordination and an emphasis on institutional policies in policymaking in the 1990s (which built Estonia’s reputation as a successfully reforming state), was in the 2000-s replaced by a splintered ministers’ council model, which is a typical feature of an administrative state. Instead of the horizontal balances and administrative decentralisation typical of democratic governance, problem-solving in Estonia has been conducted through the strengthening of an administrative hierarchy (centralisation, merging of agencies) and with legal instruments. This has enabled the cutting of expenditures and increasing efficiency in selected areas, but has simultaneously eliminated many sources of resource generation for the government. A good example is the police reform of 2010, which tried to improve the organisation’s functional division of labour by merging agencies and centralising. However, the police reform of 2014 set out to implement the principles of democratic governance with a focus on developing the policymaking capacity of the internal security sector and decentralising the basic territorial units (police stations), and increasing their community orientation.

Below we focus on the lessons learned from the creation, functioning and decline of the Local Government and Regional Development think tank, in order to demonstrate the difficulties that emerge when traditional top down policymaking is transformed into open and inclusive policymaking. In this paper the concept of an open policymaking network was concretised and this case illustrates the variables that can help or hinder the development and functioning of such networks in Estonia today.

Thus, with the creation of a think tank as a new type of discourse arena, an attempt was made to expand and strengthen the societal input into local government policy. However, the think tank format which was used does not ensure enough legitimacy and continuity for the process. The discourse arena created by the minister ceased to exist when he resigned. What are the lessons to be learned from this case?

Firstly, it should be said that during the last ten years, the Parliament has transformed from a working parliament, which

focuses on initiating and fine-tuning draft legislation, to “a parliament of speeches”, which focuses on debating and legitimising the strategies of national development, and leaves the development of instruments for implementation to the government. Therefore, the creation of a new national developmental network, proposed in SE21, does not seem like a sensible idea. Rather, the discussion of strategic goals in Parliament should be made more consistent and transparent, by developing more effective arenas for legitimising and communicating such discussions. Above all, the discussion of nationally important issues by Parliament should be taken to their logical outcomes and the resulting strategic agreements should be accepted as policy documents.

Secondly, this case shows that an open think tank, or Advisory Council, should not be linked with only one official institution. It should be a network of various societal entities that provides a discussion arena and input to different institutions, thereby creating a legitimate space of meaning and messages in a specific policy domain. An Advisory Council format that is dominated by those in power and by their partisan arguments does not allow for policy input to be broadened, and remain too close to the excessively strong influence of everyday politics. But just this type of broadening of policy input is essential if we are to move toward innovative and sustainable governance.

Thirdly, autonomous discussion arenas like the LG think tank do not lay claim to power. They are merely a discourse arena for policy communities which support and supplement, not replace, the institutions of representative democracy; their role is to provide and legitimise policy alternatives and mobilise the actors in their domain.

5.10.2 Local Government and Regional Development think tank: history and lessons

Local government (LG) reform has been on the agenda since 1993, when a law hastily adopted in the pre-election period was not able to provide a sustainable solution (Kama 1993). In the course of the later attempts to update the LG system, starting in 1996 (there have been at least seven), different scenarios for reform were formulated, but due to weak policy input were not placed on the government’s agenda, except for the reform attempt in 2000-2001, which was launched but soon halted.

On 23 September 2010, the Parliament discussed “The Partnership between the Central and the Local Governments” as a nationally important issue; the paper had been prepared on behalf of civil society by the Estonia-wide associations of the local governments in cooperation with the universities (OTK 2010). “The main conclusions reached by the representatives of civil society were”. The discussion of any current issues regarding the relations between the local and central

government, and the various small-scale changes that usually create many disagreements or political dissension, should be separated from the discussion of the key issues of LG policy strategy, and corresponding arenas should be created where decisions will be based on rational choices. Therefore, the conclusion is that it is reasonable to establish a permanent local government and regional development think tank, which will involve scientists, politicians, top officials and local government functionaries”. (OTK 2010) The action programme (KL 2011) of the ruling coalition comprised of the Reform Party, Pro Patria and the Res Publica Union (IRL), which won the parliamentary elections a few months later, established as one of its goals the development and funding of a think tank focused on local government development where scientists, politicians, representatives of local governments and the civil sector could meet.

On 23 August 2011, a summer seminar organised by the NGO Polis for presenting the think tank’s ideas to all interested parties took place in Lagedi. This forum was attended also by the representatives of the parliamentary factions, but more in the role of opinion leaders on the LG topic. The strategy for developing the think tank was supported by the participants, including the top politicians. Many new actors (Praxis, The National Foundation of Civil Society, and others) expressed an interest in joining this process with the proviso that it really develop into a constructive cooperative arena and is not reduced to being just a chat room. An inception paper prepared for this meeting proposed that the think tank become: a steadily functioning, broad-based, structured and purposeful arena of discourse (based on long-term plans), for the most adequate possible reporting on the central issues and prospects related to the LGs and regional development, and as a forum for a maximally constructive discussion on these topics. ...The think tank will not make any decisions or try to directly influence the decisions but will create as clear a picture as possible of the developments and related positions in connection with the LGs. It was considered necessary to include the existing knowhow, as well as administrative, political and communications resources in the development activities of the LG sector, which would then be formed into a flexible network... andto manage this discourse and resources as efficiently as possible, to ensure the unhindered input of positions that are important to everyone, as well as the knowhow to achieve synergy based on the existing knowhow resources (Inception Paper 2011).

