EESTI MAJANDUSPOLIITILISED VÄITLUSED

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ESTNISCHE GESPRÄCHE ÜBER WIRTSCHAFTSPOLITIK

Beiträge (CD-ROM)

DISCUSSIONS ON ESTONIAN ECONOMIC POLICY

Articles (CD-ROM)

XVI

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EESSÕNA

Käesolev publikatsioon "Eesti majanduspoliitilised väitlused" (alates 2007. aastast selle nime all, aastatel 1984 ja 1994–2006 aga erinevate artiklite kogumike nimede all)[1] ilmub juba kuueteistkümnendat aastat, mille autoriteks on valdavalt Eesti Vabariigi ja Saksamaa Liitvabariigi (alates 1996. aastast) erinevate kõrgkoolide õppejõud-majandusteadlased ja rahvamajanduse praktikud (sh Euroopa Liidu institutsioonidest). Artiklite autorid on peale Eesti ja Saksamaa olnud ka teistest riikidest (Leedu, Läti, Poola, Sloveenia, Soome, Suurbritannia jt).

Artiklite retsenseerimisel on viimastel aastatel tehtud koostööd paljude kõrgkoolidega mitmest riigist: Andrassy Gyula-nimeline Budapesti Saksakeelne Ülikool (Ungari), Ernst-Moritz-Arndti-nimeline Greifswaldi Ülikool (Saksamaa), Kieli Rakendusülikool (Saksamaa), Kufsteini Rakendusülikool Tiroolis (Austria), Leipzigi Ülikool (Saksamaa), Merseburgi Ülikool (Saksamaa), Potsdami Ülikool (Saksamaa) ja mõned teised. Lisaks on koostöös osalenud mitmed emeriitprofessorid Saksamaalt (Berlin, Kiel, München).

Aastast 2001 alanud koostööna toimub kirjastamine saksa kirjastuse Berliner Wissenschafts-Verlag (endine Berlin Verlag Arno Spitz) ja eesti kirjastaja Mattimar OÜ vahelise ühistegevusena. Käesolev väljaanne on traditsiooniliselt igal aastal regulaarselt ilmuv iseseisev teadusartiklite publikatsioon, koosnedes alates 2007. aastast CD-ROM-ist ja kokkuvõtete kogumikust. Ka käesolev kogumik koosneb kahest orgaanilisest osast: olulisem osa, artiklid, on CD-ROM-il (paigutatud paberkandja kaanetaskusse) ning paberkandjale trükitud nimetatud artiklite teisekeelsed ja ammendavad kokkuvõtted. Lisaks avaldatakse kroonika osas mitmeid teisi majandusteadusega seotud kirjutisi (väljapaistvate eestlaste-majandusteadlaste lühitutvustamine, ülevaated Eestis toimunud majanduspoliitika konverentsidest jms).

Publikatsiooni üheks eesmärgiks on analüüsida ja hinnata Eesti Vabariigi kui Euroopa Liidu liikmesriigi majanduspoliitilisi arenguid. Kindel koht on siinjuures ka teiste riikide arengute käsitlemisel ning omavahelisel võrdlemisel, seda ka väljaspool Euroopa Liitu. Edaspidi võiks üheks arvestatavaks suunaks teiste kõrval olla ka Läänemere äärsete riikide majanduslikud arengud, koostöö ja probleemid.

Eesti areng pärast Euroopa Liidu liikmeks saamist 1. mail 2004. aastal annab tunnistust sellest, et Eesti liigub kindlalt Euroopa Majandus- ja Rahaliiduga ühinemise suunas. Silmas pidades finantspoliitilisi liitumistingimusi on Eesti võrreldes enamiku EL liikmesriikidega lausa stabiilsuse musternäide – aastatel 2004 kuni 2006 moodustas valitsussektori eelarvete ülejääk 2,3 kuni 3,7% sisemajanduse

[1] Artiklite kogumike nimed aastani 2006 on võimalik leida publikatsioonist: *Eesti majanduspoliitilised väitlused – 15/ Estnische Gespräche über Wirtschaftspolitik – 15/ Discussions on Estonian Economic Policy – 15*. Artiklid (CD-ROM) ja kokkuvõtted. Berlin, Tallinn: Berliner Wissenschafts-Verlag, Mattimar 2007: 113–114.

koguproduktist, mis vähendas võlataset 4,5%ni SKP-st. Eesti Panga[2] hinnangute kohaselt selline areng jätkub, kuigi eelmisel aastal vähenes eelarve ülejääk 2,8%ni[3]. Seega pole Maastrichti lepinguga kindlaksmääratud referentsväärtustest kinnipidamisega probleeme.[4]

Kaks olulist rahapoliitilist liitumiskriteeriumit on turuintress[5] ja inflatsioonimäär. Kuna riigi võlatase on väike, ei eksisteeri Eestis kroonipõhisel riigivõlal funktsioneerivat arenenud turgu. Järelikult puuduvad ka harmoniseeritud pikaajalised intressimäärad, nn turuintressid, mis oleksid määravad hinnangute tegemisel. Niisiis võib turuintresside kriteeriumit silmas pidades väita, et ka pärast "...finantsturgude põhjalikku analüüsi praegusel hetkel pidepunktid negatiivse hinnangu tegemiseks siiski puuduvad".[6]

Murettekitav on ainult hinnataseme tõus, mis on mõõdetav harmoniseeritud tarbijahindade indeksiga (HICP). Eesti Panga arvestuste kohaselt inflatsioon Eestis hoogustub pidevalt – kui 2005. aastal oli see 4,1%, siis 2006. aastal kasvas see 4,4%ni ning mullu jõudis 6,3%-ni. Eesti Pank prognoosib 2008. aastaks veelkord 7,4%st inflatsiooni tõusu.[7] Kindlasti mängivad käesoleval aastal oma rolli terve rida eritegureid,[8] mida tuleval aastal loodevasti pole või vähemalt väheneb nende mõju. Kas aga 2009. aastaks ennustatav praeguse arengu muutus tõepoolest toimub, jättes infaltsiooni 4,6% piiridesse, seda näitab meile tulevik.

Mis puudutab 5. liitumiskriteeriumit, nimelt kaheaastast probleemitut osalemist II-s vahetuskursi mehhanismis, siis tõdes Euroopa Keskpank juba oma 2006. aasta detsembri konvergentsi aruandes, et *currency board* režiim nõuab juba oma ülesehitust arvestades Eesti Panga poolseid sekkumisi valuutaturgudel, mille ulatus *per saldo* on siiani vähene olnud.

Üldiselt võib Eesti majanduse arengut pidada positiivseks, kui hinnataseme tõus kõrvale jätta. See väljendub ka reaalse sisemajanduse koguprodukti kasvumäärades,

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[2] Eesti Pank, Economic Forecast for 2007–2009. *Monetary Developments & Policy Survey*, September 2007: 32.

[3] Eesti Pank, Quarterly economic policy statement of Eesti Pank, Economic forecast for 2007–2009: 2.

[4] Defitsiidi määr, olgu rõhutatud d e f i t s i i d i määr, kuni 3% ja võlatase maksimaalselt 60%, mõlemad arvestades SKP-st.

[5] Turuintressiks loetakse avaliku, st vastava valitsuse poolt emiteeritud riigivõla kasumimäära kestvusega 10 aastat (v järelejäänud kestvusaega). Sellist nn turuintressi peetakse stabiilsuse ja seega ka liitumiskriteeriumiks, mille järgi turud hindavad liitumiskandidaatide stabiilsuse hoidmise tahet.

[6] European Central Bank. *Convergence Report*, December 2006: 52 (deutsch: Konvergenzbericht, S. 59 f).

[7] Eesti Pank, *Quarterly economic policy statement of Eesti Pank*, Economic forecast for 2007–2009: 2.

[8] Selle kohta vaata veel käesolevas kogumikus: Raudjärv, M. Entwicklungen in der Estnischen Wirtschaft.

mis olid 2005. aastal 10,2%, 2006. aastal 11,2% ja möödunud aastal 7,1%.[9] Kuigi käesolevaks ja tulevaks aastaks on oodata "kergeid hingetõmbepause", siis tuleb seda lugeda täiesti normaalseks nähtuseks, mis teenib edasise majandusarengu kindlustamise huve.

Eelnevaga seotud ja paljusid teisi majanduspoliitilisi arenguid arutatakse Eestis regulaarselt. Järjekordne traditsiooniline arutelu toimub 26.–28. juunil 2008 Kagu-Eesti kuurortasulas Värskas. Värska Sanatooriumi hotelli- ja mineraalvee SPA-kompleksis viiakse läbi XVI rahvusvaheline majanduspoliitika teaduskonverents teemal "Majanduspoliitika Euroopa Liidu riikides – aasta 2008". Sellest võtab osa hulgaliselt käesoleva väljaande artiklite autoreid, kes esinevad ettekannetega ning osalevad diskussioonides. Konverentsile on oodata lisaks õppejõududele-majandusteadlastele ka mitmete Eesti avaliku sektori ning eraettevõtluse esindajate ettekandeid ja nende diskussioonides osalemist. Täiendavaid lisaettekandeid on oodata ka teistelt (st siin publikatsioonis mitte esindatud) saksa majandusteadlastelt-õppejõududelt.

Loodetavasti arutatakse seekordsel konverentsil ka mitmeid Euroopa Liidu majanduspoliitilisi küsimusi ja Eesti majanduse ees seisvaid aktuaalseid probleeme. Kuna majanduskasv on Eestis viimastel aastatel aeglustunud, siis on konverentsil kindlasti arutluse all ka sellised küsimused, nagu kinnisvaraturu stabiliseerumine, sündmused ja arengud Eesti tööturul ning paljude erialade (ehitajad, kinnisvaraarendajad jmt) töötajate jaoks raskused töökohtade säilitamisel ning uute leidmisel. Aktuaalne on ka Eesti regionaalse arengu tasakaalustamine, kohaliku eelarve kujunemine, linnade rolli määratlemine regionaalse ja kohaliku omavalitsuspoliitika kavandamisel ning elluviimisel. Päevakorral on siinhulgas ka edasised arengud Eesti valdade ja linnade ühendamise protsessis nende parema jätkusuutlikkuse tagamiseks. Arutamist väärivaid ja vajavaid teemasid-probleeme nii majandusteoorias kui -poliitikas, samuti Eesti praktilises majanduselus, on hulgaliselt teisigi.

Siinkohal edusoovid konverentsil esinejatele ja kuulajatele ning tänusõnad mitmetele toetajatele. Sisukat lugemist ka käesoleva publikatsiooniga tutvumisel ja kaasamõtlemisel.

Veebruar-märts 2008

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Saksamaa (Kielis ja Warderis)	Eesti (Tallinnas Pirita-Kosel ja Pärnus)

[9] Eesti majandusnäitajad aastate lõikes. Eesti majandus, http://www.eestipank.info/, 25.03.2008.

VORWORT

Die vorliegende Dokumentation erscheint nunmehr in der sechzehnten Ausgabe. Die Sammelbände der Jahre 1984 und 1994 bis 2006 sind unter variierenden Titeln[1], 2007 erstmals als "*Estnische Gespräche über Wirtschaftspolitik*" veröffentlicht worden. Die Beiträge sind vorwiegend von estnischen und deutschen, aber zuweilen auch litauischen, lettischen, polnischen, slowenischen, finnischen und britischen Wirtschaftswissenschaftern aus Hochschulen und Forschungsinstituten verfasst worden. Zum Autorenkreis gehören auch Wirtschaftspraktiker, von denen einige die Institutionen der Europäischen Union vertraten.

Die Beiträge werden rezensiert, wobei Hochschulen aus Deutschland (Ernst-Moritz-Arndt-Universität, Greifswald; Fachhochschule Kiel; Universität Leipzig; Universität Merseburg; Universität Potsdam), Österreich (Fachhochschule Kufstein in Tirol), Ungarn (Deutsche Andrassy-Gyula-Universität, Budapest) sowie emeritierte Professoren aus der Bundesrepublik Deutschland mitwirken.

Die Beitragsbände als selbstständige Sammlungen wissenschaftlicher Artikel erscheinen seit 2001 im Berliner Wissenschafts-Verlag (früher Berlin-Verlag Arno Spitz) in Kooperation mit dem estnischen Verlag Mattimar OÜ. Sie bestehen seit 2007 aus zwei Komponenten, und zwar einer Broschüre und einer in diesem Handbuch enthaltenen CD-ROM, wobei auf der CD-Rom die ausführlichen Beiträge in estnischer, deutscher oder englischer Sprache digital erfasst und in der Broschüre die dazugehörigen Zusammenfassungen in jeweils einer anderen der zuvor genannten drei Sprachen abgedruckt sind.

Die Dokumentationen haben das Ziel, wirtschaftspolitische Entwicklungen sowohl in der Republik Estland als auch in der Europäischen Union zu analysieren und – soweit das möglich ist – zu bewerten. Es ist zu überlegen, ob zukünftig stärker als bisher relevante Entwicklungen in anderen Ländern, vor allem in den Ostseeanrainerstaaten, in die Überlegungen mit einzubeziehen sind.

Nachdem Estland seit dem 1. Mai 2004 Mitglied der Europäischen Union (EU) geworden ist, zeigt die bisherige Entwicklung, dass Estland auf einem sicheren Weg in die Europäische Wirtschafts- und Währungsunion (EWWU) ist. Im Hinblick auf die finanzpolitischen Beitrittsbedingungen ist Estland – im Vergleich zu den meisten anderen EU-Staaten – geradezu ein Musterbeispiel für ein stabilitätsbewusstes Land: In den Jahren 2004 bis 2006 weisen die öffentlichen Haushalte Überschüsse in Höhe von 2.3 bis 3.7% des Bruttoinlandprodukts aus, die den Schuldenbestand auf unter 4.5% des Bruttoinlandprodukts reduziert haben. Die Eesti Pank[2] rechnet mit einer Fortsetzung dieser Entwicklung, wobei sich allerdings die Überschüsse im vergan-

[1] Ein Überblick bis 2007 ist zu finden. *Estnische Gespräche über Wirtschaftspolitik*, 15. Ausgabe, Berlin und Tallinn 2007, S. 113 f.
[2] Eesti Pank, Economic Forecast for 2007–2009. *Monetary Developments & Policy Survey*, September 2007: 32.

genen Jahr auf 2.8% etwas verringert haben dürften[3]. Damit sind die im Vertrag von Maastricht vorgegebenen Referenzwerte[4] problemlos erfüllt.

Marktzins[5] und Inflationsrate sind die beiden geldpolitischen Beitrittskriterien. Wegen des geringen öffentlichen Schuldenbestandes gibt es in Estland noch keinen entwickelten Markt für estnische Staatsanleihen. Folglich liegen keine aussagekräftigen harmonisierten langfristigen Zinssätze vor, so dass es im Hinblick auf das Marktzinskriterium auch nach "einer umfassenden Analyse der Finanzmärkte … gegenwärtig keine Anhaltspunkte für eine negative Beurteilung"[6] gibt.

Lediglich die Preisniveauentwicklung, gemessen am harmonisierten Verbraucherpreisindex (HVPI), bereitet nach wie vor Sorgen. Nach Berechnungen der Eesti Pank hat sich die Inflation in Estland fortwährend beschleunigt, und zwar von 4.1% im Jahre 2005 über 4.4% (2006) auf 6.3% im abgelaufenen Jahr. Nach Vorausberechnungen der Eesti Pank wird sie 2008 noch ein weiteres Mal auf 7.4% ansteigen.[7] Sicherlich sind in diesem Jahr eine Reihe von Sonderfaktoren[8] wirksam, die im kommenden Jahr – hoffentlich – entfallen oder zumindest an Einfluss verlieren werden. Ob allerdings die für 2009 prognostizierte deutliche Umkehr dieser Entwicklung auf eine Steigerungsrate von dann noch 4.6% eintreten wird, bleibt abzuwarten.

Was das 5. Beitrittskriterium anbelangt, nämlich die zweijährige spannungsfreie Teilnahme am Wechselkurs-Mechanismus II, so hat die Europäische Zentralbank (EZB) bereits in ihrem Konvergenzbericht von Dezember 2006 festgestellt, dass das Currency-Board-Regime von der Konstruktion her regelmäßige Interventionen der Eesti Pank an den Devisenmärkten verlangt, deren Ausmaße *per saldo* bisher gering gewesen sind.

Insgesamt weist Estland – bis auf die Preisniveausteigerungen – eine gesunde Entwicklung auf, die auch in den Wachstumsraten des realen Bruttoinlandproduktes zum Ausdruck kommt. Diese bewegten sich zwischen 10.2% (2005), 11.2% (2006) und 7.1% im vergangenen Jahr.[9] Wenn für das laufende und kommende Jahr leichte

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[3] Eesti Pank, *Quarterly economic policy statement of Eesti Pank*, Economic forecast for 2007 2009, S. 2.

[4] Defizitquote, wohlgemerkt D e f i z i t quote bis zu 3% und Schuldenbestand bis maximal 60%, jeweils bezogen auf das Bruttoinlandprodukt.

[5] Als Marktzins gilt die Durchschnittsrendite öffentlicher, d. h. von der jeweiligen Zentralregierung emittierter Anleihen mit einer Laufzeit (gegebenenfalls Restlaufzeit) von 10 Jahren. Dieser so genannte Marktzins wird als Stabilitätskriterium und damit Beitrittskriterium dafür angesehen, wie die Märkte den Stabilitätswillen der einzelnen Beitrittkandidaten einschätzen.

[6] European Central Bank, *Convergence Report*, December 2006: 52 (deutsch: Konvergenzbericht, S. 59 f).

[7] Eesti Pank, *Quarterly economic policy statement of Eesti Pank*, Economic forecast for 2007–2009: 2.

[8] Siehe hierzu in diesem Sammelband (CD-ROM): Raudjärv, M., Entwicklungen in der Estnischen Wirtschaft.

[9] Eesti majandusnäitajad aastate lõikes. Eesti majandus, http://www.eestipank.info/, 25.03.2008.

‘Verschnaufpausen’ erwartet werden, so ist das durchaus normal und dient der Konsolidierung der weiteren Wirtschaftsentwicklung.

Die XVI. estnische Konferenz zum Thema “Wirtschaftspolitik in der EU Staates – das Jahr 2008” findet vom 26. bis 28. Juni 2008 im südestnischen Kurort Värska statt. Daran werden die Autoren der vorliegenden Beiträge, Wirtschaftswissenschafter aus Hochschulen und öffentlicher Verwaltung sowie estnische Unternehmer teilnehmen.

Die Diskussionen werden hauptsächlich auf die Ursachen und Folgen der aktuellen Entwicklungen in der EU und der estnischen Wirtschaft gerichtet sein. Weil sich das Wirtschaftswachstum in Estland in letzter Zeit wieder verlangsamt hat, müssen Themen wie Stabilisierung der Immobilienmärkte und des Bausektors sowie Entwicklungen auf dem estnischen Arbeitsmarkt eingehend diskutiert werde. Nach wie vor sind Mittel und Wege zu einer ausgewogenen regionalen Entwicklung und gesunden Finanzierung der kommunalen Selbstverwaltungen zu eruieren; auch die Rolle der Städte bei der Planung und Umsetzung der Kommunalpolitik ist neu zu bestimmen. Zur aktuellen Problematik gehört nach wie vor der Zusammenschluss einzelner Gemeinden und Städte in Estland, um besser eine nachhaltige Entwicklung zu gewährleisten

Die Organisatoren sprechen allen Sponsoren ihren Dank aus. Sie wünschen den Konferenzteilnehmern interessante und fruchtbare Diskussionen im Plenum sowie weiterführende Gespräche in kleineren Kreisen.

Februar-März 2008

Manfred O. E. Hennies
Kiel/Warder, Deutschland

Matti Raudjärv
Tallinn/Pirita-Kose und Pärnu, Estland

PREFACE

This publication *Eesti majanduspoliitilised väitlused/Discussions on Estonian Economic Policy* (bearing this name since 2007 but in the years 1984 and 1994–2006 under the names of different collections of articles)[1] has been published for 16 years already and its authors are mainly members of the academic staff of different institutions of higher education and economists of the Republic of Estonia and the Federal Republic of Germany (since 1996), also experts on national economy (incl. from the EU institutions). Besides Estonia and Germany, authors of the papers have also come from other countries (Finland, Latvia, Lithuania, Poland, Slovenia, UK, etc.).

Peer review of the papers has been organised in the recent years in cooperation with many institutions of higher education from several countries: Andrássy Gyula German Language University of Budapest (Hungary), Ernst Moritz Arndt University of Greifswald (Germany), Kiel University of Applied Sciences (Germany), Kufstein-Tirol University of Applied Sciences (Austria), University of Leipzig (Germany), University of Merseburg (Germany), University of Potsdam (Germany) and a few others. In addition, several professors emeritus from Germany (Berlin, Kiel, Munich) have participated in the cooperation.

Since 2001, the publishing has been organised jointly in the form of cooperation between the German publisher Berliner Wissenschafts-Verlag (former Berlin Verlag Arno Spitz) and the Estonian publisher Mattimar OÜ. This publication is a traditional annually appearing independent collection of research papers which has consisted of a CD-ROM and a collection of abstracts since 2007. Also this collection consists of two integral parts: the main part consisting of papers is on CD-ROM (inserted in the pocket of the book cover) and the concise abstracts of the papers in other languages, printed on paper media. In addition, several other articles related to economics are published in the Chronicles part (brief introduction of Estonian economists, overviews of conferences on economic policy held in Estonia, etc.).

One of the purposes of this publication is to analyse and evaluate the developments in the Republic of Estonia as a EU Member State from the aspects of economic policy. Also developments in other countries, including outside the EU, and comparisons between them are definitely relevant here. In the future, economic development, cooperation and problems of the countries of the Baltic Sea could be another important subject area.

The development of Estonia after becoming an EU Member State on 1 May 2004 shows that Estonia is steadily moving towards joining the European Economic and Monetary Union. From the aspects of the financial and political criteria of accession, Estonia is a real example of stability for most EU Member States – in 2004–2006

[1] Names of the collections of articles until 2006 have been listed in the publication *Eesti majanduspoliitilised väitlused – 15/ Estnische Gespräche über Wirtschaftspolitik – 15/ Discussions on Estonian Economic Policy - 15*. Papers (CD-ROM) and abstracts. Berlin, Tallinn: Berliner Wissenschafts-Verlag, Mattimar 2007: 113–114.

the government surplus constituted 2.3 to 3.7% of the GDP, which reduced the debt level to 4.5% of the GDP. Such development will continue according to the evaluations of the Bank of Estonia,[2] although the budget surplus decreased to 2.8% last year[3]. Consequently, there are no problems with following the reference values set with the Maastricht Treaty.[4]

The two important accession criteria of monetary policy are market interest rate[5] and the rate of inflation. As the government debt level of the country is low, the market based on government debt in kroons has not developed in Estonia. Therefore there are also no long-term harmonised interest rates, i.e. market interest rates which could be the determining factor in making the evaluations. Thus we can state concerning the criterion of market interest rates that "however ... on the basis of a broad analysis of financial markets, there are no indications suggesting a negative assessment".[6]

Only the increase in the price level, measured with the harmonised consumer price index (HICP), is worrying. According to the estimates of the Bank of Estonia the inflation in Estonia is steadily increasing – while it was 4.1% in 2005, it rose to 4.4% in 2006 and to 6.3% last year. The Bank of Estonia forecasts another increase of inflation to 7.4% in 2008.[7] A number of special factors will surely have a role this year,[8] which will hopefully not exist next year or at least their effect will decrease. The future will tell whether the current development will really change as forecast for 2009, leaving the inflation to the level of approximately 4.6%.

As to the 5th criterion for accession, namely the participation in the exchange rate mechanism ERM II for 2 years without problems, the European Central Bank accepted already in its Convergence Report of December 2006 that the currency board arrangement implied by definition that the Bank of Estonia was regularly active in the foreign exchange markets but the volumes of foreign exchange transactions conducted were small on a net basis.

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[2] Eesti Pank, Economic Forecast for 2007–2009 in Monetary Developments & Policy Survey, September 2007, p. 32.

[3] Eesti Pank, *Quarterly economic policy statement of Eesti Pank*, Economic forecast for 2007–2009: 2.

[4] Government deficit, i.e. **deficit**, must be less than 3% of GDP and government debt must be no more than 60% of GDP.

[5] Market interest rate is the yield of public, i.e. government debt issued with the term of 10 years (i.e. time to maturity). Such market interest is regarded as a criterion of stability and therefore an accession criterion according to which markets evaluate the intention of accession candidates to maintain stability.

[6] European Central Bank, *Convergence Report*, December 2006: 52 (deutsch: Konvergenzbericht, S. 59 f).

[7] Eesti Pank, *Quarterly economic policy statement of Eesti Pank*, Economic forecast for 2007–2009: 2.

[8] For additional information on this issue see the paper in this collection: Raudjärv, M. Entwicklungen in der Estnischen Wirtschaft

The economic development of Estonia can be generally regarded as positive, if we do not take into account the increase in the price level. This is also manifested in the growth rates of real GDP which were 10.2% in 2005, 11.2% in 2006 and 7.1% last year.[9] Although some breathing space is expected for this and the next year, it should be regarded a fully normal phenomenon which serves the interests of consolidation of further economic development.

The developments related to the above and many other economic developments are regularly discussed in Estonia. A traditional discussion will take place in a small health resort town Värska in Southeast Estonia on 26–28 June 2008. The XVI International Scientific Conference "Economic Policy in the European Union states– in 2008" will be held in the hotel and mineral water SPA complex of the Värska Resort. Many authors of the papers in this publication will take part in the conference, giving presentations and participating in the discussions. In addition to members of the academic staff and economists also presentations from several representatives of the Estonian public sector and private companies and their participation in the discussions will be expected at the conference. Additional presentations will be expected also from other members of the academic staff and economists from Germany (who are not represented in this publication).

Hopefully also several issues of the economic policy of the EU and topical problems facing the Estonian economy will be discussed at this conference. As the economic growth has slowed down in Estonia in the recent years, also such issues as stabilisation of the real estate market, events and developments in the Estonian labour market and difficulties of employees of many specialities (builders, real estate developers, etc.) in keeping their jobs and finding new jobs will surely be discussed at the conference. Also balancing of regional development in Estonia, formation of the local budget, determination of the role of cities and towns in the planning and implementation of regional and local government policy are topical issues. Other related issues on the agenda are further developments in the process of merging Estonian rural municipalities with cities and towns to improve their sustainability. But there are many other subjects and problems of both economic theory and practice, also current economic life in Estonia which deserve and need discussion.

We wish success to participants who will give presentations at the conference and to the audience and appreciate the help of several supporters. We hope you will find the content of this publication interesting and give you food for thought.

February–March 2008

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Germany (in Kiel and Warder)

Matti Raudjärv
Estonia (at Pirita-Kose in Tallinn and in Pärnu)

[9] Eesti majandusnäitajad aastate lõikes. Eesti majandus, http://www.eestipank.info/, 25.03.2008.

INTER- VS. INTRAREGIONAL INCOME INEQUALITY AND VOTING BEHAVIOR WITHIN FEDERATIONS

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Introduction

As economies grow and prosper, the increase in welfare is not split equally among its citizens. Technological progress and globalization widens the wage gaps[1] and hence increases income inequality. Politics is prompted to challenge this problem through income redistribution. But what is the optimal level of redistribution? The answer seems straightforward: It should reduce inequality to an appropriate amount. But what is appropriate? Total equality like communism cannot be the answer, but total laisser-faire either.

However the first problem arises with measuring inequality.[2] A measurement that is convincing should satisfy the following conditions:

- Independence of proportional income changes.
- Independence of population size.
- Weak transfer principle.

Hence, it should not change, if overall income or population e.g. doubles. The last condition requires that a transfer from rich to poor people should lower inequality. These conditions seem simple and convincing, but not every measurement satisfies them and is therefore suited for analysis. Such measures are e.g. the *range* (difference between maximal and minimal income), the *relative mean deviation* (relative variation from average income) or the *variance* (relative frequency). A suited statistical measurement is the *Gini coefficient* (area between the Lorenz curve and the perfect equality line, divided by the total area underneath the perfect equality line). However these statistical measures do not consider an important point: they do not evaluate the inequality. They do not analyze, which level of inequality is appropriate or not.

A measurement that satisfies these conditions and evaluates the results was suggested by Dalton (1920) who recommended to use the social welfare function.[3]

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[1] There is no agreement on which effect prevails since it is almost impossible to separate the effects. Krugman (2000) argues that trade volumes are too small to affect relative wages, whereas Leamer (1998) argues that prices are determined on the margin and hence trade does affect wages. Also the consideration of sector-specific technological progress (Leamer 1998) or of factor-specific technological progress (Krugman 1998) leads to different results. For an empirical consideration for the US see e.g. Lawrence and Slaughter (1993).

[2] See Atkinson and Bourguignon (2000), Cowell (1995) and Cowell (2000).

[3] Important assumptions of this concept are: it's individualistic (the individual factor is income), symmetric (if two individuals swap their income, utility will not change), additive (sum of all

Since the utility function is an ordinal concept, positive linear transformations are allowed, which is problematic Atkinson (1970) enhanced this concept and his advancement will be used in our further analysis, where we consider the optimal utility (at least from the perspective of the median-voter). By using the Atkinson index we determine the regional inequality aversion and therefore the median-voter's preferences. Hence, policy-makers can decide about income redistribution measures for achieving the optimal inequality ensuring their re-election. The optimal inequality level may not be fulfilled by the politicians since there are federation rules regarding inter-regional income redistribution. In this case a decision regarding the further participation to the federation has to take place.

In this model we do not consider optimal federation size as analyzed by Alesina and Spolaore (1997). Therefore we do not presume costs arising from regional heterogeneity. The only benefit arising from federation membership is the possibility of harmonization of inequality levels across regions. These may lead to a situation, where homogeneous regions are the only members of the federation. Furthermore we do not examine the optimal amount of decentralization. The formation of the federation as well as the attribution of responsibilities between the different levels of the federation (Alesina, Spolaore 2003) is disregarded in this paper. We define federation as being just an additional possibility for redistributing income and hence for changing inequality.

Our paper is structured as follow: in the next section 2 we develop the basic model, the utility function of the median voter. The (political) outcome for the optimal income inequality within the region results. In section 3 we consider the outcome within a federation considering two possible distribution rules and identify different types of regions and their preferences. Finally, section 4 concludes.

The Intra-Regional View

We consider several regions integrated in a federation. The main purpose of this federation is redistribution among regions. Redistribution takes place within a region as well. A conflict arises since inter-regional redistribution reduces the budget available for intra-regional redistribution. However, under certain circumstances it may increase the available budget and hence helps lowering intra-regional inequality. We measure inequality by Atkinson's inequality index *I*. This index is defined as (Atkinson 1970):

(1) $I = 1 - \frac{y_{\text{EDE}}}{y_A}$,

where

y_{EDE} – the equally distributed equivalent level of income;
y_A – the average or mean income level;

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individual utilities), (strict) concave (decreasing marginal utility expresses inequality-aversion) and elasticities are constant (constant relative risk aversion).

y_{EDE} / y_A – measures the ratio of the income level equal for all residents that would lead to the same social welfare as the actual income distribution.

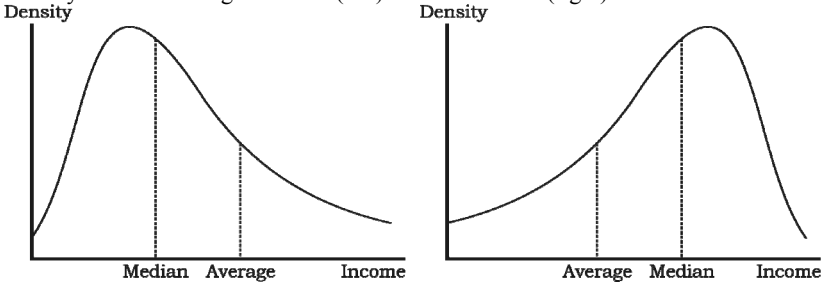
We do not specify this social welfare function here any further, the only important condition (among those described in footnote 3) this function has to fulfil is concavity. Only under these condition the population is inequality-averse[4]. This index lies between 0 implying complete equality and 1 implying complete inequality. Note further that this social welfare function may imply – depending on its specification – decreasing, constant or increasing absolute inequality-aversion. A society that becomes richer may hence develop a greater need for equality or unequality. The considered regions in the federation need not necessary to have the same social welfare functions as this index allows us to compare inequality and how theses societies will react to an increase in equality. The lower this "proportional risk premium" the less a society is willing to pay (in terms of a lower GDP) to increase equality – either because this society has already a high level of equality or this region has less inequality-aversion than a comparable one. Inequality may be natural, if individuals are heterogenous with respect to their skills, preferences for leisure time and other characteristics. To exclude these effects, we assume homogeneous individuals and hence there is no (objective) reason for inequality (no-communism-condition). Regions in the federation differ in two dimensions: GDP and inequality. Furthermore we assume these two variables as not being correlated. There may be rich and equal (or less inequality-averse) societies as well as poor and very unequal (or very inequality-averse) regions, or rich and unequal and poor but equal regions. However, to make regions more comparable, we assume the same social welfare function for all regions to exclude different inequality-aversions and concentrate on the de-facto inequalities. We also make no assumption, if equality lowers or enforces growth of a region. (Josten, Truger 2003) We further assume that all regions are perfect democratic societies. This implies a votes maximizing politician considers the preferences of the median-voter so that he can win the elections. According to this, we first identify the optimal inequality preferred by the median.

Atkinson's measurement of inequality, *I*, does give us few information about the income of the median voter. If the income distribution is right skewed the median is poorer than the average (prevailing in most developed countries) and if the income distribution is left skewed then the median is richer than the average (see figure 1). Assuming that the income distribution is unknown, the Atkinson index does not give us any information about the position of the median's income and the average income. Hence we do not know which scenario prevails. However we can state the following conclusion: The higher Atkinson's index *I*, i.e. the more unequal is the society, an the less likely an individual will achieve a higher income than a given higher income level. This probability declines in *I* as well as in this income level.

[4] Hence this utility function is comparable to the expected-utility function and the concept of risk-aversion. A convex social welfare function would therefore induce inequality-loving individuals – a quite abstruse property.

We consider the average income is the given level mentioned above and conclude

Density functions of right skewed (left) and left skewed (right) income distributions.