The civil society’s actors initiative created the preconditions for the development of the think tank, but as soon as government actors became involved in the process this beautiful concept started to crumble. Primarily, the realisation of certain items in the coalition programme started to depend on the rigid “ownership” of policy domains by the corresponding parties and their ministers, which is characteristic of

Estonia's government cabinets. The input into coalition program came from the Reform Party, which had the best command of the subject since it headed up the constitutional committee discussion in Parliament in 2010. After the formation of the coalition, this topic became the domain of the IRL, for whom this was an unexpected initiative and who lacked a clear vision of the possible role of the think tank. After the consultations with the lead parliamentary group for the support of local and regional development in June 2011, which took place primarily as a result of an initiative by Polis, plans started to be made for the creation of an Think Tank. On 26 September 2011, at the first meeting of the parliamentary support group, it was decided to create an Advisory Council. However, soon the discussion of the issue was framed by the political confrontation of the coalition partners, based on their need to score political advantages or to restrain competitors. Although the initiators of the Advisory Council only aspired to create the meaning-space for policy discourse and to be a facilitator of policy inputs, some parliamentary factions and politicians were not able to understand that the Advisory Council could become a policy arena that was open and could provide authoritative policy input from society. The active members of the support group saw the Advisory Council not as a partner, but as its sub-unit.

Instead of the Advisory Council's central idea of focusing on institutional policy issues, such as the balance of power between the national and local governments, or the role of local taxes, the support group saw the Advisory Council as "experts" who could help them prepare specific issues, such as the development of fish farming in the counties or the organisation of regional bus transportation. The founding meeting of the Advisory Chamber took place on 12 December 2011, mainly at the initiative of the civil society representatives. At the same time, it became increasingly clear that the members of parliament did not see the need for such policy input.

Consultations with the Minister of Regional Affairs started in September of 2011. Based on his list, the minister convened the think tank and the first session occurred on 31 October 2011. A relatively broad spectrum of interested parties was represented, which gave the minister strong informational input. However the politicians were under-represented and the officials over-represented, something the initiators of the think tank idea had not intended. Some of the well-known representatives of the policy community were

left out, especially some of key figures of the 1993 reform and subsequent reform attempts. Thereby, the legitimacy of the discussion arena, the institutional memory and the ability to impact public opinion was reduced. The minister did not impose his agenda and provided quite a broad framework for the discussion. However the discussion focused on one topic – the merger of local governments. And with that the think tank was transformed into a broad-based ministry committee.

The think tank became an arena for quite an open-minded discussion. Among other things, a final document of the National Rural Municipalities' and Cities' Day (held in March 2013), which was quite critical of the government's policies, was discussed at the think tank meeting. The LG reform package was presented on 12 October 2012, not as a finalised completed document but in order to establish the assignments for analysing and choosing among six possible scenarios, including the preservation of small rural municipalities. In the course of the discussions in the think tank, the minister abandoned the initial timetable for reform, according to which the proposed draft was to be enacted in January 2013, and implemented by October 2013. Instead, after exhaustive discussions in the think tank, the package of reform scenarios was sent initially to the county governments, the county-based and national local government associations, and the parties related to them, and also the ministries and universities. Based on their opinions and proposals, which were summarised in writing and sent to those making the proposals for feedback, the think tank's working groups, in cooperation with the ministry, started to discuss new institutional forms of local government in May 2013. Since preference was given to the scenario based on areal hubs, each county governor, in cooperation with the local government association, had to present an analysis of the county areal hubs. After consultations that had lasted 14 months, the reform plan was sent to the concerned parties for an official round of approval in January 2014. The process faded out in March 2014 in connection with the breakup of the coalition.

Conclusions

In summary, today policymaking can no longer rely on the logic of traditional governance and administration. Flexible approaches are needed that draw on the democratic governance paradigm. ●

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SUMMARY

► GEORG SOOTLA

This chapter explicates how difficult it is in today's complicated world to develop an efficient and sustainable political process. We often expect more from our policymakers than they can objectively deliver. At the same time, in Estonia's policymaking today we can see the general problems and contradictions that are also prevalent in other democratic countries. Just making people more aware of these problems and contradictions would allow us to significantly increase the effectiveness of policies. It is clear that Estonia's governance system requires considered and smart changes, because the limited wish or ability of governments to initiate institutional policies has started to hinder development in many spheres of life. If to date attention and criticism have converged on the delay in local government reform, then just as necessary, if not more so, is increasing the coordination capability of the government and its apparatus. The splintered nature of governance in Estonia is caused only to some extent by attempts of political parties to try to highlight their own achievements and diminish those of others. Another problem is that the pattern for today's core executive, as an institutional structure, is clearly unsatisfactory for efficiently aligning policies. This is also indicated in the OECD (2011) Report, the recommendations of which have not been pursued with any special sense of urgency. Prescriptions that are too simplistic (reducing the number of members of parliament, officials and ministries) are being presented in the current debate on state reform, but because they do not consider the diverse roles of democratic institutions, they may result instead in a decline of governance efficiency. Democratic governance institutions are not so simple that strictly mechanical reductions or increases can solve the very complicated and interdependent problems. There is no sense in discussing ideal formulas for victory that cannot realistically be implemented. Existing opportunities must be perceived in the institu-

tional policies and these opportunities need to be utilised wisely. In almost all the articles in this chapter, such opportunities are pointed out and if efficiently implemented, they could have an unexpectedly great impact and generate positive changes.

Today, when speaking about local government reform, for instance, the political parties stress their differences, but if we take a closer look, we can also see significant common ground in the alternative ideas. In order to increase this common ground, we should significantly broaden the policy input, i.e. the opportunity for various concerned parties to impact policymaking, thereby making them into full-fledged partners in the political process. A mere invitation to civil society actors to enter into the policy process is just one, and not always the most efficient, way of improving policy input, because the civil society organisations in Estonia are currently still too dependent on the state. Increasing the policymaking capability of society can occur if the influence of various concerned parties is effectively balanced and discourse between them skilfully mediated by the government. As a result, the public interest, i.e. the common ground of various groups, can be mapped out.

These problems are also reflected in the Europeanisation of policies. In this chapter, we tried to show that, although the relative importance of learning in the process of Europeanisation is increasing, too many European Union policies are adopted directly without considering Estonia's specific needs and interests. The Estonian political communities, in which bureaucrats dominate, often try to use the EU's recommendations to legitimise their own specific points of view. This reduces the capacity for policies to be adapted to changes and promotes so-called "freezing-up." Most of the authors of the articles in this chapter believe that the most effective medicine against this is greater openness and an interactive decision-making style. ■

SUMMARY:

ESTONIA'S POST-2015 DEVELOPMENT MODEL

► RAIVO VETIK

In the fall of 2015 it will be ten years since the Parliament adopted Sustainable Estonia 21 (SE21), the strategic development plan that articulated the long-term objectives of Estonian society in relation to the improvement of people's wellbeing, of social cohesion, the sustainability of the natural environment, the development of the cultural space and the functioning of democracy. This report analyses the development of Estonia in the last decade by the objectives and measures of SE21, presenting not only extensive empirical data and traditional social analysis, but also asking existential questions such as who we are and where we are going, and what is important and not so important for the nation.

Such an approach serves the aim of contributing to the ongoing public debate on the development model for Estonia. The need to change Estonia's current development model has been emphasised by many influential political and economic voices, ranging from Jüri Raidla, who initiated the debate on state reform (Raidla 2013), to the Estonian Employers' Confederation in its Manifesto (ETK 2014), the Estonian Cooperation Council in its State Maintenance Plan (EKK 2014), the National Audit Office in its 2014 Audit Report (RK 2014), the Government of the Republic in its competitiveness plan Estonia 2020 (The Estonian Government 2014) and to the President of Estonia in his speeches (Ilves 2014). This summary should be seen first and foremost as an attempt to uncover the logic of the last decade's social trends as well as the languages of their interpretation, and discuss which could impact the choice for the post-2015 model of development the most.

Making sense of ongoing social changes

The sustainability of Estonian society is mainly influenced by two fundamental social changes – the rapid decrease and ageing of the population, and Estonia's openness to the world. Demographers are able to predict fairly accurately the composition of the Estonian population in ten and twenty years (Eurostat 2014). These predictions, some of the most shocking of which have been described by Rein Taagepera (Taagepera 2005), also feed the debate on Estonia's possible extinction and on how to prevent it. The debate has been dominated by as-

surances that such extinction can be avoided, even giving rise to a new term: "sustainable shrinking" (Kõomägi 2011; Luik 2013; Kiin 2014). Since the latter term can be easily associated with the race between Achilles and the turtle where, in spite of their different speeds, the distance between the two was constantly shrinking, it may be more reasonable to use the term "resilient adaptation" instead (see Walker 2006).

Estonia's openness to global processes is reflected, for instance, in the rapid development of a number of sectors in the recent decade, which is mainly attributable to participation in international networks. At the same time, questions remain: How successfully can the Estonian people and institutions adapt to the new international environment? How can Estonia further improve its position in the increasingly competitive international value-creation chain? How can the loss of the labour force be avoided in the situation where the borders are open and our living standards remain markedly lower than in some neighbouring countries? How can the vitality of the Estonian language be preserved in large digital communication networks?

These questions can be answered in the framework of two metaphors that grow out of different parts of this report: social entrapment and empowerment for development. As a generalisation, entrapment refers to the type of problems that Estonia is facing, while empowerment provides a key to finding a solution. These two metaphors are used in this report with a view to analysing Estonia's development trends from the field theory perspective, not to repeating what has already been said in the report in trendy words.

In analysing social change, classical social theory differentiates two basic dimensions and action strategies – on the one hand, relations of hierarchy, and on the other, relations of belonging in society, oriented either towards reproduction or change. The essence of the relations of hierarchy is the proportion of equality/inequality in different parts of the social realm, and the public's perception of its legitimacy. In case of the relations of belonging one looks at interests and values that either unite or separate different social groups and at the evolving "we-them" and "sacred-profane" perceptions within the relationships. While the Max Weber tradition analyses the reproduction of social hierarchies in the course of social

changes, the Émil Durkheim school of thought focuses on “social reintegration”. When analysing hierarchies, the first school introduces the term social status, while the latter assumes that in order to overcome fragmentation of the society, new institutions must be set up that would re-connect the social system.

In addition to classical social theory, we also take into account the ideas of field-theoretical cultural sociology and the Tartu school of cultural semiotics, which can significantly contribute to the understanding of the logic of Estonian social development. One can claim that the language system of Saussure, which forms the basis for and is being developed further by both cultural sociology and cultural semiotics, is in its essence linked to Durkheim’s concept of society (Culler 1977). Both rely on a similar metatheoretical assumption that provides a different perspective in the analysis of social change, in comparison to the current approaches to sustainable development.

Since the publication of the Brundtland report *Our joint future* in 1987, the ideas of the Club of Rome, which emphasised the need to protect nature by restricting economic growth (Meadows 1972) were gradually abandoned in both national and international policy documents on sustainable development. In social science literature, the sustainability concept developed on the basis of this withdrawal is seen as questionable (Tellegen 2006). While the field-theoretical approach assumes not only continuation, but also change in sustainability analysis, respective policy documents are limited, as a rule, only to the first. In such a framework, sustainability often remains nothing but rhetoric, i.e. something that everybody professes agreement with, but which does not translate into real policymaking and remains nothing but good intentions.