Source: Own model as described in text.

that it becomes more unlikely for the median to be richer than the average if a high *I* prevails. I.e. the lower *I* the more probable that the median has a higher income than the average. The probability for a lower income level is smaller. If the median is poorer than the average he profits from redistribution, if he is richer, he is a net-contributor – the median loose from redistribution and hence will oppose it. Following scenarios may arise: If the median is richer than the average he will oppose redistribution since he loose income, if the median is poorer than the average, he will vote for redistribution, since he is supposed to gain from this policy. Only in the case, that the median is as rich as the average a kind of steady state is reached. The median will be indifferent with respect to redistribution. This of course has consequences for politician behavior. We can state following special probabilities with respect to the inequality:

- $Prob(I = 0) = 0$, if a society is perfectly equal, the probability that the median is poorer than the average or as rich as the average is 0% (in fact everyone has the same income).
- $Prob(I = 1) = 1$, if a society is perfectly unequal, the probability that the median is poorer than the average is 100% – consider e.g. where one person possess an income equal to the region's GDP, the average then is surely higher than the median's income of zero.

Hence this is the relation between (in)equality and the median's income level we use for further analysis. Without knowing the exact income distribution the probability distribution regarding the median's income is unknown (e.g. for $I = 0.2$ the expected income of the median is not known). However, this probability differs from region to region, differentiating the regions.

A politician that wants to gain or to keep his political power has to promote a redistribution measurement that maximizes the probability for the equivalence of the median's expected income and the average income level. We now have to determine the critical value of Atkinson's index that maximizes this probability. As mentioned

above too much equality rises the possibility that the median becomes richer than the average. He expects less redistribution or no redistribution at all. A high value of I increases the possibility that the median is poorer than the average and votes for more redistribution. In both scenarios the governing politician may loose elections. Only a critical value, I^*, ensures that the ex ante income of the median is equal to the average income. We assume, that if the government chooses the critical value and ex post the median is richer or poorer than the average the government will win elections as long as their redistribution policy is according with I^*.

We now know a critical value of I that is claimed by the median. However, if there are no state interventions the prevailing inequality is the market inequality, the laissez-faire or market-generated unequality, I^{lf}. Since all individuals are homogeneous inequality may arise due to economic growth, technological progress or other exogenous factors. Normally the laissez-faire inequality and the critical inequality (demanded by the median) differ, making state interventions necessary. A rational, vote-maximizing government of region i announces a budget that lowers (or increases) the laissez-faire to the critical inequality level,

(2) $b_i \left(\left| I^{lf} - I_i^* \right| \right) = \tau_i y_i$,

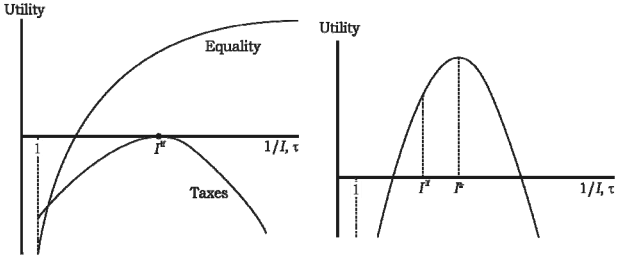
where

y_i – the GDP of region I;

τ_i – the tax rate needed to generate this budget, b_i.

If we rearrange (2), we obtain $\tau_i \left(\left| I^{lf} - I_i^* \right| \right) = \tau_i^*$, the critical tax rate.[5] If we assume that the laissez-faire inequality is always higher than the critical inequality, then we ignore the absolute value consideration and I^{lf} becomes the upper bound of the inequality levels. The higher the difference between I^{lf} and I_i^*, the higher the disposable distribution income (budget) and hence the higher the taxes.

Utility function with respect to equality and taxes (right) and overall utility function (left).



Source: Own model as described in text.

[5] At τ^* the marginal costs equals the marginal benefits of tax paying. This does not assume taxes of zero. We consider τ^* as being the tax rate for which the median-voter can assign service in return. Everything below (above) this tax rate implies income redistribution.

The median-voter evaluates the consequences of the governmental policy measures by considering the taxes he has to pay as well as the society redistribution. Considering the critical level of inequality as well as the critical tax rate the utility function of the median-voter can be formulated as follows

(3) $U_i\left(I_i, \tau_i\right)$.

It depends negatively on I as well as τ. Since the government aims to get the median's vote, the inequality value will equal the critical value. At this critical level of inequality the median-voter is indifferent with respect to redistribution since he is neither net contributor nor net recipient. Considering the democratic system, this critical level of inequality is utility maximizing for the median-voter, since the marginal costs (taxes) equal marginal benefits (equality). A situation with $I = 0$ is not possible in a democratic system because of very high tax burden which leads in the end to expropriation.

Figure 2 shows the median-voter's utility function depending on inequality and taxes. The left figure indicates separately the dependence between utility and equality[6] and utility and taxes. Since the utility simply increases with increasing equality[7] something else can be observed for the run of utility curve with respect to taxes. Excluding the inequality, the utility equals in the best case zero. In this point the laissez-faire inequality is given (the laissez-faire inequality does not imply any taxes because no redistribution is taking place). The right figure shows the run of the median's utility function where the utility maximizing point is given by the critical inequality. In this case, the median votes for more equality since the critical equality is above the marked-based inequality.

The Inter-Regional View

As shown in the previous section, the median voter maximizes his utility with $I^{opt} = I^*$[8]. Since this value of I has to be obtained by the government for keeping political power, regional behavior within the federation may be changed. Politicians' behavior depends on two variables: GDP and Inequality. A problem will arise if this objectives compete, fact which is possible (as we will show below) for two types of regions. The feasible trade-off between equality and GDP may have consequences for regional disparities and inter-regional income redistribution. We consider in this section two types of regional utility maximizing behavior: First we consider a region that maximizes its utility with respect to GDP and second we assume a region that maximizes utility considering the – (in)equality. In both cases the ignored variable (in)equality in the first case and GDP in the second case – results from inter-regional

[6] Please note that we inverted Atkinson's index. Hence it starts a 1 (for $I = 1$, perfect inequality and is infinite (for $I = 0$, for perfect equality).

[7] We assume a decreasing marginal utility since $I = 0$ is leading to a negative value of the utility because of very high taxes. If a government focuses only on maximizing equality (communism) a negative utility will arise.

[8] The fact that I^* maximizes the median's utility as well as the government's utility does not imply same utility functions.

behavior of the government. The politicians will decide for that kind of inter-regional income redistribution that allows an inequality value that equals I^* so that he can obtain the median's vote. This depends on the redistribution rule chosen in the federation. If the regional government cannot implement the redistribution rule which maximizes the median's utility, he will not be re-elected in the next period.

Considering the federation inequality as well as the regional inequality and the intra-regional voting behavior two budget redistribution rules for the n federation members arise:

1. Redistribution rule:

(4) $\delta_i = \dfrac{y_i - \overline{y}}{y_i}$,

where

$\overline{y} = \sum_{i=1}^{n} y_i \big/ n$ – the average GDP;

y_i – region i's GDP.

2. Redistribution rule:

(5) $\eta_i = -\dfrac{I_i^* - \overline{I}^*}{I_i^*}$,

where

$\overline{I}^* = \sum_{i=1}^{n} I_i^* \big/ n$ – the average critical inequality;

I_i^* – region i's median-demanded inequality.

These rules regard the efficient and fair income distribution within the federation not considering regional policy interests and therefore regional median-voter's preferences. The first rule shows that the inter-regional redistribution changes the budget available for intra-regional redistribution as well as GDP. The budget before redistribution was

(6) $\tau_i^* y_i$,

where

$\tau_i y_i <$ GDP.

After inter-regional redistribution the budget changes to

(7) $\left(1-\delta_i\right)\tau_i^* y_i = \tau_i^* \overline{y}$.

Therefore GDP after redistribution results

$\left(1-\tau_i^*\right) y_i + \left(1-\delta_i\right)\tau_i^* y_i = \left(1-\delta_i \tau_i^*\right) y_i$

We assume optimal taxes as defined in (2) and get

$$y_i > \overline{y} \;\rightarrow\; \delta_i < 0 \;\rightarrow\; \left(1-\delta_i\right)\tau_i^* y_i < b_i\left(\left|I^{\text{lf}} - I_i^*\right|\right) \;\rightarrow\; I_i \uparrow$$

$$y_i = \overline{y} \;\rightarrow\; \delta_i = 0 \;\rightarrow\; \left(1-\delta_i\right)\tau_i^* y_i = b_i\left(\left|I^{\text{lf}} - I_i^*\right|\right) \;\rightarrow\; I_i \text{ const.}$$

$$y_i < \overline{y} \;\rightarrow\; \delta_i > 0 \;\rightarrow\; \left(1-\delta_i\right)\tau_i^* y_i > b_i\left(\left|I^{\text{lf}} - I_i^*\right|\right) \;\rightarrow\; I_i \downarrow$$

Three cases arise with respect to the first rule. If the regional income is higher (lower) then the federal average income the region will be a net contributor (recipient) of federal redistribution budget. This implies that the intra-regional budget is too small (high) for attaining the critical value of inequality. I.e. the intra-regional inequality, *I*, increases (decreases). If the regional income equals the average federation income, the inequality will be constant. Concluding, income equality in poor countries increases whereas income equality in rich countries decreases.

The second inter-regional redistribution rule changes the budget available for intra-regional redistribution and GDP as well. The budget before redistribution is the same as in (6). After redistribution the budget is

$$(9)\quad \left(1-\eta_i\right)\tau_i^* y_i = \left(2 - \frac{\overline{I}^*}{I_i}\right) b_i\left(\left|I^{\text{lf}} - I_i^*\right|\right),$$

and GDP after redistribution is

$$(10)\quad \left(1-\tau_i^*\right) y_i + \left(2 - \frac{\overline{I}^*}{I_i}\right) b_i\left(\left|I^{\text{lf}} - I_i^*\right|\right) = y_i - \eta_i b_i\left(\left|I^{\text{lf}} - I_i^*\right|\right).$$

Since $\eta_I < 0$, a region whose median is voting for a lower *I* than the average becomes richer. Analogous if the median is voting for less equality, a country becomes poorer. Hence the second redistribution rule is depending on the regional inequality, the median's preferences are taken into account for the inter-regional redistribution directly.[9] The advantage of this rule from the federation's view is given by the fact that a median whose preferences are for more inequality has to pay more taxes, since the second redistribution rule aims at the highest possible equality, i.e. inter-regional income redistribution may lead to better regional equality values despite political preferences. Therefore the median that is voting in favor of less inequality has to pay less taxes compared to the situation where his region belongs not to this federation. As an opposite the first redistribution rule does not consider the median's preferences directly since it depends only on the GDP. If regions decided to establish or join the federation for gaining more equality the second rule would hence be a better choice. E.g. if a region has a high GDP and a high

[9] As we mentioned previously in footnote 8 utility functions of regions and median-voters are different despite that both tend to the same result. I.e. a region which prefers the first redistribution rule comprises in its utility function the median's preferences just indirectly (it maximizes median's utility considering the income) while the second redistribution rule is maximizing median's utility by considering its inequality preferences directly.

inequality, the first redistribution rule will lead to a higher inequality for constant tax rates while the second rule will induce a higher equality.

Since we compared the regional inequality situation considering both income redistribution rules we have to analyze the GDP changes. For comparing the GDP under the first rule and second rule, we rewrite (8)

(11) $y_i - b_i\left(\left|I^{lf} - I_i^*\right|\right) + \tau_i \overline{y}$.

A government prefers the first rule over the second rule, if it leads to a higher GDP,

(12) $y_i - b_i\left(\left|I^{lf} - I_i^*\right|\right) + \tau_i \overline{y} > y_i - \eta_i b_i\left(\left|I^{lf} - I_i^*\right|\right)$,

this simplifies to

(13) $\tau_i \overline{y} - \left(2 - \frac{\overline{I}^*}{I_i}\right) b_i\left(\left|I^{lf} - I_i^*\right|\right) > 0$

i.e. if the new budget under the first rule is larger than under the second rule.

If the region is richer than the average it has to choose a higher value of τ_i^* under the first rule to ensure the necessary budget. Thus, $t_{i,f}^*$ has to be determined such to ensure that

(14) $b_i\left(\left|I^{lf} - I_i^*\right|\right) = \tau_{i,f}^* \overline{y}$

is fulfilled. If $y_i > \overline{y}$, taxes for a region within the federation are higher than if the region does not belong to federation. If $y_i < \overline{y}$, taxes would be lower. Hence, under the second rule poor regions profit: they are able to fulfill the median's preferences more easily at the cost of lower taxes. Richer regions loose, they have to bear higher tax to ensure the preferred inequality. To sum up, the median voter in poor regions gains and hence supports the membership in the federation whereas the median in the richer regions is more skeptical about the federation. If the richer region deviates from federation rules, it is able to reach the median's aim more easily at lower (tax) costs. If the region's old government does not change its policy is risks to loose elections.

Under the second rule $\left(2 - \frac{\overline{I}^*}{I_i}\right) b_i\left(\left|I^{lf} - I_i^*\right|\right)$ applies and hence

(15) $\left(2 - \frac{\overline{I}^*}{I_i}\right) \tau_i y_i$

As long as a region tries to reach more equality than the average, it has to charge less taxes, hence there is an incentive to strive for less inequality. Whereas the first rule is fair, the second rule is efficient.

Both rules hence induce different incentives: the first rule seems mostly attractive to poor regions, independent of the level of inequality preferred by the median,

whereas the second rule is attractive for regions whose median aims at a high level of equality independent of the region's GDP. Poor regions trying to achieve high equality may be indifferent between both rules, since their GDP rises and they are able to achieve high equality at lower costs (Type A region). However, rich regions whose median cares less about equality will loose under both scenarios and hence never join the federation (Type D region). The following table illustrates the several, possible types of regions:

	$I_i^* < \overline{I}^*$	$I_i^* > \overline{I}^*$
$y_i < \overline{y}$	A	B
$y_i > \overline{y}$	C	D

Regions of type A prefer both rules and regions of type D dislike both rules. Type B regions prefer the first rule and regions of type C prefer the second redistribution rule. However, several conflicts may arise if one rule is applied: Assume, the federation's redistribution rule is the first one, determining the contribution to the federation with respect to the GDP. This rule is preferred by A and B. C and D may not join, a fact which leads to the situation where only poor countries remain in the union (if more and more regions leave, several A and B regions will turn to C and D regions). If the second rule is applied, A and C regions prefer to stay and B and D may leave, leading to a situation where only those regions with the highest preference for equality remain. As a result only equal regions will join federations.

Conclusion

In this paper we analyzed the region's behavior within a federation considering intra-regional income redistribution needs with respect to the median-voter. The Atkinson inequality index allows us to measure inequality, whereas the relative income position of the median with respect to the average could not be identified. According to the inequality aversion and the income distribution skewness we determined the median preferences for inequality, i.e. the higher the Atkinson index (more inequality) the higher the probability that the median prefers more income redistribution. We concluded that the median voter will prefer that level of inequality which allows him to be indifferent with respect to redistribution policy.

Since the politician needs the median's vote for (re-)election, he will choose his income redistribution policy considering the median's preferences. The budget available for redistribution is therefore determined to satisfy the critical inequality value.

Furthermore we considered the region as being part of a federation. Inter-regional income redistribution arise. Two redistribution rules may be used within the federation: one with respect the relative GDP deviation and the other with respect to the relative critical inequality deviation. Both rules change GDP and inequality level

and therefore the intra-regional redistribution budget. The critical inequality level can be reached by changing taxes. If the critical inequality level is not reached through the inter-regional federation redistribution and the costs (taxes) of achieving this level at the regional level are too high, this region will exit the federation. Finally, we defined four types of regions with different inter-regional redistribution preferences and therefore behavior.

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OBSERVATIONS ON EUROPEAN FLEXICURITY POLICIES

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Background

The aims of much of the legislation surrounding the Single Market and competition policy are threefold. Firstly, it aims to create a free European market. Secondly, it continues to mould the structure of the European economy. Finally, it promotes the international competitiveness of European firms. The fundamental economic rationale of the Single Market programme is to enlarge the European economic market and thus allow firms to be both big enough to reap economies of scale and numerous enough to promote competition. Even if economists can demonstrate that, on balance, the economy as a whole benefits, the fact remains that some jobs will be lost and some individuals will incur substantial and long-term losses as a result. Therefore, a more integrated and globalising Europe, which additionally has to adapt to the pressures of an ageing society (Funk 2004), is of some concern to workers in Europe, and many believe it threatens their jobs.

A recent Eurobarometer study showed that increased competition, particularly globalisation, has created anxieties amongst workers in Europe. (For more information covered in this and the following paragraphs, see European Foundation … 2007) Many employees believe that developments associated with globalisation threaten their jobs. It is puzzling, however, that Swedes and Danes were most optimistic in this respect. As both countries are small open economies with a high exposure to external competition, it is noteworthy that workers in these countries are less likely than those in other European Union (EU) countries to believe that globalisation represents a serious threat to jobs.

Such attitudes are certainly one of the reasons why the Danish policy of 'flexicurity' has, for some time now, been a very popular concept that others have sought to put into practice. Indeed, this policy was recently adopted by the European Commission (EC) after it was first broached at the European level by the so-called Kok Report, which was named after a former Dutch Prime Minister, Wim Kok, who chaired the High Level Group established by the European Council to review the progress towards meeting the Lisbon objectives (European Commission 2004). This policy approach may provide an answer to the puzzle of why anxiety in Denmark and Sweden stemming from globalisation is relatively low, as both countries are regarded as role models for flexicurity. This reputation rests, in part, on their strong labour market records, especially with regard to employment rates. It may be argued that if workers are both compensated temporarily for the loss of their job and have good chances of gaining a new one, they are less prone to be anxious about the prospects of losing their jobs. More concretely, in such a flexicurity approach, policy has a role to play in promoting structural adjustment in line with market forces, which is welfare enhancing from an economic point of view. In addition, it needs to ameliorate the negative consequences of the ensuing labour market

adjustment on the workforce. These basics are also part of the EC's definition of flexicurity. In short, flexicurity is said to exist when employers can hire and fire comparatively easily (that is weak unemployment protection), and when, at the same time a relatively high safety net that includes effective activation policies and appropriate policies that help to ensure that the provision of skills is in line with market demands so that those who lose their jobs are protected. Denmark is often regarded as the paragon role model of flexicurity that is based on these pillars.

Security and flexibility are mutually reinforcing in this model. A judicious mix can bring about greater numerical and functional flexibility in the workforce (for details, see, for example, Hardes 2008) and within the economy more generally for a given level of security. Employment protection and unemployment benefits are regarded as functional substitutes in this model, as both can be used to protect workers against losing their jobs.

Empirical evidence appears to demonstrate that decreased job protection when combined with increased unemployment benefits that aim to offset the loss of job security seems to make the economy more adaptable, whilst still protecting workers. Clark and Pastel-Vinay (2006) find empirical evidence to support the contended advantage of the flexicurity approach. They discerned a positive correlation between perceived job security in both temporary and permanent private jobs and unemployment insurance benefits. At the same time, the relationship with employment protection legislation strictness was negative. This implies that workers feel less secure in countries where jobs are more protected. Using a partial equilibrium labour search model and cross-country evidence, Bell and Tawara (2008) confirm additionally a potentially positive role of active labour market policies and an adverse effect of employment protection legislation, whilst passive labour market policies fail to have any effect on perceived employment security. Such results may well help to explain the positive attitude towards globalisation in Denmark and Sweden.

Taking these observations as starting points, this essay addresses three issues related to the recent debate on European flexicurity policies. Firstly, after some brief remarks on macro-economic issues, this article highlights the most important stylised facts of European labour market performance compared to that of the United States (US), as the EU's inferior record was the starting point for recent efforts to catch-up with the US. Secondly, the paper very briefly surveys different labour market experiences and outlines the different varieties of social models. Moreover, it assesses whether the principal ideas of flexicurity can potentially be regarded as the smallest common denominator of the controversially discussed European Social Model (ESM) as the EC wants to implement flexicurity policies in all member states. Thirdly, the question arises, with regards to the opportunities and risks the flexicurity strategy at the EU level contains, as it is the basis of amendments to the European Employment Strategy (EES) in early 2008. This article concludes by providing an evaluation of the related issues of if – and, if so, under what conditions – the concept of flexicurity can be regarded as beneficial in attempts to solve labour market problems in the EU.

A few remarks on macro-economic issues

Due to the fact that according to most econometric analyses the largest part of unemployment in Europe is non-cyclical/persistent or structural, questions of fiscal and monetary policy will not be dealt with here. A few general remarks will have to suffice in this respect. (For more on the following, see Lindbeck 2006) When we understand unemployment as the combined effect of a malfunctioning labour market, welfare state arrangements that create (dis)incentives for labour supply and deficiencies in macro-economic stabilisation policies, the implementation of policies that only stimulate the supply of labour will be insufficient to improve the labour market outcomes. Higher employment will only result if the demand for labour increases simultaneously. To the extent that unemployment problems are cyclical, cautious macro-economic stabilisation policies may be needed in order to avoid the prospect of such unemployment becoming structural over a period of time. European monetary institutions and the reformed stability and growth pact as well as the existing room for manoeuvre for fiscal policies at the national level may suffice in this respect during normal times. However, renewed attempts by governments to test the limits of these institutions are more likely to occur in the future – at least if economic crises occur – than are economically sound adjustments. (Ahearne 2008; Trichet 2008; Weber, Knappe 2007)

Since, on average, a much larger part of unemployment in Europe appears to be structural than it does in the US, however, the first priority to boost labour demand should be to reform appropriately deficiencies in welfare state arrangements and in market regulations that artificially decrease labour supply and labour demand. Low competition in product markets emanating from obstacles to the entry of firms, for example, reduces labour demand as larger profits due to monopoly power can be divided between firms and incumbent employees. Conversely, pro-competitive policies in product markets tend to boost demand for labour. More generally, in case of high structural unemployment, exploiting complementarities of alternative policy measures, for example, by combining a number of market-enhancing and welfare state reforms, may show better results than isolated reforms to improve the employment situation of a country. (For the potential interactions of structural and macro-economic policies, see, in general, OECD 2006 and, for the specific case of Germany, Funk 2007)

Stylised facts of comparative labour market performance

Western Europe's labour market problems emerged in the mid-1970s after the first oil price shock which led to a rise in unemployment across OECD countries. In contrast to the US, however, where the labour market problems remained mainly cyclical, unemployment became structural in a number of European countries. Additionally, since the mid-1990s, productivity in the EU-15[1] has fallen behind that of the US. Since then, output per hour in the EU-15 has been dropping below the

[1] The EU15 comprises Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and the United Kingdom.

level in the US. Additionally, this was accompanied by a decrease in relative working hours whereas the US managed at the same time to increase both labour productivity and labour input. By 2005, gross domestic product (GDP) *per capita* amongst the EU-15 was 27% lower than that of the US. Around one third of this productivity shortfall can be explained by lower labour productivity, whereas the remaining two thirds are due to lower labour resource utilisation. In terms of the lower labour utilisation in the EU, one third is attributable to lower employment rates and the other two thirds result from lower hours worked. (Cameron, Fawcett, Fernandez 2008)

The lagging Western European labour market and productivity performance compared to the US can be illustrated similarly when taking into account the euro area. The latter does not include Denmark, Sweden and the United Kingdom of the EU-15 countries. For example, in 2006 the number of annual hours worked in the euro area was 1617 compared to 1804 in the US. This noteworthy lower average number of annual hours worked does not in itself necessarily reflect a preference for more leisure time induced by European culture, as some authors argue. "Rather, in conjunction with low employment and participation rates, it reflects poor labour market outcomes for the long-term unemployed, the young, the low-skilled, women, and the old, along with an apparent preference for intra-household production of services rather than market-provision of services." (Cameron, Fawcett, Fernandez 2008) Short working hours, low employment, poor substitution between home services provided personally at home and those bought in the market as well as weak productivity growth in Western Europe on average may, according to the standard labour market literature, be seen to a large extent as the cumulative effect of certain institutions and disincentive effects in the European states. (Alesina, Glaeser, Sacerdote 2005; Lindbeck 2006; Nickell, Nunziata, Ochel 2005; Siebert 2006) These issues include labour market regulation and taxes, employment-hampering benefit duration and benefit replacement rates as well as labour union policies and the connected distinct asymmetries in market power between well-protected incumbent workers, on the one hand, and employment-seeking persons, on the other hand (the well established "insider-outsider" phenomenon).

"All in all, this clearly suggests that there is still considerable room for improvement as regards increasing the level of labour resource utilisation in Europe" (Trichet 2008). According to the current President of the European Central Bank (ECB), Jean-Claude Trichet, Europe is not lagging in terms of labour input utilisation only but also with regard to innovation and particularly the diffusion of information and communication technology. "The structural characteristics of the US economy – a more flexible labour market, a higher degree of competition in product markets and lower barriers to entry for new firms – were apparently more conducive to exploiting the opportunities provided by new technologies." (Trichet 2008)

"All in all, it appears that the overriding policy concern for Europe is how to simultaneously achieve solid employment and productivity growth" (Trichet 2008). In other words, according to such a diagnosis, policymakers need to increase the flexibility of the European economy by, above all, improving competition and

supporting enterprise in order to raise labour resource utilisation. "This is not because there is some simple trade-off between labour utilisation and productivity growth, but because a common set of institutional features may constrain Europe's performance in both areas simultaneously, rather than one causing the other to under-perform." (Cameron, Fawcett, Fernandez 2008, for an earlier treatment of the basic issues, see Knappe, Funk 1997, and for a less optimistic view which finds evidence for a strong negative trade-off between productivity and employment growth Dew-Becker, Gordon 2007)

EU's Lisbon strategy

In the year 2000, a comparable diagnosis by the EC that highlighted the poor average labour market and productivity performance in Europe led to the launch of the original Lisbon strategy aiming, by 2010, to make the EU "the most dynamic and competitive knowledge-based economy in the world, capable of new economic growth with more and better jobs, and greater social cohesion." (quoted in Sinn 2007, cf. also ECB 2005) It aims to do this by supporting structural reforms in the member states. The strategy made clear that reform of both labour market and social policies combined with a higher spending on research and development (3% of GDP or more in each state) appeared to be required at least in several of the member states to boost employment and growth. The evidence shows that alternative national employment-related policies have led to markedly differing levels of employment and unemployment rates. An inferior average performance compared to the US as well as a very poor performance in some member states (e.g. France, Germany, Italy and Spain) are characteristic of these differences. In order to aid such reforms, the EES of 1997 contained several specific measures designed to increase job creation. Although it was re-vamped so as to align it more closely to the early Lisbon strategy, which aims (among many other goals) at an EU employment rate for the working-age population of 70%, for women of 60% and for the 55 to 64 age group of 50% by 2010 (Abig 2005), the performance was still unsatisfactory.

According to Hans-Werner Sinn (2007) "instead of showing signs of becoming the world's most dynamic region, Europe has turned out to be its laggard" in spite of the launch of the Lisbon strategy. He adds that "politicians have focused on the wrong priorities (and in fact have done very little even to pursue the priorities on which they focused). Emphasizing the roles of research and innovation, they have ignored Europe's labor-market problems…" In short, the message of many academics is that the "Lisbon Agenda has not realised its objectives. A major reason for this is the failure of EU members to liberalise their product and labour markets." (Criscuolo 2008) Having been widely criticised as having contributed little to European economic progress, the European Council of Heads of State and Government, in response, re-launched the Lisbon strategy in March 2005 by shifting its focus to micro-economic reforms. These reforms were buttressed by a macro-economic policy designed to create the necessary conditions for more growth and employment. (Owen Smith 2008)

The ambition of this renewed agenda is reflected in the claims made by the EC that the adoption might add 3% to the EU's GDP by 2010 and add 6 million jobs. (Directorate General … 2005) Other, independent research confirms that the potential gains of the strategy could be very significant. (Netherlands Bureau … 2005) Important components of the renewed Lisbon Agenda include measures to make Europe a more attractive place to work, invest, and innovate. Additionally, the renewal requires creating a more flexible and skilled workforce by adjusting human capital continuously to the needs of the labour market through improved education and training as well as lifelong learning. Moreover, the governance framework of the Lisbon strategy had to be improved in order to increase the rather poor implementation rate of structural reforms. Accordingly, all EU member states have to prepare National Reform Programmes (NRPs) since the re-launch of the strategy. These NRPs have to outline steps for structural reform for the period from 2005 to 2008 and for the new cycle (2008–2010). Emphasising partnership between the EU and the member states, these NRPs appear to reflect a stronger political commitment to the process of enacting meaningful structural reforms in order to improve performance in terms of both labour market outcomes and productivity. As the renewed approach recognises that, in order to address the common challenges, each level needs to play its full part, the new Community Lisbon programme, sets out, in addition, as counterparts to the NRPs those Community actions that will contribute the greatest value to those reforms undertaken by the member states.

European flexicurity policies

In order to bring the different levels together, the 2006 Spring European Council agreed priority areas as the pillars of the renewed strategy. The current focus is, above all, on the implementation of the existing guidelines that urge member states "to promote flexibility combined with employment security – 'flexicurity' – and reduce labour market segmentation, having due regard to the role of the social partners." (European Expert … 2007) For the period 2008 to 2010, the aim is to put "a stronger emphasis on measures aimed at investing more in people and at modernising labour markets." (European Commission 2007b) According to the EC, flexicurity "aims at ensuring that all citizens can enjoy a high level of employment security i.e. that they can easily find a good job at every stage of their active life." (European Commission 2007b) By elaborating on this topic in detail in several recent publications and conferences, the EC has provided extensive information on flexicurity and ways for member states to adapt their labour markets to the pressures of the current and future economic challenges, while, at the same time, tackling the social challenges of the 21st century.

European flexicurity policies are sometimes regarded as the most important recent addition to the EC's strategy of supporting structural reforms of labour markets at the member-state level. The Lisbon Strategy's early failure resulted in the EC adopting the flexicurity idea after the Kok Report on employment policy had underlined, in November 2004, the need for more labour market flexibility "while providing workers with appropriate levels of security." (European Commission 2004) The concept appears as a natural extension of the EC's earlier efforts. The EC's

flexicurity strategy proved successful at least in the sense that a consensus in favour of it appeared to have emerged by 2006 among all relevant actors. (Keune, Jepsen 2007) After the joint analysis on "Key Challenges Facing European Labour Markets" which paid particular attention to flexicurity issues had been undertaken by the European social partners (ETUC/BUSINESS … 2007) actual contractual agreement was reached among the political EU actors in December 2007 when the European Council endorsed the EC's "Proposal on common principles on flexicurity." (Council of the European Union 2007)

This agreement includes a common set of flexicurity principles that are based on four components identified from, and related to, typical labour market situations or specific challenges and pathways: effective labour market policies, flexible and reliable contractual arrangements, comprehensive lifelong learning strategies and adequate social protection systems adapted to the challenges posed by more flexible labour markets. (European Commission 2007b) As a one-size-fits-all approach is regarded as inappropriate, member states, according to the European Expert Group on Flexicurity (2007), "will decide for themselves which challenge is most urgent for them, and not unlikely, they may wish to draw on more than one pathway." Accordingly, the EC recommended in December 2007 that "member states should now implement them, tailoring them to their own specific situations", that is "by defining national pathways within their NRPs by end 2008." (European Commission – Directorate-General … 2007)

The role played by the EC in employment policy, which has become established over time, is clearly illustrated by the Council of the European Union's (2007) invitation to the EC "to take the necessary steps to secure favourable conditions for a balanced implementation of this approach" by member states. This should occur while "acknowledging that the common principles are intended to be instrumental in the implementation of the next cycle of the Lisbon strategy and to serve as a useful basis for reforms, framing national policy options and specific national arrangements in the field of flexicurity; …; underlining the importance of European-level mutual learning and progress monitoring in the field of flexicurity, for which a consensual set of robust indicators based on high-quality statistics, covering equally and adequately the different components of flexicurity, is of utmost importance." (Council of the European Union 2007)

Flexicurity as smallest common denominator of the ESM?

As the relevant actors already acknowledged in the EES of 1997, it is vital to keep in mind that Europe is a diverse continent. This implies that looking at the performance of the EU-15 as a whole or the euro area only can be misleading. On the one hand, some countries have exhibited much better economic performance than others. On the other hand, European diversity increased considerably after recent EU enlarge-

ments, which started in May 2004 and which led to an increase of the EU to 27 members by 2007 and the euro area to 15 members by 2008.[2]

Additionally, it has to be taken into account that an activating role of the welfare state has only become one of the core elements in employment-related policy reforms since the mid-1990s. This idea implies finding a new balance between the rights and commitments of welfare beneficiaries in order to make work pay. The activating concept stems not only from national experiences of supposed role models in Europe, as mentioned above (Hardes 2008; European Foundation … 2007a), but also from the EES. The latter signifies that the member states have, for the first time, been trying to fight unemployment by means of community law. Formerly, such employment and social policy matters had always been regarded as a matter of genuine national responsibility (Abig 2005). In contrast, nowadays the EU recognises "the importance of a solid, integrated and balanced approach to the key challenges for the modernisation of labour markets, including the four components of flexicurity there identified." (Council of the European Union 2007). Moreover, it is acknowledged "that the common principles are intended to be instrumental in the implementation of the next cycle of the Lisbon strategy and to serve as a useful basis for reforms, framing national policy options and specific national arrangements in the field of flexicurity; recalling that there is no single pathway, and there is no principle more important than another …" (Council of the European Union 2007)

What do these developments mean for 'the' ESM? How can the EU's interference with employment issues be explained? Is it justified by economic rationality or caused by other factors? Based on former work on varieties of welfare states, it is argued that there is not just one ESM, but four or even more when taking into account the new member states, each with its own characteristics. (Sapir 2006; European Foundation … 2007b; Berthold, Brunner 2007) According to such approaches, there may be so many differences among national welfare state and labour market systems in the EU-27 that the very notions of an 'ESM' or a 'Social Europe' are rather dubious. It can be argued, however, that a substantial amount of unity remains within this diversity due to the fact that a great deal of common ground exists among the different member states' fundamental beliefs and core values. This includes, for example, strong support for social cohesion and relatively high levels of social protection against life risks for the entire population as well as a rather large role for social partnership and social dialogue at least in the majority of 14 of the 'old' EU-15 member states. In the United Kingdom as well as in several of the new member states, however, these social aspects are less pronounced. (Bukodi, Róbert 2007; Philips, Eamets 2007; Funk, Lesch 2004) The minimum social consensus amongst all EU countries may, however, be that the current key Lisbon goals of more employment and growth can be justified, above all, "because a Europe with more wealth is also more capable of supporting better social programmes and a better environment." (Pissarides 2005) Furthermore, a basic consensus exists that

[2] The new member states are Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia (since May 2004) and Bulgaria as well as Romania (since 2007). Slovenia (in 2007) and Cyprus as well as Malta (in 2008) entered the euro area.