In the academic literature of the last decade, attempts have been made to re-define sustainability through the concept of system resilience, which is used by the 2014 Global Human Development Report (United Nations 2014) as well. System resilience can be defined as the system’s capacity to resist external negative impact, while preserving its functions, structure, feedback capacity and, as a result, its identity (Walker et al. 2006). There is also a lively debate in literature about the relationship between the concepts and practices of sustainability and resilience (Benson, Craig 2014; Rees 2014) and, on the whole, it seems that the latter has certain advantages, due to being process-oriented (Redman 2014). However, as with strategy documents on sustainability, they also share a joint weakness, i.e. the insufficient consideration of factors such as power and politics, which are introduced only in the form of utopian calls such as “Let’s start living as friends!”

Field-theoretical cultural sociology assumes that as policies are created by people who have power, and as people in power are mainly interested in the preservation of the status quo (i.e. their position of power), such moralistic exhortations are just not enough.

Social traps

One of the main keywords of this report is the metaphor of the trap. Traps highlighted in this report concern concepts like middle-income trap, welfare state trap, glass-ceiling trap, poverty trap, higher-education trap, routines trap, etc. This may create an impression that Estonia’s whole social space consists of nothing but traps that surround us and are there to lure us in. In reality, most of the traps mentioned in this report describe the same phenomenon – the weakness of feedback within the social system. In this context, a trap can be defined as the inability of an individual or a group of individuals to improve their position in the social hierarchy regardless of their efforts. This metaphor describes a social system that is excessively formal and ritualistic and casts doubt over its capacity to adapt to changing environment because the inflexibility of relationships between the system’s elements wastes resources and restricts the changes necessary for adaptation.

The victim of the middle-income trap is the Estonian economy as a whole, which is struggling to improve its position in the international value chain. Estonia’s lingering status as a cheap outsourcing country has been well described in the latest Manifesto of the Employers’ Confederation: “We dashed off and soon left behind the group of poor countries, but lost our steam in catching up with richer countries ... We don’t want to do cheap jobs any more, but don’t yet know how to do expensive jobs” (ETK 2014). The Human Development Report shows that the relatively low position of the Estonian economy in the international value chain has largely remained unchanged in the last decade.

Changes in the economic structure have not increased productivity as much as expected, and that has also restricted the possibility of resolving domestic social problems. For instance, Estonia’s per capita spending on social protection is still less than 40% of the European Union average. The level of social exclusion in Estonia has not decreased over the last decade, and the risk group includes a quarter of the population. One in every three working age persons is out of the labour market and, considering purchasing-power parity, the consumption capacity of Estonian residents is only 65 percent of the EU average.

One of the key features of social traps is that they are relational. It is especially clear regarding the phenomenon of migration – outmigration from one country results in immigration into another country. In the period between the two most recent population censuses, Estonia’s migration balance has been negative by more than 40,000 people, i.e. about the size of the town of Pärnu. Migration also causes other social traps that are amplifying each other. This is reflected in Estonia’s standing in international comparisons that reveal that better education does not secure a higher income in Estonia. Because of the economic structure, people who have higher education often cannot find employment that corresponds to their education level. As a result, Estonia’s domestic migration is often caused by the higher-education trap, among the other

reasons; most of the migrants are people with higher education who cannot find jobs that correspond to their education level in smaller locations. In the case of outmigration, most Estonians, on the contrary, are facing the trap of jobs that require lower educational levels, as they often do jobs that are below their education level.

The education system is one of the central instruments to ensure social sustainability, and therefore demands special attention from authorities. The foundation of the Estonian education system is the unitary primary school, and international comparisons have shown that the impact of the social background of students on their study results is relatively small. At the same time this report highlights, for example, that in lifelong learning people who need it the most are excluded.

The biggest traps of the education system are linked to Russian-language education. While the language-based unification of the Estonian school system as a whole has been inevitable, there have been problems in the way it has been implemented and especially with the introduction of the transition to Estonian-language study at the upper secondary-school level – problems which could have been avoided. As a result, a “glass-ceiling trap” has been created, which is reflected in the inability of Russian-speaking youth to secure equivalent jobs in the labour market compared to those of Estonians (Lindemann 2011; Helemäe, Saar 2015). In general, one should say that in the planning of Russian-language education reform, learning the Estonian language has not been considered in terms of preparation for career for Russian youth, but rather as a thing in itself, which has not been fully analysed. This has created a situation where experts believe that the sufficient language-skill level for studying in upper-secondary school is C1, while the law requires only a B1 level, and in reality many do not even achieve that (Ossinovski 2014). Herein lies a typical social trap: if a student fails to obtain sufficient Estonian language skills in primary school, then no matter how hard he/she tries at the Gymnasium level, it will be very difficult for them to obtain a secondary-school education that enables them to be competitive in the labour market.

The reform of the Russian-language school system and the entire sphere of the national integration of society are directly related to the issue of the security of the Estonian state. In analysing the future of the Estonian language space, this report has referred to a forecast which says that if today's trends continue, more than half of the residents of the cities in Ida-Virumaa in the future will be citizens of Russia. Regardless of the interpretation of the causes, such a development has, in light of Russia's growing imperialistic ambitions, which at times seem to take on apocalyptic dimensions (see for instance Dugin 2014), grave implications for the security of Estonia's nationhood. For instance, Graham Allison and Dimitri K. Simes discuss in *The National Interest* magazine the fact that in the context of the Ukrainian crisis, the popularity of the slogan “Russia does not leave its people behind” has been growing in the Russian social consciousness (Allison, Simes 2015). So we should ask, how does Russia perceive Russian Es-

tonians in terms of ‘us’ and ‘them’?

The conclusion from the above is that the Estonian integration policy needs to be more efficient and focus on activities that unite all Estonian people and strengthen their national identity (see also Raag 2015; Vetik 2015). In this context, we should analyse the question of whether the security policy of the Estonian state would be more cost-efficient if some of the defence budget were to be re-allocated to resolve social integration issues (see also Trumm 2015)? This question is based on the assumption that while it is very important to increase the military capacity of Estonia, it remains only a part of the solution to the security problem. Contrary to what teacher Laur recommended to Toots, in the national classic “Spring”, about homework (if you cannot do a full math task, do at least half), the security of the Estonian state is not guaranteed if only half the math is done. The second half, national integration, should be given a priority as it depends on ourselves and not on external powers.

The meaning of the theoretical generalisation provided through the metaphor of a social trap is to bring processes that at first seem different together under the same common denominator, thereby creating a possibility for disclosing the underlying social logic and the mutual reciprocal relations. Several traps described herein emphasise how dependent Estonia's internal processes are on the international and increasingly globalising external environment. The cheap input of the Estonian economy into the international value chain means that there are countries whose input is more expensive; if Estonia loses people by emigration, some other country wins them; if ethnic minorities do not trust the Estonian state, they trust somebody else. In this context one must welcome the public interest concerning the issue of the middle-income trap, because this is a topic where we all are losers in the same boat and, therefore, psychologically ready to dig to the core of the problem.

The middle-income trap has at least one important similarity with a mousetrap – both are designed to restrain the victim, not to rescue it. The mouse is the only one that wants to get out, while others would like to make sure that the trap functions reliably. Therefore, it is important to re-analyse our low-position status in the international value chain – this is a position in a unified system, which has a pre-programmed hierarchy between the centre and the periphery. Hence, the middle-income trap is not a deviation from the norm, but a relational mechanism by which the system as such functions, shaping the diverse behavioural strategies of the component parts. From the viewpoint of the agents at the top of the pyramid, the priority is to ensure that the trap functions reliably because it enables them to continue their domination. Lower-position agents in the system, on the other hand, wish to see changes that would enable them to improve their position.

Thus, in analysing the middle-income trap it is important to keep in mind that we are part of a system whose elements have divergent interests. From the viewpoint of Estonia, the main weakness of the neo-liberal canon is the fact that the difference in the interests of the central and peripheral

countries is being ignored, which essentially means that issues are regarded from the viewpoint of the highest element in the hierarchy (i.e. not from Estonia's viewpoint). As a result, it is emphasised that while there is a possibility of linear progress for the economies of countries that are lagging behind, it is assumed that this depends only on the hard work and austerity of these countries. This ignores the general logic of the system and places the responsibility for possible problems only on the weaker side, i.e. on us. The logic of such a system has been described fittingly by state auditor Alar Karis: "Estonia's success in external competition tends to depend mainly on the preservation of internal poverty" (State Audit Office 2014). Therefore, the middle-income trap is essentially a Catch-22. This leads to the conclusion that if we want to restart Estonian economic growth, we must re-assess the current model, instead of endlessly trying to resolve a problem from which there is no escape.

The conclusion in the context of formulating a post-2015 development model for Estonia is simple: we should not take the neoliberal canon as a gift horse whose mouth we cannot look into. Such a canon forces us to remain inside a hamster wheel and make great efforts, even in a situation where such effort no longer works. This is why the Estonian economy has become stuck in the middle-income trap during the last decade, which can be interpreted as a part of the logic of the centre-periphery relationship. This logic says that belt-tightening is not enough to get out of the lower position in the value chain and that we need to make a qualitative leap. In this context, we must ask ourselves a Kantian question: assuming that if, with regard to the middle-income trap in place among countries, we support the mouse, isn't it time that we take the same approach to our internal hierarchy traps, i.e. interpret social problems also from the viewpoint of the weaker side of the hierarchy?

Resources of empowering development

The field-theoretical approach defines the sustainability of society not along the lines of a popular song: "Keep everything that is good", but in terms of the quality of feedback within a system. In addition to receiving high-quality feedback, the sustainability of the system depends also on its capacity to find sufficient resources for development. This aspect is related to the second most frequent keyword in this report: empowerment. In this report, the word empowerment has been used in various combinations, such as empowering state, empowering welfare state, empowering social policy, empowering creative economy, empowered civic society, empowered political communities, etc. While the metaphor of a trap shows the reasons why the system has become stuck, empowerment is a keyword that highlights the resources for system dynamics.

The broadest common denominator of the various empowerment strategies analysed in this report is innovation. In the chapter on Estonian nature, this is mainly linked to the need to develop new eco-system services. Since the global eco-

nomics crisis of 1970s, the priority of governments has been economic growth and not environmental protection. This can be directly linked to the changes that have taken place in the last decade in the health of our planet, as expressed by climate changes, extensive degradation of the land surface and a rapid decrease in clean water resources and natural biodiversity (Bierman et al. 2012). In this situation, there is a growing pressure to urgently revive the ideas of the Club of Rome concerning the priority of nature protection because natural resources can one day be exhausted, and humankind cannot survive in that situation for long. At the same time, this report highlights the fact that the quality of Estonia's natural environment is extremely high in comparison with most other countries. We are blessed with numerous ecological systems that are in a near-natural state, and which are able to buffer the impact of human action, thus ensuring the resilience of the system. Estonia's nature heritage has great power to help the people and the society (see also Mikita 2013).

In this report, the most ambitious concept of empowering development is the idea of "Technology-Estonia". The implementation of this model requires making the development of technological skills and know-how a priority, and the readiness to support such experiments on national level. Technology-Estonia represents the model of an innovation-based state, the attainability of which has been proven by the rise of several countries in East Asia to the top of international value chain.