such a mix of differences and common ground implies that despite rather similar common challenges and risks, as for example globalisation, the EU should not aim at a common ESM with social uniformity and an additional transfer of national competencies to the EU, let alone harmonisation for the sake of harmonisation. (Pestieau 2006)

The role of the OMC

The obvious solution, therefore, appeared to be the implementation of some kind of soft governance by objectives – as in the EES. It is here that the Open Method of Co-ordination (OMC), which was coined at the Lisbon meeting in March 2000, made its appearance. It was positioned as a means of spreading best practices and achieving greater convergence towards the main EU goals. In spite of the fact that its merits and problems are still controversial (Busch 2005; Offe 2005; Verdun 2006), one obvious advantage of the OMC is that it limits political conflict. It does this by not imposing a single European vision on the ideal welfare state design. It does, however, leave potentially difficult implementation problems to the member states. (Pissarides 2005) The OMC was regarded as politically useful, because, on the one hand, amongst other Lisbon objectives, the goal of reaching employment targets fell into areas where the competence largely lay with member states, as mentioned above, and where the method of EU regulations or directives which are then implemented in the member states cannot be applied. On the other hand, throughout the 1990s, there was a debate about the inclusion of an employment dimension within the Maastricht criteria for participation in the European Monetary Union (EMU). There was, however, no consensus on an additional Maastricht criterion possible, but politicians as well as the EC wanted to act in an alternative way as the bleak employment performance created a political demand for a strong European commitment to employment. Furthermore, additions at the EU level in the fields of social protection, social inclusion and the fight against discrimination, which have much to do with employment, had implications in terms of EU legislation and policy co-ordination. (Ederveen, van der Horst, Tang 2005; Siebert 2006; Funk 2002)

Explaining the expanding EU influence

One economic rationale behind the expanding influence of the EU on, for example, national employment policies in spite, on the whole, the absence of formal powers (Sbragia, Stolfi 2008) is that the economic policies of one member state may have implications for economic welfare in others. In terms of economics, one important condition for EU involvement is that some kind of spillover exists for every area of economic policy concerned, more specifically with regard to re-focusing the Lisbon strategy for jobs by including joint principles of flexicurity. However, evidence, at least for employment, appears to show that a surge in employment in one member state seems to have a very limited impact on employment in other countries. For example, a boost to employment that raised national income in Germany by € 1 million would benefit other EU countries by less than € 40.000 (Ederveen, van der Horst, Tang 2005). Such a result may – at least with regard to spillover effects of improvements in national employment – weaken somewhat the EC's position that

"member states' economies are highly inter-dependent" and that "there are many benefits to be gained if all move in the same direction and if reforms are aligned in time." (European Commission 2007b)

An alternative view, based in the public choice school of thought, states that further spillovers, for example capital flows, have to be taken into account. (Vaubel 2008) It is argued that as long as the member states set their labour regulations as a sovereign in isolation, the actors have to fear that a tightening of labour market regulations or an increase in these hurdles for companies – and, therefore, a comparative increase in costs – will lead to capital flight to countries with fewer or less onerous restrictions, other things being equal. With an increased role of Europeanisation and globalisation, however, the role of interjurisdictional competition to attract mobile capital has heightened considerably as more capital tends to mean improved labour productivity, wages and employment. Competitive decision making on national regulations, therefore, leads to a decreased level of regulations. This result is changed by qualified majority voting, which, since 1993, has become increasingly important in the EU also with regard to certain labour market-related issues. In the latter case, the member states with the deciding vote – that is the country whose vote tips the decision either for or against a proposal – can declare its level of regulation or a somewhat higher level as a compulsory minimum for all member states in order to avoid capital flight resulting from labour market regulation. Higher joint minimum regulations then, overall, decrease capital flows among the member states, which is driven by efforts to escape the regulations in the home country. Such a "strategy of raising rivals' costs" appears to play a major role in explaining the regulatory levels of controversial labour market-related directives, such as the European Working Time Directive (1993) and the European Works Council Directive (1994).

Even though the OMC hardly passes formal power to the EU, it can be interpreted as a strategy of raising rivals' costs by contributing to a "lowest common denominator" approach that can preserve the interests of the majority of the higher regulated EU as well. Bearing eastern EU enlargement in mind, such a strategy appeared rational for the majority of the comparatively highly regulated EU-15 countries, especially as it seemed to interfere only marginally with the sovereignty of nations as the EC was awarded a co-ordinating function only. If it is true that the EC has a deregulatory bias with regard to national regulations, this bias is, at the least, lessened at the supranational EU level by the partly compulsory inclusion of the social partners in decision making. (Funk 2006) As both established trade unions and employers' associations have an interest in deterring the entry of "newcomers" due to the higher competitive pressures that result, a bias against "pure market" solutions – that is in favour of regulations that raise rivals' costs of low regulated member states – and the use of ambiguous terms like flexicurity are the natural result.

It is true that a rather low compression of wage differentials in most continental European countries with often malign effects on employment and unemployment cannot be directly attributed to EU policies, as the EU has not legislated in this area. (Siebert 2006) Less formal channels may be very effective, however: on balance, the

EU's stance is such that the "right for fair and just working conditions" and the decision to regard (only?) "high-quality and productive jobs workplaces" as essential in the jointly adopted "Common Principles of Flexicurity" (Council of the European Union 2007) certainly indicates the likelihood of wage compression and inflexibility. The more such ambitions lead to stricter regulations in, up until now, lightly regulated countries, the more pressures in the most regulated EU member states of capital flight to such less restrictive member states will be moderated – as will the incentives to reform strict regulations. This is definitely in line with the idea of raising rivals' costs and may contribute to the persistence of rather low employment in the EU compared to the US. Taking, in addition, the resultant migration pressures and opportunities of capital flight towards countries outside the EU into account, some reform pressures are likely to remain; nonetheless, this interpretation may explain why overtaking the US in terms of competitiveness will prove to be difficult for the EU even in a longer-term perspective.

In contrast, other arguments that may justify some economically beneficial role of the EU in the form of the OMC in national employment policies include policy learning, as mentioned above, and the political economy of reform, both supporting – or at least not immediately rejecting – the idea of some soft co-ordination. A potential for policy learning means that learning can be stimulated through the process of participation, the exchange of information on best or good practices and peer review. Where – as in the case of employment policies – spillovers seem to be weak, the OMC then may contribute, above all, by taking into account cross-country deviations which allow for benchmarking exercises and mutual learning. However, benchmarking is not a panacea and clearly has limits if used as the sole means of reform. Trying to understand success solely by examining the strategies of countries with currently superior labour market performances may be biased. The problems of benchmarking labour market performances are similar to the ones in the microeconomics of strategy: "Successful firms may pursue several strategies, only some of which contribute to their success. Successful firms may possess proprietary assets and know-how that allow them to succeed where imitators would fail. A strategy of 'monkey see, monkey do' is no guarantee of success." (Besanko *et al.* 2007) Similarly, the real ingredients for success have to be identified and they need to be separated out from those that apparently explain comparative labour market performance. Indeed, based on proper economic analysis, the necessary as well as the sufficient conditions for superior labour market performance need to be identified. Benchmarking efforts can support such analysis; they cannot, however, substitute for it.

According to the insider-outsider hypothesis, the key obstacle in solving persisting structural unemployment problems in several European countries is the existence of powerful constituencies of incumbent employees, the insiders, who block reforms that would, ultimately, improve the situation of the outsiders in the labour market (as well as the welfare of the nation as a whole). A supranational approach may help to overcome such resistance not only in relation to product market reforms (as was demonstrated by liberalising product markets and by capital market reforms which were stimulated to a noteworthy extent by supranational initiatives at the EU level

over the last decades), but also with regard to welfare-enhancing labour market reforms that are difficult to implement at the national level. Again, however, the evidence that supports the argument that the EU's employment targets and benchmarking efforts as well as peer pressure have been the decisive drivers of national labour market reforms appears to be relatively scant. Political economy critics have, *inter alia*, noted that due to the absence of sufficiently strong sanctions and due to the fact that national politicians can potentially claim that conditions beyond their control have hindered their achievement of better results, the OMC is not capable of generating the necessary commitment either to fighting unemployment or increasing employment. (Offe 2005)

Other explanations for the EU's involvement in labour market issues are based on the EC's self-interest. According to a different public choice approach, the EC has a self-interest in shifting additional duties to the supranational level in order, firstly, to justify its current and future use of resources, such as expenditure for personnel, and, secondly, to increase its influence and power. (Vaubel 2001; Siebert 2006) To put it another way, the EC's involvement may mainly produce costs without having much of an additional impact on actual employment-creating reforms in the national economies. It may, for example, be argued that for the policy transfer of successful reforms to happen, the EC's efforts to support flexicurity approaches are probably not as vital as it seems that they are quite likely to speed up such a policy transfer to only a limited extent. In other words, in the current environment, policy transfer would take place in the self-interest of the country anyway; that is, it would occur without the EU's involvement. This makes its involvement superfluous. Moreover, because national expertise as well as international institutions, such as the OECD and the International Monetary Fund, provide sufficient information on reform successes and failures that is easily and widely disseminated throughout the EU. On the one hand, the positive effects of the OMC are low if not much additional knowledge and pressure to reform are created by these efforts. On the other hand, additional costs for member states stem from the direct costs mentioned above and the indirect ones through competition-decreasing interventions by the EC on the labour market situation.

It is difficult to discriminate among these alternative hypotheses empirically. On the whole, however, it appears safe to say that, up until now, the EC's role in structural employment policies has, at best, helped, on balance, to only a limited extent to improve the employment situation. One reason for this is may be that the EC has also undertaken measures that may have increased inflexibility, compressed labour costs and decreased interjurisdictional competition by partially replacing national labour market-oriented deregulations with new supranational regulations that have lowered the potentially employment-creating effects of more competition. (Siebert 2006)

Such evidence appears to be altogether in line with an alternative political economy hypothesis that states that, at the European level, a bias towards an over-ambitious agenda to solve employment problems appeared to exist during the first five year period of the Lisbon strategy compared to the supranational level's capability to

contribute to the attainment of those EU targets. This is because most of the necessary labour market and social policies needed to achieve the targets have to be set within the nations themselves. Christopher Pissarides (2005) speculates that the supranational EU level of the strategy's target setting may explain "why politicians were prepared to risk their reputation on such specific targets: precisely because it was done at the European level. As far as I know, no national politician has been voted down or re-elected on the basis of his or her record *vis-à-vis* Lisbon." The political differences between the national and the supranational levels with regard to the re-election of national politicians may explain why "when it comes to specific measures designed to achieve the growth and employment targets, the Lisbon agenda does not appear to have had an impact on national policies. There has been a lot of talk and a lot of support for the objectives, but not much direct action, at least not more than would have been taken by a responsible government faced with the challenge of economic survival and growth in a rapidly globalising world." (Pissarides 2005) Such a pessimistic reading of events may be repeated after the implementation of the renewed Lisbon strategy as the underlying problems have hardly changed: "The reason might be that the types of policies needed are universal, they apply to all countries. But the processes needed to implement them are not common; they need to be decided at the national level within the context of the institutions and objectives of the national government, which is much more difficult. And there are likely to be objections from many stakeholders who have vested interests in the status quo." (Pissarides 2005)

Dilemmas of the OMC

The political economy dilemmas associated with the OMC are depicted in Table 1. Given that the EU sets rather ambitious – but, in terms of future challenges, economically justified – employment targets, the potential economic efficiency of the reform may be assessed as high if the needed reforms are implemented in an appropriate way. The political acceptance or viability is low, however, as the incentives of implementing the necessary reforms at the national level are low if these efforts may mean "committing political suicide" as the economically necessary strategy is likely to be injurious to powerful constituencies. In the case of the current soft OMC, the opposite is true, even if the strengthening of the Lisbon strategy in 2005 probably lowered the dilemma to some extent. The efficiency is likely to be low, whereas the political acceptance at the EU level appears to be high.

Table 1. Dilemma of the OMC as a tool for employment policy

	Strong OMC – efficient sanctions	Soft OMC – inefficient sanctions
Economic efficiency	High	Low
Political acceptance	Low	High

Source: Author's compilation.

The evidence with regard to the first phase of the Lisbon strategy as well as concerning the renewed strategy seems to confirm these hypotheses. Politically the

current OMC approach is the only one that appears to be possible in practice due, firstly, to the fact that political acceptance of stricter measures is absent and, secondly, the risk of proposing or prescribing inadequate instruments or pathways to reform that may prove to be inappropriate means by which the envisaged goals should be achieved; potentially, however, a further employment crisis in the EU may lead to more stringent measures with stricter monitoring.

Controversial evaluations despite official consensus

Against this background, it can be argued that the EU's principles of flexicurity may be interpreted as the consensus with regard to the smallest common denominator of the ESM. Even this interpretation is, however, probably more controversial than it seems at first glance. Some critics who are close to the trade unions assess the EC's request for flexicurity as a strategy of following its own one-sided policy agenda; these critics evaluate the approach as "not balanced and hardly new." (Keune, Jepsen 2007) This demonstrates that an assessment of flexicurity policies as the smallest common denominator or compromise with load-carrying capacity of the ESM may even go too far. The current consensus that apparently exists may be superficial only and, perhaps, rests, above all, on the indubitable ambiguity of the term. This ambiguity assures all of the participants in social dialogue that their views will, to a certain extent, be represented. This enables the texts that have been jointly agreed upon to be interpreted differently, and it may result in rather different views on flexicurity.

For example, despite the joint position paper of the social partners, incalculable differences in important viewpoints of these actors on how to interpret and implement flexicurity policies at the national level obviously persist. An indication of this can be seen in a comparison of the commentaries on flexicurity issues by representatives of different social partners at the European level. On the one hand, representatives of business often insist that social and employment policies are the competence of member states and that, correspondingly, the EU should not have any powers beyond the setting of minimum standards. Moreover, in their view policy learning from countries with successful flexicurity models often depends on necessary preconditions that are frequently absent in countries that have adopted different reform strategies.

On the other hand, trade union representatives fear that flexicurity approaches simply hide the objectives of dismantling job protection and giving employers more power to press for a re-distribution in favour of business and industry. (Dauderstädt 2007; Janssen, Stocker, Huemer 2007; Keune, Jepsen 2007; Peter 2007) Hence, it is particularly striking that in contrast to the European Expert Group on flexicurity (2007), the social partners seem to regard flexicurity, to a large extent, as "a zero or negative sum game where only one party wins" whereas it is meant to aim at win-win situations or a positive sum game, in which all stakeholders benefit.

Supposed win-win situations – sometimes theoretical at best

Indeed, it may be – as demonstrated by the economics of labour market reforms (Saint Paul 2006) – that supposed win-win situations due to potential efficiency gains may prove to be at best theoretical possibilities that may not be realised in practice. One reason for the likely failure of potentially (better: apparently) superior reforms are problems of contractual timing if it is not possible for governments to commit to the future pace of taxes and transfers following any reform. This, probably, arises because, above all, it is not certain that the party or, indeed, politicians will remain in power for the required length of time. This may explain the reluctance of trade unions in poorly performing continental European countries, which traditionally have had rather high job security combined with high income security, to exchange employment protection rights for higher unemployment benefits, as suggested by the much celebrated and recently economically superior Danish flexicurity model (relatively easy hiring and firing, generous social security, extensive activation policies), as governments often cannot commit or have no interest in committing themselves to the promises and laws of a former government.

Hence, it appears debatable whether the current consensus of flexicurity policies as the smallest common denominator of the ESM will last. In the final analysis, it is not certain if the EU's flexicurity strategy will always – or, at least, most of the time – lead to the adoption of more than cosmetic or marginal reforms at the national level in several EU countries due to political economy problems associated with the implementation or due to potential inefficiencies of such policy approaches resulting, for example, from the problems of transferability.

Mixed results of recent policy transfers

It is by no means a coincidence, therefore, that we have seen mixed results of the EU's flexicurity policies up until now. Despite an extensive debate on flexicurity in recent years and in spite of the fact that the 2006 Spring European Council stressed the need "to pursue, in accordance with their individual labour market situations, reforms in labour market and social policies under an integrated flexicurity approach, adequately adapted to specific institutional environments and taking into account the need to combat labour market segmentation" (European Expert Group … 2007) the results have, so far, not been very encouraging. Even if the EC extols the merits of the approach, it appears not to be seen as a panacea by quite a few stakeholders and, hence, the member states' reactions were often cautious despite their official agreement. Although the EC has publicised the fact that the EU's policies to boost jobs and growth appear, finally, to be paying off in terms of increased economic growth and employment – by 2007 the general employment rate reached 66% which is close to the 2010 Lisbon target of 70% – the bigger part of the recent upturn in employment is cyclical. Moreover, the remaining effect can only be traced back, to a certain extent, to flexicurity-oriented reform efforts. As the European Commission (2007b) has noted: "About half of the Member States have developed – or are developing – policies on the basis of a 'flexicurity' approach. Yet the policy response remains fragmented. A sustained move from passive to active labour market

policies is underway. Member states are reforming social security systems, especially through changes of their tax and benefit systems, so as to balance rights and obligations. More flexible labour contracts for particular categories (e.g. new entrants) have been introduced but have not been backed up sufficiently by opportunities to acquire new skills which can help to advance in the labour market. The more difficult task of reforming the rules governing other kinds of contracts has received little attention. As a result, many labour markets remain segmented, with well-protected insiders and more precarious outsiders on contracts with uncertain prospects. Equally, lifelong learning falls far short of what is required, particularly among the low-skilled, who need it most. Education and training systems are not yet sufficiently responsive to labour market needs."

On balance, therefore, the mixed record of the European employment strategy during the 2005 to 2008 Lisbon cycle as well as the rather weak rationale in favour of a prominent role for the EC in employment issues probably do not justify an increased role of the EU in employment policy. Going further, it may even be doubted whether the EU's involvement in employment issues will really lead to appropriate action at the national level. It is true, however, that some good flexicurity practices have already been developed and implemented. They may influence reforms in other countries as they appear to be easily transferable due to their potentially self-enforcing character. In an ideal typical way, such reforms create incentive-compatible win-win solutions that do not dupe either employers or employees. Additionally, they do not harm the rest of society. Useful examples, the details of which follow, include the Austrian individual savings account and the Danish reform of competence training to improve employability.

- Until 2003, severance payments to redundant employees depended on the length of the employment relationship in Austria. This implied that workers, when moving from one employer to another, would lose their accumulated rights. In the new system, Austrian employers have had to make monthly payments into personalised accounts held by the employee, which are portable from job to job. Workers can draw on this account in the case of dismissal. "The new system means that workers will no longer be put off from changing jobs for fear of losing out financially and that they will not lose out if they choose to hand in their notice to an employer" (European Commission – Directorate-General … 2007). The Austrian reform has the additional advantages of guaranteeing much greater predictability to employers with regard to the costs of hiring and firing while providing essential security to workers who are laid off. Simultaneously, such a reform may improve or at least stabilise the employment situation in the economy and may have potential also for other welfare state reforms. (cf. OECD 2006)
- The Danish vocational training reform "was to focus on delivering competencies for the labour market as opposed to merely completing a course. … The competence description is defined in terms of three core elements: a description of the typical workplace at which the competence is required, the competence required at that workplace and a list of the programmes or courses that will

provide this competence. Once the competence has been obtained, a certificate which documents the competence is provided" (European Foundation … 2007a). More generally, in order to ensure effective human capital formation, the workforce needs, firstly, to adjust to changing skill demands, and, secondly, to be enabled to aspire to better-paid jobs. In order to achieve these goals, it is important to ensure that training markets function better. Sufficient financial incentives for companies and employees are needed to invest more in on-the-job training by using co-financing instruments (see OECD 2006 for details). As in Denmark, it may be an important and promising task of social partners and companies to enable within the framework conditions set by the government well-designed training leave schemes and to reduce inequalities in access to training without necessarily harming efficiency.

At this stage it is probably most important to note that some of the recent flexicurity amendments will not become hurdles for improving employment in a cyclically less favourable context and during a time for which "reform fatigue" has become a contemporary characteristic. (European Commission 2007b) This is particularly true if some of the flexicurity measures and pathways preferred by the EC may become potential hurdles for reaching a further improvement of the labour market situation, particularly the employment targets, and may be misused in the bargaining processes in order to play security improvements that favour insiders of the labour market off against employment improvements favouring, above all, the outsiders. The following section will analyse some of these issues more thoroughly.

Neglects and limitations of the European flexicurity strategy

In order to achieve the labour market goals set in the renewed Lisbon strategy, the policies that are initiated at the EU level must be approximately in line with the empirically valid proposals of labour market economics. This means that the underlying causes of the still comparatively low employment in Europe must be understood before policy prescriptions can be made. As noted above, standard labour economics gives us rather clear preconditions that must be met in order to make the European strategy effective. In line with general proposals to improve the employment situation in the EU as a whole compared to the US, such a policy approach needs to ensure the following (Lindbeck 2006):

- Nothing creates more employment security than a well-functioning labour market and a high employment rate. (Sinn 2007) Therefore, the underlying tenets of a flexicurity strategy must acknowledge that, in line with empirically confirmed negative short-term labour demand curves, it is better for a person to gain a job at a wage below current insider wages rather than being unemployed in the expectation of, potentially, receiving a similar wage to insiders. To put it differently: it may well be that as a result of employment-enhancing reforms, wage inequality will rise, at least in the short-term, and certain persons will be worse off in terms of, for example, hourly wages compared to the status quo. Due to the ambiguity of the flexicurity concept and because it regards "high-quality and productive workplaces" as "essential" (Council of the European

Union 2007), it is entirely unclear if – or to what extent – such lower wages (or more generally a low-wage sector with entry jobs for the long-term unemployed) are regarded as acceptable within the flexicurity approach. In particular, such problems resulting from structural changes and necessary adjustments must not be addressed with the wrong instruments. There is a danger that this might happen to a great extent in some countries, despite the rhetorical acceptance of flexicurity policies at the EU level. Just one such recent example is the French government's intervention in a series of industrial restructurings. This clearly favours protecting jobs as opposed to protecting workers. (Betts 2008) If this proves not to be the only exception to the flexicurity policy rule of protecting workers and simultaneously allowing companies to restructure by closing plants and cutting jobs, but if, instead, this were to occur on a regular basis in many EU countries, this will mean that the whole strategy might be doomed to suffer the same fate as the early Lisbon strategy. A contributing factor of this may be also that, as in the early Lisbon strategy, the expectations of the realistic effects are probably again over-optimistic and that the whole approach is over-ambitious. It is probably not without dangers when Vladimir Spidla, the commissioner responsible for employment, social affairs and equal opportunities, leaves the impression that, despite all the future challenges that European workers are likely to face, they will not have to live with lower levels of job security and that European social models are not in jeopardy "if we are prepared to modernise them." (European Commission – Directorate-General … 2007) Such statements might backfire in the future when people's expectations that are, probably, too high are left unrealised.

- Employment-hampering insider-outsider problems that still exist in Europe must not be neglected in order to avoid controversial, but sufficiently effective, policies to solve unemployment and low employment problems. If only lenient policies, such as increasing unemployment benefits in exchange for negligible reductions in dismissal protection, are implemented, these will be insufficient to solve the remaining problems in quite a few European countries, including France and Germany. Harsher problem-solving policies that may be necessary from an economic point of view, however, may be rejected by some of the actors involved in flexicurity issues, particularly the trade unions, as not being in line with the basic strategy. Potential examples include the controversial question of the role that financial pressures should play in encouraging unemployed persons to accept a new job. It is entirely unclear if national representatives of trade unions accept the implications of the EC's decision that financial pressures may be needed to increase incentives for the unemployed to find a job (Tornau 2007): "Good unemployment benefits are necessary to offset negative income consequences during job transfers, but they may have a negative effect on the intensity of job search activities and may reduce financial incentives to accept work." (European Commission – Directorate-General … 2007) Putting what is, probably, too much emphasis on those problems of the dual labour market that still exist neglects the fact that such segmentations, which result from jobs for entrants into the labour market being less protected than insiders' jobs, are often only temporary. Furthermore, they are sometimes

functionally needed in order to be able to implement fairer labour market reforms in the medium term: such marginal liberalisation policies may be a transitional device to gradually build a political coalition in favour of more equitable labour market reforms. Such reform efforts then reduce employment protection for permanent contracts and redistribute the chances for regular employment over insiders and outsiders in a fairer and efficiency-enhancing way. Moreover, gains may arise from decreased employment-hampering insider power in wage bargaining and from a reduction in the extent of skill loss due to shorter unemployment durations. (Deelen, Jongen, Visser 2006) Problems resulting from the political feasibility of reforms must be taken into account and must not be neglected: "Having a single, more flexible, employment contract is often advocated but very few governments have attempted to move towards such a contract for fear of political opposition. Marginal liberalisations themselves are not very easy to implement." (Saint Paul 2006) Characterising the recent Spanish reform efforts as a relatively successful example of a flexicurity strategy (see, for example, Tornau 2007) tells only half of the story. A necessary precondition for this to have happened was the former policy of consciously pursuing a partial liberalisation. This was done by allowing greater use of fixed-term employment (for reasons of political feasibility). As a result, the labour market was segmented. The latter appears to have been essential to achieving a coalition that enables more recent reform efforts to occur that have reduced existing labour market segmentation due to low labour mobility, high wage dispersion and inadequate investments in human capital in Spain. Similarly, the more socially inclusive reforms in Britain since the mid-1990s were probably possible without hurting the labour market outcomes only after the earlier liberalising reform efforts of the Conservative governments, which resulted in a decrease not only in unemployment, but also in dual labour market problems. (Funk 2007) Only this background may explain why the United Kingdom can be assessed now in a relatively positive light in the EC's evaluation of national reform programmes. (European Commission 2007) On the other hand, the German social and labour market reform efforts of the Red-Green coalition under former chancellor Schröder are often evaluated as having "taken a big step away from a flexicurity-inspired model rather than towards it." (Flexicurity 2006) Indeed, these reforms lowered, amongst other things, the reservation wages of quite a few long-term unemployed persons and deregulated temporary jobs while leaving Germany's relatively strict rules on protection from dismissal mostly untouched. (Funk 2007) As a result, the EC (2007) criticises, *inter alia*, the fact that "Germany has not sufficiently addressed the flexicurity concept in an integrated manner" and that "the labour market remains segmented between insiders and outsiders". What is forgotten, however, is the fact that, on the one hand, the reforms of the Schröder government proved to be, on balance, successful recently in terms of strong employment creation – also in terms of the volume of hours worked in the whole economy – in contrast to the years before. On the other hand, even those reforms that hardly altered directly the entitlements of labour market insiders directly were so unpopular that they cost chancellor Schröder his job. More popular and apparently more socially inclusive reforms as suggested by the EC

– focusing on more lifelong learning and increased training efforts in active labour market policies as well as a decreased emphasis on persons combining permanent work in low-paid part-time jobs with basic income support (European Commission 2007c) – would almost certainly hamper the current German employment successes according to the view of the majority of German economists. Had such reforms occurred instead of those actually implemented in the last five years, it would have almost certainly meant the maintenance of the old German insider-outsider problem of very high unemployment of outsiders and high wages of insiders at the cost of a low general employment rate. (Funk 2000) To put it differently, considerably more socially inclusive reforms that remove new labour market segmentations that have resulted from recent reforms, such as the relatively large wage differences between labour market insiders and labour market entrants with temporary jobs only, and that, simultaneously, do not or hardly hamper job creation in general, will only be possible in Germany if political majorities accept such reforms. This will, in all probability, not be the case as long as the majority of voters expect to gain from such a dual labour market which protects the insiders of the labour market more strongly than it does new entrants. It appears highly problematic that such political economy considerations do not seem to play any role in the EC's evaluations of national employment policies. Moreover, it must not be forgotten that flexicurity policies themselves are sometimes associated with labour market segmentation, as they may preserve or even reinforce existing ones. A key example relates to policies as they affect women as they normally face a significantly larger amount of transitions than men due to care breaks which may lead to a segmented female labour market with secure but rather low earnings career prospects. This is particularly true for Sweden, one of the celebrated role models of flexicurity. Nonetheless, the country appears to show strong signs of gender job segregation. This situation needs additional governmental or social partners' intervention to organise transitions in such a way that unpaid work should not hamper women's career development. (Gazier 2006) More fundamentally, this demonstrates that, similar to, for example, the effects of marginal reforms to liberalise only outsiders' labour contracts only and the effects of reductions in replacement rates through lower unemployment aid, pure flexicurity-oriented policies have their drawbacks as well. In both cases adequate interventions to obtain beneficial, socially inclusive results are required that do not harm the employment creation of the economies decisively.

- The strategy must additionally take into account that high labour force participation is not the same thing as a substantial number of hours worked. There may be huge differences among countries not only with regard to the number of persons in the labour force and those actually employed, but also between the number of employed individuals and those actually doing their job; that is, those who are not absent from their job due to sickness or family-care reasons with little or no loss of income. A further cause for this difference stems from the average hours worked per employee due to cross-country differences in marginal, part-time and full-time jobs as well as differences in overtime. The Swedish example demonstrates that the number of persons

employed and those actually performing their job may differ considerably. In 2004, only 64% of working-age men were actually at work although 75% were recorded as employed. For women, the actual work figure was just 57%. An example of a different problem that leads to the lower supply of labour comes from Germany. The German experience shows that labour supply may decrease as a result of the design of transfer incentives: "Despite some easing of the rules on additional earnings, the effective marginal tax burden on recipients of social assistance (Unemployment Compensation II) resulting from transfer withdrawal when an income is earned is still in the range of 80 to 90%, and in some income ranges even 100% and more." (Sinn 2007) Therefore, all efforts of combined flexicurity strategies need to support an increase in the volume of labour in a country and not only a higher rate of employment, which may include many part-time and marginal jobs that, if subsidised, may lead to a decrease in the hours worked in an economy. If the EC's flexicurity strategy contributes to a lower supply of hours worked, the approach cannot really be seen to be the answer to the EU's dilemma of how to maintain and improve competitiveness whilst preserving the ESM.

- Despite the EC's efforts to take into account the alternative natures of labour market problems in different groups of countries (for more details Hardes 2008), it is safe to say that doubts still arise regarding the transferability of the flexicurity concept to economies other than the Nordic ones and the Netherlands, where it originated. "Flexibility may be understood as a re-interpretation of those countries' one hundred year tradition of social dialogue. Such a tradition does not exist in many countries, for example in Central and Eastern Europe. In other countries – mainly the Mediterranean ones – employer/trade union relations have historically been much more confrontational. It remains to be tested whether those countries will as easily accept the disappearance of the antagonism between labour and capital as the Nordics seem to have." (Flexibility 2007) Beyond the political feasibility problems mentioned above – flexicurity reforms are difficult to implement against the will of labour market insiders who normally also represent a political majority – several other practical problems exist: it is true that "activation/mutual obligations" approaches can successfully co-exist with comparatively generous benefits while providing effective incentives for the unemployed to work. Success depends, however, on the strenuous efforts of recipients to find paid work again and on the relevant payment actually being claimed only in an emergency. Put another way, wrongful benefit claims must be regarded as unfair. (OECD 2006) Surveys demonstrate that this is largely true in the Scandinavian economies, but is so to only a limited extent in most countries in Western and central Europe and even less in the EU's south. In other words, a key requirement for implementing this element of flexicurity is lacking in these countries. (Algan, Cahuc 2006) Additionally, in countries that are characterised by inefficiencies in the legal system and in the public sector, the flexicurity paradigm may prove to become very costly. Furthermore, it is obvious that flexicurity reforms may be doomed to failure in the medium to long term if they are not accompanied by parallel investments to upgrade skills and, against the backdrop of increasing competi-

tion at all levels of education systems, to increase the employability of the workforce. (Nunziata 2007)

- The EC has repeatedly emphasised the importance of the involvement of social partners in the implementation phase of the Lisbon strategy, despite the different roles that they play in the member states. It is certainly true that the exclusion of powerful social partners may hamper reform progress as the acceptance of difficult reforms imposed by the government among employees may be low. The integration of social partners into such a strategy should, however, take into account that this may also dilute the reform processes that are needed. Therefore, their role should be mainly limited to their comparative advantages in contributing to the attainment of the desired labour market goals, especially the employment targets set in the EES. Examples include a potential role for employers and their associations as well as trade unions to maintain social norms in favour of work and against living on benefits and monitor "excessive" use of various benefit systems. An important function could be to contain "moral hazard" behaviour in an environment where such norms erode over time. However, reform blockages or a watering-down of the policies and the costly monitoring needed to effectively increase employment may occur and may be regarded as a risk of a flexicurity policy strategy, in general, and of an inclusion of the social partners into the implementation of such reforms in particular. (Saint Paul 2006)

This discussion shows that the flexicurity policies that are currently being initiated at the EU level are only partially compatible with the proposals made by labour market economics. After all, this approach still appears to be, to some extent, as over-optimistic and as over-ambitious as the early Lisbon strategy was. This may be criticised because an over-ambitious reform agenda almost inevitably leads to disappointment. This, in turn, may increase levels of animosity towards the EU that already exist. It may, thereby, decrease future confidence in the EU.

Furthermore, the strategy neglects that a flexicurity approach is probably neither required nor sufficient for achieving a good labour market performance combined with a social inclusion that is at least in the medium and long term compatible with the idea of the ESM. This implies that alternative European paths to good labour market results are, to a certain extent, being neglected. This is particularly true for the British approach that hardly supports the use of active labour market policies and disregards the role of social partners to a much greater degree than many other "old" member states and, therefore, may be a useful role model for quite a few of the new member states in particular. Additionally and even more importantly, the preconditions that are, potentially, necessary for success as well as the unwanted side-effects that the flexicurity idea may have for employment creation are downplayed to too great an extent.

Table 2. Alternative labour market reforms: flexicurity is not always a panacea

		Additional employment in terms of hours worked induced by structural reforms?	
		Yes	No
Flexicurity-inspired reforms?	Yes	activation/mutual obligations approach creates strong work incentive in spite of generous benefits for inactivity successful exchange of lower job protection for higher employment and income protection problems of mutual commitments are solved by effective norms, social pacts etc.	new mix of activation/ mutual obligations insufficiently increases work incentives to pay for a simultaneous increase of benefits linking-up of reforms that is vital for success may be difficult or impossible decrease in effective labour supply if incentive changes lead to a substitution of full time jobs by part-time jobs
	No	marginal liberalisations (two-tier reforms) that only ease outsiders' jobs regulations to overcome political viability problems; they often become more socially inclusive in the medium term due to a change of the political equilibrium 'work first' policy without a large role for ALMPs may lead to more social inclusion than highly regulated labour markets with high unemployment social inclusion may be facilitated by in-work benefits that top-up low market wages or national minimum wages if they have a limited detrimental effect on free labour market performance	decrease of labour supply by costly early retirement measures, schematically reduced weekly working time etc. decrease of labour demand in low-wage sector due to generous minimum wages marginal two-tier reforms concentrated on outsiders may change only slightly employment in the economy as a whole in the short term if outsiders' reservation wages are high and if reversal of liberalising reforms is likely for political reasons neglect of complementary reforms with regard to investment incentives in training or earned-income tax credits, for example

Source: Author's compilation.