The model of Technology-Estonia recommends investing mainly in fields that would improve Estonia's position in the international labour division. In the situation of our shrinking population and growing external dependence, the contribution to technological advancement could seem like a good solution, while we must also answer the question of how to secure public support for the model during a time when people are tired of reforms? How do we transform economic and technological prose into a poetry that would mobilise people? One possible answer to this question can be found in the chapter of this report on welfare policies, which sees the solution as being the smart organisation of relations between different sections of society. The authors base their analyses of the social processes of recent decades on the paradigm of social investments, which represents a theoretical trend within welfare policy research. This branch of research requires that welfare policies should be regarded not simply in terms of costs, but also as a key to empower human resources. It represents an attempt to overcome the limitations of the two existing socio-political models – the welfare state and neoliberalism – by offering a new synthesis as a result of the smart combination of certain elements of both models. At the same time, this idea has both strong and weak elements: on the one hand, it seems that there is nothing more reasonable than finding new development resources in a Hegelian-type synthesis, while, on the other hand, it is still not clear how to achieve this in practical terms.

The key to answering to this question can be found in the culture chapter of this report. SE21 differs from similar

strategies in other countries by the fact that in addition to preserving people's wellbeing, social cohesion and natural environment, it has also introduced the objective of the sustainability of Estonian culture. Such an addition has been motivated by the concern over the survival of the Estonian language and culture in the globalising world, but it also hit the nail on the head in terms of an understanding of society itself because it is culture that contains the central resources for society's development (Lauristin 2006). Culture is the self-growing logos of Heraclitus, which should not be interpreted solely in terms of the fine arts, but also through its role in the social system, which is put in motion by the social positioning of agents in the situation of a certain freedom of choice (Bourdieu 1977; Davies, Harre 1990).

From the viewpoint of sociological cultural theory, the lines written by Kristjan Jaak Peterson – “Is then this country's language....” – are not only nice poetry, but also the shaping of a new subject position in Estonian society. This laid the basis for one of the two central languages of Estonian self-description (i.e. symbolic positioning), sparking hope in a small people that through cultural exertion, a tiny nation can become great. The articulation of such a social position automatically meant also the possibility of creating an opposing position that has over time developed into the second main language of Estonian self-description. Its essence is an acute sense of danger arising from the smallness of the Estonian nation and the vulnerability of its language, which emphasises the need for self-defence. The most common form of defence is withdrawal into self, which Estonians seem to be better at than anyone else.

The potential of empowering development that is generated by the mutual positioning of two languages of self-description within a culture is the central idea of the chapter on Estonian cultural space in this report. For instance, it analyses the powerful rise of visual culture in recent decades as a competitor to, and at times a replacement for, literary culture, which has caused both devastating criticism and admiration. Pictures have often been destroyed in history and will probably be destroyed in the future as well; one form of such a phenomenon is the opposition between spirituality of literary culture and entertainment focus of digital image flows. Along these lines, Jean Baudrillard believed that the replacement of the tangible reality with empty images in the post-modern era creates just simulacra, leading to explosive collapse of meaning.

People who emphasize the empowering force of visual culture interpret cultural explosion not in terms of destruction, but as a source for innovation, along the framework of the Tartu school of cultural semiotics. In this sense, the growing role of visual culture in our life represents a macro-historic change, supporting the development of a different type of thinking and memory as compared to thinking and memory based on literary culture (compare with Lotman 1999b). In the Internet era, the social practices based on such a type of thinking strongly promote innovative educational and business applications. It can be assumed that if something is as profitable

as the visual culture has become in online businesses, then there is no possible way back to restore the almost monopolistic right that literary culture used to have in defining good and evil as well as sacred and profane. The norms and rituals from the era of literary culture are supplemented by new ones based on visual culture. It cannot be ruled out that in the future the Ten Commandments will be painted, not written down.

The processes of change in understanding sacred rituals in Estonian society are uncovered in the analysis of the generation gap related to perceptions of the tradition of the National Song Festival. The authors of the report ask whether we want to see our song festivals predominantly as the continuation of our current national tradition or also in terms of change. These analyses show that there is no clear-cut answer, because the life experience of the generations differs. The older generation values mostly the existing tradition, while young people gladly welcome various innovations. For the older generation, the song festival is a sacred ritual enshrined by the memory of resistance. Resistance and the suffering it is based on endow the song festival with a powerful social capital, creating a sense of sacredness.

The younger generation lacks the experience of the cultural of resistance as Estonia is a free country now, and Estonians feel themselves to be masters of their fate. However, as there is no experience of resistance, the sense of nation-based sacredness inevitably diminishes and is gradually replaced by new sources of sacredness. So it may be nature or rock stars that will become the objects of cults in such a context (Altnurme 2001). When studying the religious worldview of Estonian secondary-school students, Urmas Viilmaa revealed that young people also believe in their parents, friends, themselves and in love (Viilmaa 1998). Therefore, the basis of sacredness is transferred from the level of religious faith or securing national unity to the level of personal life and self-expression, and the functioning of sacredness in society becomes more complex.

The relationship between the sacred and the profane in the Estonian consciousness is best described by the debate in *Looming* magazine over the “existential Estonia” metaphor, introduced by Rein Veidemann (Veidemann 2010; *Looming* 2011: nr 6–12). The debate includes a number of brilliant essays that see the essence of “Estonianness” either in the survival instinct of the nation or in everyday social practices of Estonians. Under the former language of description, a small nation has a sacred obligation to make a metaphoric leap from smallness to greatness that in the newer debate about Estonianness is described by such concepts as interruption (Hasso Krull), absurdity (Jaan Undusk) and existence (Jüri Talvet, Rein Veidemann) (see Pilv 2011). The latter concept interprets the marginality of a small nation and language through the concept of boundary based on the semiosphere theory of Juri Lotman, attempting to give it a new meaning and importance – marginality being the reservoir for new meanings and a source for creativity. It is something great that we do have, but others do not.

The interpretation based on the need for an existential leap stands in contrast to the concept of Estonianness as an everyday social practice that emphasises the ideological nature of the cultural languages on which it is based. For instance, in their essays published in *Looming* magazine, Aare Pilv, Tiit Hennoste, Hent Kalmo and Märt Väljataga found that the disposition of “existential Estonia” does not represent an organic sense of unity that includes all ethnic Estonians, but, rather, one particular subject position in social field (Pilv 2011; Hennoste 2011; Kalmo 2011; Väljataga 2011). In their opinion, in the “existential Estonia” concept, the two different meanings of existence are conflated: the nation’s survival on the one hand, and, transcendence, as opposed to joint essence, on the other. In the existential Estonia approach, the function of transcendence is given not to Nature, Idea nor God, but to the Nation, thereby imposing on it a status of sacredness.

In such a role, the nation becomes so important and self-explanatory for the people that we have a hard time understanding what we talk about when we talk about nation. Understanding is replaced by faith, which in its daily social practice reproduces and amplifies the feeling of threat to nation, that is perceived in differences and ambiguities, thus marginalising potential competing subject positions in the field (see also Altheide 2007). Therefore, in the practice of social positioning, the sacredness of a nation is smoothly supplemented by party-political objectives that are achieved by eliminating differences and dissenting voices. Hennoste counters this with another type of interpretation of Estonianness, which is characterised by the effort to make our existence more positive through creativity and originality (Hennoste 2011). In his approach, he sees Estonianness not through the lens of transcendental existence and the core texts that describe them, but through the concept of Bahtin’s dialogue and Lotman’s text, emphasising the partial reciprocal untranslatability of the language codes it is based on, as a source of the dynamics of culture (Lotman 1999a).

The most revealing aspect in the comparison of the two languages of Estonianness is that both largely share the same basis. It appears that regardless of the language of culture, we have a need to say the most important things about ourselves with the words of Juri Lotman. Opposing interpretations share the same foundation and conversely, the latter may lead to entirely different positions. It is difficult to find a better validation of the basic presumption of cultural semiotics, which holds that the differences and reciprocal positioning of the languages of a culture are not simply enriching, but represent the key resource for the development of society.

A glimpse into the future

The key object of analysis in this human development report is adaptation – both Estonia’s adaptation in the globalising world and the adaptation of various social groups and individuals to changing situations and to each other. While, in general, Estonia’s development since regaining independence has been extremely rapid and also very successful compared to a

number of other countries that shared a similar fate, the analysis of the trends of the last decade also highlights our weaknesses and vulnerabilities. These are attributable mainly to the lack of experience and skills, on the one hand, and to the logic of the social system, on the other. While the former problem can be resolved, in principle – and there are, indeed, many wonderful success stories – the risks and vulnerabilities of the latter are inherent (Beck 1992). They cannot be fully avoided, only eased.

The vulnerabilities related to the functioning of the system cannot be eased without adequate feedback. However, several sections in this report highlight the fact that some important feedback mechanisms in Estonia are not functioning properly, which results in a number of social traps. A short and fitting diagnosis of the non-sustainability of such a situation can be found in the speech of the President at the celebration of the 95th anniversary of the Republic of Estonia: “What has brought us here is not taking us further” (Ilves 2014). This report argues that in order to adapt to global and internal challenges, Estonia needs economic, social and cultural innovation. In this context, the report offers ideas for promoting Technology-Estonia, social investments and visual culture practices as possible strategies for empowering Estonia’s development.

One precondition to empowering social development is the ability of society to regard the multitude of languages of culture, partial reciprocal untranslatability and the social positioning based on these, as resources for development and not as a deviation or a problem, as is done by nationalism focusing on self-defence. This is also the key for interpreting the debate in recent years about Estonia’s development model in which one can detect two opposing trends. First, the views of different actors are very different at times, because they are founded on opposing positions in the social field. It is entirely understandable that trade unions and employers may have a different view on, for instance, issues of wage policy. There are differences even in jointly planned cooperation projects – for instance, different texts in this report express fairly different opinions about Estonia’s economic development, public reform, culture, policymaking, etc.

On the other hand, a few surprising coalitions have also been born in Estonia. For instance, after the last Parliamentary elections, the Employers’ Confederation, the Chamber of Commerce and Industry and the trade unions presented to the Parliament a joint action plan on state reform, which shared common views on key economic issues (Ühisvaldus 2015). These partners may be in opposite positions in the economic field, but it does not reflect in this statement. The statement was preceded by the Manifesto of the Employers’ Confederation published in October 2014, which expressed a similar position and with due consideration of social partners, set as its objective not only competitiveness of the Estonian economy internationally, but also employees’ wellbeing, and in concluding, in the true spirit of Plato’s theory of the state, perhaps too grandly urged the country’s leaders, employees and employers to make a joint effort (ETK 2014).