Table 2 summarises some of these problems by demonstrating that not all policies that may be termed flexicurity approaches by some of the actors in the EU are necessarily employment friendly in terms of a highly important indicator; that is, the volume of work. Two drawbacks appear to be the most significant: on the one hand, severe problems of political feasibility remain as, for example, insiders in the labour market who are normally also decisive for political decision making will often not accept the loss of job protection rights, even if they are partially compensated for this by higher benefits as they have often regard the former as their more secure social entitlements. On the other hand, the flexicurity strategy may lead to the adoption of policies that have undesirable side-effects due, for example, to the missing preconditions for such policies to become solutions to problems. This, in turn, may be due, for instance, to low search intensity by the unemployed for new jobs. Contrary to expectations, flexicurity may then lead to decreased economic

efficiency and lower, rather than higher, employment. The Table also shows that alternative policies may lead to similarly good results in terms of employment without necessarily neglecting social inclusion.

Assuming those controversies away that still exist among economists, the Table does not include policies to increase product market competition or to create a stable macro-economic environment as they can be regarded as positive for employment creation independent of the alternative constellations in the Table.

Concluding remarks

Quite a few of the strategies that were used by several of the member states to fight structural unemployment, such as early retirement or cutting weekly working hours, have, to a large extent, proved to be failures. The reason is that most of these strategies did not solve the fundamental problem of the labour market, which is the impossibility for outsiders to compete on equal terms with insiders. Gilles Saint-Paul (2006) summarises this argument, with which many mainstream economists would probably agree: "As long as this problem remains, European labor markets will be plagued by distortions and inefficiencies, which show up not only in the form of high unemployment, but also high unemployment duration, misallocation of employment across sectors, resources wasted on 'active labor market policies' that could be spent more productively, and so on."

One of the merits of the flexicurity model – if implemented, from an economics perspective, correctly – is its potential to contribute to a resolution of this characteristic problem. If the EU's strategy can achieve this goal, this is likely to be an important step towards catching-up with the performance of the US in terms of employment and economic growth. A further merit is the potential role of the EU's flexicurity strategy to avoid "worst case" economic scenarios in some countries where strictly interventionist "anti-market" governments may come to power. To some extent at least, the strategy may help to avoid a shift towards an old-fashioned non-activating employment policy that favours insiders in the labour market and, in effect, simply redistributes towards outsiders without increasing their opportunities and their incentives to work.

If the numerous political economy risks and the knowledge gaps that still exist regarding the implementation of the approach are taken into account, however, it can be argued that the European flexicurity suggestions will, paradoxically, lead to a further delay of the actual reforms needed, and to an aggravation of the problems in some of the member states. This may happen if an interpretation of flexicurity as extensive social security comes to the fore. Such an interpretation is supported by, for example, some trade union-supporting analysts in Germany. (Tornau 2007) It may govern the respective national decision-making processes and spread to other countries as well. Such an interpretation, which supports, for example, rather generous minimum wages despite their well-known risks (Funk, Lesch 2006) and a minimisation of external flexibility even at the risk of leaving existing unemployment problems unresolved differs markedly from the point of view on how to fight

the remaining unemployment problems in Europe that is shared by European and most national employers and their associations. It is also the position of the majority of economists. If the view supported by some powerful trade unions becomes the orthodoxy in large parts of the EU, it may well be that, as in the first part of the Lisbon strategy the agenda, this time the adoption of "The Common Principles of Flexicurity" in order to reach employment targets will prove to be over-ambitious.

A simple general flexicurity rule to ensure – other things being equal – the simultaneous creation of more employment and more security should be as follows: if, on balance, the employers' benefits of increased "flexibility" are larger than the employers' costs of increased employees' "security", employment tends to increase in functioning labour markets (and *vice versa*). Such a rule may help employers and employees as well as the social partners to find mutually beneficial solutions in bargaining situations. Additionally, flexicurity pathways should not be interpreted as narrow and static as several commentators have done until now.

In the final analysis, optimal reform sequencing in the labour market may need to create certain labour market inequalities first by marginal liberalisations of, for example, temporary jobs, part-time work etc., in order to break the old insider cartels which put outsiders and entrants at a disadvantage. Therefore, a more dynamic and more fruitful perspective has to bear in mind that, in order to improve decisively the employment performance of the EU as a whole, certain tendencies of labour market segmentation have to be accepted in lagging countries, at least temporarily, before new national political majorities will emerge and demand fairer labour market reforms some years later. There is a clear risk of attacking dual labour market tendencies in a way that is partly independent of their causes. This is what the EC appears to be doing. In practice, the removal of such inequalities may be implemented, above all, by destroying the room for manoeuvre of market-driven employment creation in quite a few EU countries. This is, again, because such interventionist policies are often in the interest of those current job-holders – and their representatives, the established trade unions – who are well paid and well protected, to a large extent, against dismissal. If that risk materialises, the new Lisbon strategy will not help to create lastingly higher employment in terms of hours worked nor will it achieve measurably fairer labour market outcomes than before. Thus, the opportunities of many labour market entrants will still be lower than those of the insiders.

The best the EC can do to avoid such a scenario is to put the main emphasis on a lasting increase in employment (and economic growth) when reviewing the NRPs instead of putting a strong emphasis on questions of labour market segmentation. The latter may play a function in ensuring future national employment- and justice-creating labour market reforms. The future success will also depend on the decision about which quantitative indicators will be monitored by the EC in the future. It will, again, be potentially counterproductive to put too much emphasis on equity-related – instead of employment-related – quantitative indicators, as their interpretation is more likely to lead to inadequate policy proposals. Furthermore, the EC has to ensure the completion of the single market, especially with regards to the liberali-

sation of services and to take better advantage of economies of scale within the Community Lisbon programme, as the latter mainly requires action from European institutions. (Pissarides 2006; European Commission 2004)

Finally, it has to be mentioned that several lightly regulated "liberal" market economies, including the United Kingdom, that have residual social protection only and are, therefore, without all of the features of the prominent flexicurity paradigm as practised in Denmark or Sweden, and that they often have populations that have anxieties about globalisation that are only marginally higher than those in these Nordic countries. Moreover, their populations, on average, appear to be as "happy" as the people of the Nordic countries as recent research indicates. (European Foundation … 2007) Such a result may further increase the doubts on too strong an emphasis on the flexicurity paradigm.

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VENEMAA VARJATUD MAJANDUSSANKTSIOONIDE MÕJU EESTI RAUDTEETRANSPORDILE

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Sissejuhatus

Viimasel ajal on seoses 2007. aasta aprillisündmustega elavnenud poliitika-, äri- ja teadusringkondade arvamustevahetus raudteetransiidi ja laiemalt transiidiklastri [1] tähtsuse üle Eesti majanduses. Käesoleva artikli eesmärk on faktide ja nende analüüsi alusel esitada ülevaade raudteeveonduse hetkeolukorrast Eestis ning välja tuua probleemid, mis raskendavad Transpordi arengukavas aastateks 2006–2013 püstitatud strateegiliste eesmärkide saavutamist.

K. Staronova järgi hõlmab majanduspoliitika analüüs muuhulgas nii kvantitatiivse kui kvalitatiivse informatsiooni kogumist, analüüsi ja tõlgendamist, et anda alus otsuste vastuvõtmiseks poliitikakujundamise tsüklis. Informatsiooni olulisuse määravad ära konkreetses majandusharus tegutsevate institutsioonide eesmärgid ja väärtused. (Staronova 2002) Tuginedes akadeemik U. Mereste töödele on võimalik raudteeveondust kui süsteemi kirjeldada mitmest allsüsteemist koosnevana, millest olulisimad on raudteekaubaveo ja raudteeinfrastruktuuri allsüsteemid. Kõigi veonduse allsüsteemide väljundiks on toodang, mida saab mõõta teatud kvantitatiivsete näitajate (nt veomaht) abil. Ühtlasi on ühe allsüsteemi väljundid teise allsüsteemi sisenditeks, samas on raudteeveonduse süsteem omakorda osa rahvamajanduse süsteemist. (Mereste 1987)

Seega on raudteeveonduse mistahes eesmärgil teostataval uurimisel vajalik analüüsida vähemalt järgmisi aspekte: raudteeveoettevõtja aspekt (nii Eestis kui ka raudteetransiidi geograafiast lähtudes kõigis Balti riikides ja Venemaal), raudteeinfrastruktuuriettevõtja aspekt, rahvamajanduse aspekt. Eelnevat arvessevõttes püstitas autor järgmised ülesanded ja kujundas neile vastava uurimuse struktuuri.

1. Kvantifitseerida veomahud Eesti avalikul raudteel[2] enne ja pärast 2007. aasta aprillikuud (peatükk 1).
2. Teha kindlaks kaubaveomahtude jagunemine veoettevõtjate vahel enne ja pärast 2007. aasta aprillikuud (peatükk 2).

[1] Transiidiklaster – E. Terk'i järgi transiitvedudega seotud osa veondusest ja laomajandusest, millega liituvad neid teenindavate teiste majandusharude panus ja viimaste poolt vahendatud majandusharude mõju. (Transpordi … 2007)

[2] Avalik raudtee on raudtee-ettevõtja raudteeinfrastruktuur, mille kasutamine peab juurdepääsu tagavate põhi- ja lisateenuste ning tasu, aja ja muude kasutustingimuste osas olema diskrimineerimata tagatud kõigile raudtee-ettevõtjatele raudteeveoteenuse osutamiseks seaduses sätestatud alustel ja korras. (Raudteeseadus 2008) AS Eesti Raudtee ja Edelaraudtee Infrastruktuuri AS infrastruktuurid määrati avalikuks kasutamiseks 1. mail 1999 jõustunud raudteeseadusega.

3. Identifitseerida muutused teiste Balti riikide raudteede kaubaveomahtudes pärast 2007. aasta aprillikuud (peatükk 3).
4. Anda hinnang tasu muutustele raudteeinfrastruktuurile juurdepääsu tagavate teenuste eest liiklusgraafikuperioodil 2007/2008 ning alates liiklusgraafikuperioodist 2008/2009 (peatükk 4).

Ülesannete lahendamisel kasutas autor valdavalt aegridade analüüsi meetodit. Analüüsis võrreldi aastate 2004–2006 kuukeskmisi näitajaid 2007. aasta esimese nelja ja viimase kaheksa kuu keskmiste, ning 2008. aasta jaanuarikuu näitajatega. Arvutuste lihtsustamiseks ei tehtud andmetes korrektsioone raudteekaubavedude sessoonsuse arvessevõtmiseks. Artikli koostamisel kasutati lisaks avalikule infor-matsioonile teiseseid andmeid AS Eesti Raudtee infosüsteemidest.

Rahvusvahelised ja kabotaažveod Eesti avalikul raudteel

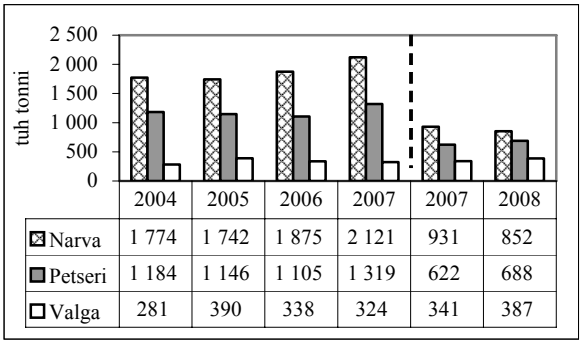
2006. aastal moodustasid raudteetransiitveod Eesti residentide kaubavedude kogukäibest 43,7% ja raudteevedude kogukäibest 86,2%. (Statistikaamet 2008) Transiitvedude mahust 88% pärines 2006. aastal Venemaalt, 6% Valgevenest ja 4% Kasahstanist. (Klaas 2008) Seega esindab Eesti tüüpilist Balti raudteetransiidi mudelit, mis põhineb Venemaa nafta ja naftasaaduste veol Läänemere äärsetesse sadamatesse ning seal laevadele laadimisel. Sellest tulenevalt on transiidiklaster määratletud raudtee- ja sadamapõhisena.

2007. aasta aprillisündmuste ajal ja järel on väidetud, et Venemaa rakendab Eesti suhtes varjatud majandussanktsioone, mille ilminguteks on saanud oluliselt vähenenud veomahud raudteel ja sadamates ning piiriprobleemid maanteetranspordis. (Ellam 2007) Avalikkuse ees on seda põhjendatud Venemaa valitsuse otsusega forsseerida tooraineekspordi suunamist omamaistesse sadamatesse ja vajadusega teostada edasilükkamatuid remonditöid Venemaa Oktoobriraudteel. (Vare 2007) Ajakirjanduses on ilmunud ka hinnanguid, et aprillisündmused vähendasid Eesti sisemajanduse kogutoodangu 2007. aasta kasvuvõimalusi 2% ehk rahalises väljenduses 4–5 mld krooni võrra. (Matson 2007)

Eesti Raudtee kui Eesti peamise raudtee-ettevõtja valduses on 71,5% avaliku raudtee liinidest, sh kõik kaherealised, samuti elektrifitseeritud liinid. Eesti Raudtee infrastruktuur on ühenduses teiste riikide raudteeinfrastruktuuridega Tallinn–Narva, Tallinn–Petseri, Tallinn–Valga ja Valga–Petseri suundadel. Edelaraudtee Infrastruktuuri AS-l ühendus teiste riikide raudteevõrguga puudub. Seega on Eesti raudteeinfrastruktuur TERFN-võrgus tupiktee, mis seab piirangud raudtee-ettevõtluse arenguvõimalustele Eestis. (Koppel 2006)

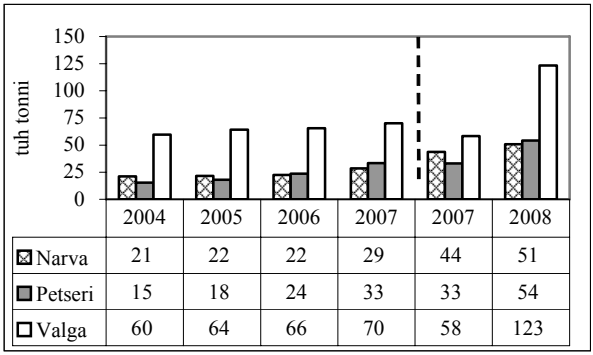
Joonistel 1–4 on esitatud kaubavedude dünaamika Eesti Raudtee infrastruktuuril rahvusvaheliste vedude (sisse- ja väljavedu) ning kabotaažvedude kaupa. Jooniselt 1 on näha, et 2007. a esimese nelja kuu keskmine sisseveetavate kaupade maht suurenes võrreldes 2006. aasta kuukeskmise veomahuga Narva suunal 13,1% ja Petseri suunal 19,4%, ning Valga suunal mõnevõrra vähenes. Kaupade väljavedu (vt

joonis 2), mille osatähtsus rahvusvaheliste raudteekaubavedude mahus on ebaoluline, kasvas vaadeldaval perioodil samuti, sh Petseri suunal üle 37%.