How should we interpret such calls? Are things really as they seem or is it the calm before the storm? Which of these two trends will dominate in the post-2015 development model of Estonia? One can assume that the answer to these questions depends not only on the relationship of different interest groups or political parties, but also on the magnitude of ongoing social changes and the challenges caused by them. If external threats exceed the pain threshold, the nation will consolidate, as this is required by the adaptation of the system. The Singing Revolution provides an insight into the logic of how such a sense of unity can be achieved (Selg, Ventsel 2009). However, if development is to be more or less stable and the impact of the external environment less painful, it would be more useful for the system to hang on to the various strategies that are guaranteed by the existence of different factions in society. Yet it is inevitable that with fewer resources and more mouths around the table to feed, opposing groups will become ever more hostile and aggressive towards each other. In such a scenario, idyllic joint statements soon become nothing but a nice memory.

To conclude

To conclude: in order to successfully adapt to the social and cultural changes taking place in Estonian society, one needs a certain type of thinking that corresponds to the kind of era we are entering into. Conservative thinking that emphasises the importance of social unity and the sacredness of tradition is one of the sources of vitality for the nation. This should not be underrated because – using a botanical comparison – you need roots to blossom. However, the type of thinking that values social differences and creativity enables us to respond to the challenges of the era in a better way. In the coming decades, this type of thinking will become dominant because it is not so important any more what is the colour of your thinking, but how it helps to adapt to ongoing fundamental social changes. ■

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LIST OF AUTHORS

Laura Aaben, National Institute for Health Development

Mare Ainsaar, Faculty of Social Sciences and Education, Institute of Sociology and Social Policy, University of Tartu

Raul Eamets, Faculty of Economics and Business Administration, University of Tartu

Martin Ehala, Institute of Estonian and General Linguistics, Faculty of Philosophy, University of Tartu

Martin Gauk, Institute of Ecology and Earth Sciences, Faculty of Science and Technology, University of Tartu

Ronald Gutmann, Department of Public Health, Faculty of Medicine, University of Tartu

Jelena Helemäe, Institute of International and Social Studies, Tallinn University

Indrek Ibrus, Baltic Film and Media School, Tallinn University; Estonian Ministry of Culture, Advisor for audiovisual affairs

Mari-Liis Jakobson, Institute of Political Science and Governance, Tallinn University

Mihkel Kangur, Institute of Ecology, Tallinn University

Erkki Karo, Ragnar Nurkse School of Innovation and Governance, Tallinn University of Technology

Kairi Kasearu, Institute of Social Studies, Faculty of Social Sciences and Education, University of Tartu

Rainer Kattel, Ragnar Nurkse School of Innovation and Governance, Tallinn University of Technology

Tiiu Koff, Institute of Ecology, Tallinn University

Siim Krusell, Statistics Estonia

Martin Küttim, Institute of Ecology, Tallinn University

Marin Laak, Estonian Literary Museum

Silja Lassur, Estonian Institute for Futures Studies, Tallinn University

Triin Lauri, Institute of Political Science and Governance, Tallinn University

Marju Lauristin, Member of the European Parliament; Institute of Social Studies, Faculty of Social Sciences and Education, University of Tartu

Veiko Lember, Ragnar Nurkse School of Innovation and Governance, Tallinn University of Technology

Kristina Lindemann, Institute of Sociology, Department of Social Sciences, Goethe-University Frankfurt am Main

Krista Loogma, Institute of Educational Sciences, Tallinn University

Ott Lumi, Institute of Political Science and Governance, Tallinn University

Arko Olesk, Institute of Communication, Tallinn University

Hans Orru, Department of Public Health, Faculty of Medicine, University of Tartu

Kati Orru, Institute of Social Studies, Faculty of Social Sciences and Education, University of Tartu

Raimo Pajula, Institute of Ecology, Tallinn University

Margus Pensa, Institute of Ecology, Tallinn University

Liisa Puusepp, Institute of Ecology, Tallinn University

Kaire Pöder, Department of Finance and Economics, Tallinn School of Economics and Business Administration, Tallinn University of Technology

Ringa Raudla, Ragnar Nurkse School of Innovation and Governance, Tallinn University of Technology

Antti Roose, Institute of Ecology and Earth Sciences, Faculty of Science and Technology, University of Tartu

Erle Rikmann, Chancellery of the Riigikogu (Parliament) of Estonia, Research Department

Ellu Saar, Institute of International and Social Studies, Tallinn University

Maarja Saar, Södertörn University

Küllli Sarapuu, Ragnar Nurkse School of Innovation and Governance, Tallinn University of Technology

Georg Sootla, Institute of Political Science and Governance, Tallinn University

Marko Sõmer, Estonian Institute of Humanities, Tallinn University

Tiit Tammaru, Institute of Ecology and Earth Sciences, Faculty of Science and Technology, University of Tartu

Külliki Tafel-Viia, Estonian Institute for Futures Studies, Tallinn University

Küllli Taro, Estonian Cooperation Assembly Foundation

Jaanus Terasmaa, Institute of Ecology, Tallinn University

Erik Terk, Estonian Institute for Futures Studies, Tallinn University

Anu Toots, Institute of Political Science and Governance, Tallinn University

Avo Trumm, Institute of Social Studies, Faculty of Social Sciences and Education, University of Tartu

Anu Tõnurist, Statistics Estonia

Kadri Ukrainski, Tartu Ülikool, Majandusteaduskond

Annika Uudelepp, Faculty of Economics and Business Administration, University of Tartu

Tiit Vaasma, Institute of Ecology, Tallinn University

Egert Vandel, Institute of Ecology, Tallinn University

Urmas Varblane, Faculty of Economics and Business Administration, University of Tartu

Raivo Vetik, Institute of Political Science and Governance, Tallinn University

Margus Vetsa, Institute of Mathematics and Natural Sciences, Tallinn University

Peeter Vihalemm, Institute of Social Studies, Faculty of Social Sciences and Education, University of Tartu

Piret Viies, Institute of Estonian Language and Culture, Tallinn University

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