	2004	2005	2006	2007	2007	2008
Narva	1 774	1 742	1 875	2 121	931	852
Petseri	1 184	1 146	1 105	1 319	622	688
Valga	281	390	338	324	341	387

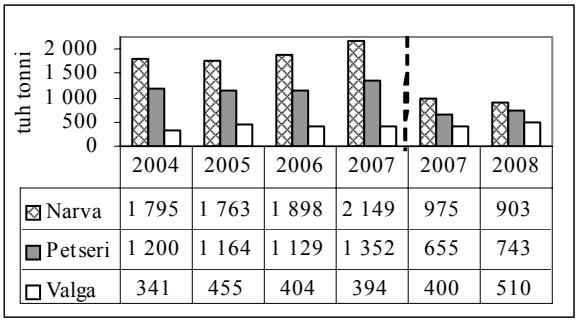
Joonis 1. Kuukeskmised kaubaveomahud Eesti Raudtee infrastruktuuril 2004–2008: sissevedu. (Eesti Raudtee)



	2004	2005	2006	2007	2007	2008
Narva	21	22	22	29	44	51
Petseri	15	18	24	33	33	54
Valga	60	64	66	70	58	123

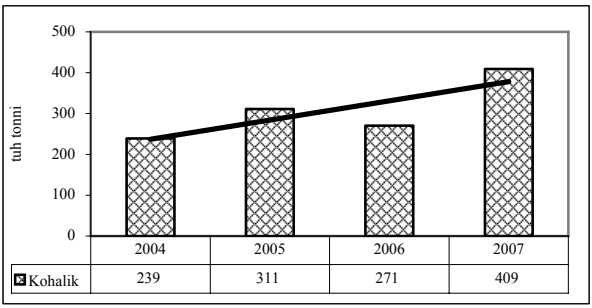
Joonis 2. Kuukeskmised kaubaveomahud Eesti Raudtee infrastruktuuril 2004–2008: väljavedu. (Eesti Raudtee)

2007. aasta viimase kaheksa kuu analüüs näitab, et rahvusvaheliste vedude kogumaht (vt joonis 3) vähenes võrreldes 2006. aasta kuukeskmiste näitajatega 47,9%, sh Narva suunal 54,6% ja Petseri suunal 51,6%, ning kasvas Valga suunal 1,5%. Antud tulemused ületavad oluliselt Riigikogu tellimusel Tallinna Tehnika-kõrgkooli poolt juhitava töörühma koostatud raportis "Eesti transiit ja logistika: tänapäev ja tulevik" esitletud andmeid, mille kohaselt transiitvedude maht raudteel ja sadamates vähenes 2007. aasta aprillisündmuste tulemusena ainult 30%. (Klaas 2008)



	2004	2005	2006	2007	2007	2008
Narva	1 795	1 763	1 898	2 149	975	903
Petseri	1 200	1 164	1 129	1 352	655	743
Valga	341	455	404	394	400	510

Joonis 3. Kuukeskmised kaubaveomahud Eesti Raudtee infrastruktuuril 2004–2008: rahvusvahelised kaubaveod kokku. (Eesti Raudtee)

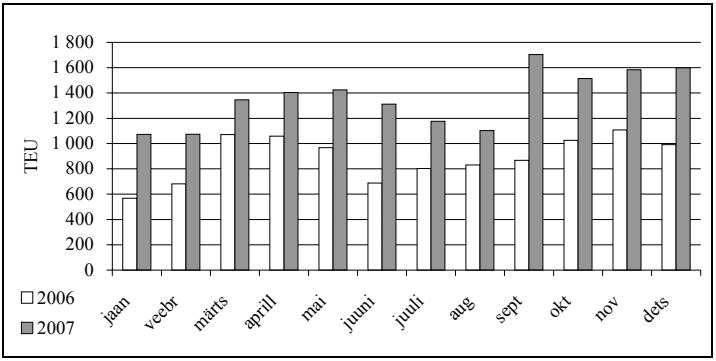


	2004	2005	2006	2007
Kohalik	239	311	271	409

Joonis 4. Kuukeskmised kaubaveomahud Eesti Raudtee infrastruktuuril 2004–2008: kabotaažveod. (Eesti Raudtee)

Jooniselt 4 on näha, et kuigi kohalike raudteevedude kuukeskmine maht on Eesti Raudtee infrastruktuuril perioodil 2004–2007 kasvanud 71,1%, ei suuda nad olulisel määral asendada pärast 2007. aasta aprillisündmusi rahvusvahelistel vedudel kaotatud veomahtu. Samuti ei ole lühi- ja keskajalises perspektiivis alust eeldada olulisi muutusi põhja-lõunasuunalise transiidi arengus.

Majandus- ja Kommunikatsiooniministeeriumi juurde moodustatud transiidikomisjoni ekspertgrupi liikmete hinnangul leidis transiitvedude vähenemise protsess, mis muidu oleks kestnud neli kuni viis aastat (Варэ 2008), aset vähem kui ühe kuuga, täpsemalt 2007. aasta maikuu esimese kolme nädalaga. 2008. aasta jaanuarikuu tulemused näitavad, et veomahtude edasise vähenemise trend, mis 2007. aasta II poolel välja kujunes, parimal juhul peatub. Sellises kontekstis on eluliselt vajalik otsida võimalusi täiendavate kaubaveomahtude kaasamiseks ning maailmamajanduse globaalsete suundumuste taustal võivad nendeks osutuda konteinerkaupade veod, mille veomaht raudteel kasvas aastatel 2006–2007 53% (vt joonis 5).



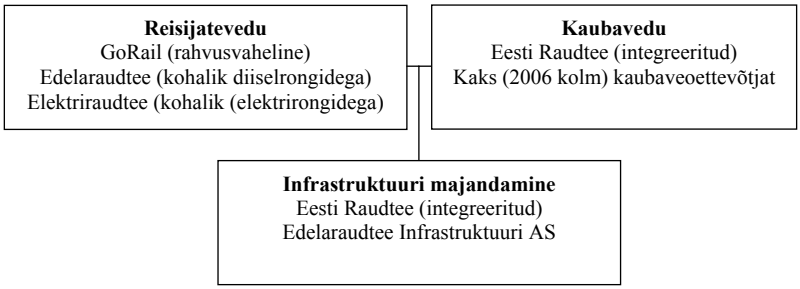
Joonis 5. Avalikul raudteel teostatud konteinervedude dünaamika 2006–2007. (Eesti Raudtee)

Käesoleva artikli autorile jäävad siinkohal mõistetamatuks ajakirjanduses avaldatud arvamusavaldused, kus püütakse juba ühiste kavatsuste protokolli staadiumis lugeda ebaotstarbekaks edasised konsultatsioonid investeeringute osas Muuga sadama konteinerterminalide arenguks. (Klaas 2008) Eesti transpordipoliitika väljatöötajate hinnangul on konteinerveod nende käitlemisel tekkiva lisandväärtuse poolest oluliselt kasulikumad kui senised naftasaaduste transiitveod. On avaldatud arvamust, et konteinerite käitlemine ühe miljoni TEU ulatuses võib genereerida rahakäibe suurusjärgus miljard krooni. (Allikivi 2008)

Rahvusvaheliste raudteekaubavedude struktuur veo-ettevõtjate kaupa

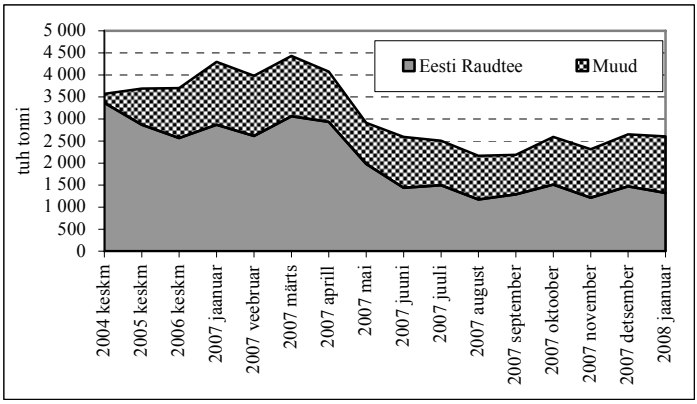
Euroopa transpoliitika alusdokumendid näevad raudteeveonduse põhilise arengusuunana ette vaba juurdepääsu võimaldamist infrastruktuurile, et elavdada konkurentsi raudteeveoteenuste turul. (Euroopa Parlament ja Nõukogu 2001) Euroopa Komisjonile on Eesti Vabariik raporteerinud direktiivide 91/440, 95/18, 95/19 ning kõigi nn esimese ja teise raudteepaketi direktiivide integreerimisest siseriiklikku õigusesse. (DG-TREN 2008) Oma põhiosas 31.03.2004 jõustunud raudteeseaduse paragrahvi 50 lõige 1 sätestab, et raudteeveoettevõtjal on õigus raudteeinfrastruktuuri kasutustasu, kasutusaja ja muude kasutustingimuste osas diskrimineerimata kasutada avalikku raudteed, et osutada raudteeveoteenuseid. (Raudteeseadus 2008)

Väliseksperdide hinnangul kuulub Eesti Euroopa raudteeveonduse konkurentsivabaduse edetabelis juhtriikide hulka koos selliste maadega nagu Suurbritannia, Saksamaa, Holland, Taani, Rootsi, Šveits ja Slovakkia. (IBM Deutschland 2004) Käesoleval ajal tegutseb Eesti avalikul raudteel nii kolm reisijateveo- kui ka kolm kaubaveo-ettevõtjat. Avaliku raudtee infrastruktuur kuulub vertikaalselt integreeritud raudtee-ettevõtjale AS Eesti Raudtee, ning Edelaraudtee Infrastruktuuri AS-le (vt joonis 6). AS Eesti Raudtee ja Elektriraudtee AS aktsiate omanikuks on Eesti Vabariik, ülejäänud joonisel 6 toodud äriühingud kuuluvad Eesti ja välismaisele erakapitalile. (Krediidiinfo 2008)



Joonis 6. Raudtee-ettevõtjad Eesti avalikul raudteel. (Tehnilise Järelevalve Amet 2008)

Jooniselt 7 on näha, et pärast 2007. aasta aprillisündmusi vähenes Eesti Raudteega konkureerivate raudteeveoettevõtjate veomaht ainult lühiajaliselt. Järgnevatel kuudel nende veomaht taastus ja 2007. aasta lõpus alustas kasvu. Võrreldes liiklusgraafiku-perioodiga 2004/2005, mil rakendusid kehtiva raudteeseaduse põhisätted, on tänaseks riigile kuuluva Eesti Raudtee osatähtsus vähenenud 2004. a kuukeskmiselt 94,4%-lt 2008. a jaanuarikuu 50,1%-le.



Joonis 7. Eesti Raudtee infrastruktuuril teostatud kaubavedude dünaamika ja struktuur veoettevõtjate kaupa 2004–2008. (Eesti Raudtee)

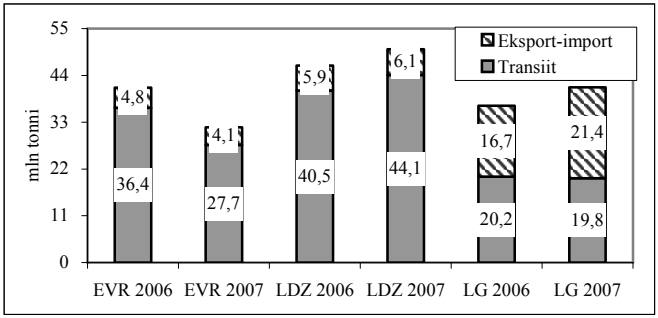
Eelnevalt on märgitud, et käesoleval ajal tegutseb Eesti Raudtee infrastruktuuril kolm raudteekaubaveoettevõtjat, kellest üks on Eesti Raudtee kui vertikaalselt integreeritud ettevõtja ise, lisaks tegutsevad raudteeveoettevõtjatena AS Spacecom ja OÜ Westgate Transport.

Esimene neist lõpetab oma tegevuse raudteeveoettevõtjana alates liiklusgraafikuperioodist 2008/2009 ning seoses sellega vabanenud läbilaskevõime on Tehnilise Järelevalve Amet[3] eraldanud aktsiaseltsile E.R.S. (Tehnilise Järelevalve Amet 2008) Nii viimatinimetatud äriühing kui AS Spacecom kuuluvad Küprosel registreeritud valdusühingule Transportation Investments Holding, Ltd (TIHL), kes omab Eestis äritegevust ka AS E.O.S., AS Intopex Trans, AS Skinest Veeremi, AS EK Holding, AS Stivterminal ja AS Pakterminal kaudu. TIHL põhitegevuseks on Venemaal ning SRÜ ja Ida-Euroopa riikides raudteekaubavedude, ekspedeerimise ja stividoriteenuste osutamisega tegelevate äriühingute aktsiate ja osade haldamine. (Konkurentsiamet 2008)

Westgate Transport OÜ osanikeks on Küprosel registreeritud äriühingud Royal Rivera Holdings, Ltd ja Kingbridge Holding, Ltd. (Krediidiinfo 2008) AS Spacecom ja Westgate Transport OÜ omanikke on ajakirjanduses ilmunud teadete kohaselt seostatud Venemaa administratsioonile lähedalseisvate naftatreideritega.

Rahvusvaheliste raudteekaubavedude jagunemine Balti riikide vahel

Venemaalt lähtuva transiitkauba omanikel on võimalus kasutada alternatiivseid kanaleid kõigis Baltimaades, kuna nii Läti kui ka Leedu raudteed on samuti valdavalt spetsialiseerunud Venemaalt lähtuva transiidi teenindamisele. Nii ongi seni läbi Eesti kulgenud raudteetransiitveod suundunud Eestist Riiga, Peterburi, Võssotskisse, Murmanskisse, Kaliningradi ja Ventspilsi, mõningal määral ka Musta mere äärsetesse sadamatesse. (Варэ 2008)



Joonis 8. Eesti (EVR), Läti (LDZ) ja Leedu (LG) raudteede rahvusvaheliste kaubavedude võrdlus 2006–2007. (Eesti Raudtee)

[3] Vastavalt raudteeseaduse sätetele annab raudteeinfrastruktuuriettevõtja läbilaskevõime jaotamise toimingud üle Tehnilise Järelevalve Ametile, kui ta kasutab oma raudteeinfrastruktuuri raudteeveoteenuse osutamiseks ka ise või kui ta ei ole läbilaskevõime jaotamise otsustamisel erapooletu ja sõltumatu põhjusel, et läbilaskevõimet taotleb raudteeinfrastruktuuriettevõtjaga ühte konsolideerimisgruppi kuuluv raudteeveoettevõtja. (Raudteeseadus 2008)

Joonisel 8 on võrreldud Eesti, Läti ja Leedu avalike raudteede rahvusvaheliste kaubavedude mahte aastatel 2006 ja 2007. Jooniselt on näha, et aasta kokkuvõttes vähenesid rahvusvahelised veod Eesti Raudtee infrastruktuuril 22,8%, kasvades samal ajal Läti Raudteel 8,2% ja Leedu Raudteel 11,7%.

Balti riikide rahvusvaheliste raudteekaubavedude turu mahuks oli 2006. aastal 124,5 mln tonni ja 2007. aastal 123,2 mln tonni, vähenedes seega aastaga 1%. See tõestab ilmekalt Venemaa varjatud majandussanktsioonide iseloomu, mis on suunatud just Eesti riigile kuuluvate äriühingute vastu. Eesti turuosa Balti riikide rahvusvaheliste kaubavedude turul vähenes 2006. aasta 33,1%-lt 25,8%-le 2007. aastal, kuigi 2007. aasta I kvartalis see Läti ja Leedu raudteede arvel hoopis suurenes. Nii ei ole Eestil võimalik realiseerida oma konkurentsieeliseid, mis seisnevad muuhulgas ka lühemates veokaugustes ning kvaliteetsemates veo- ja sadamateenustes.

Raudteeinfrastruktuuri kasutustasu

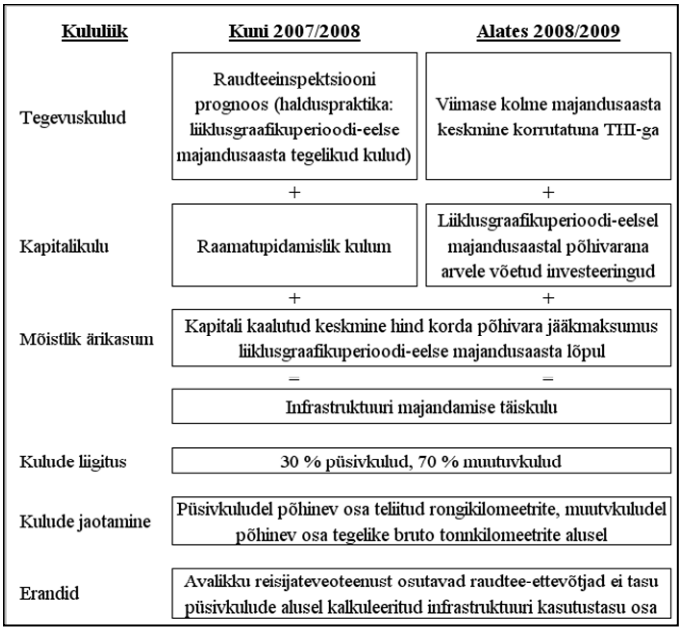
Kehtiva raudteeseaduse paragrahvi 59 lõige 3 sätestab, et raudteeinfrastruktuuri kasutustasu juurdepääsu tagavate põhiteenuste[4] eest koosneb raudteeinfrastruktuuri kasutada andmise kuludest ning mõistlikust ärikasumist. (Raudteeseadus 2008) Raudteeseaduses on majandus- ja kommunikatsiooniministrile antud pädevus kehtestada raudteeinfrastruktuuri kasutustasu arvutamiseks täpsemad juhised.

Joonisel 9 on kujutatud raudteeinsfrastruktuuri kasutamise üldskeemid kuni liiklusgraafikuperioodini 2007/2008 (kaasa arvatud) ja alates liiklusgraafikuperioodist 2008/2009. Viimatinimetatud lahendust on kavandatud rakendada alates 2008. aasta maikuu viimasel pühapäeval algavast liiklusgraafikuperioodist neljal järjestikusel liiklusgraafikuperioodil. (Raudteeinfrastruktuuri ... 2007) Uue metoodika kehtestamise tingis asjaolu, et Raudteeinspektsiooni poolt kujundatud halduspraktika ei võimaldanud tingimustes, kus riik ei pidanud vajalikuks osaleda avaliku raudtee infrastruktuuriinvesteeringute finantseerimises, infrastruktuuriettevõtjal oma äritegevusega genereerida piisavat rahakäivet investeerimisvajaduse katteks.

Jooniselt 9 on näha, et Eestis kasutuselolev raudteeinfrastruktuuri kasutustasu arvutusmeetod on majandusteooriast tuntud kui täiskulu hinnakujundusmeetod. Kasutustasu kalkuleeritakse kaheosalise tariifina, kusjuures kasutatakse autori arvates põhjendamatut eeldust, et raudteeinfrastruktuuri majandamise kuludest on 30% püsiv- ja 70% muutuvkulud. Esimesed neist jaotatakse veoettevõtjate vahel vastavalt neile eraldatud läbilaskevõimeosale (mõõdetuna rongikilomeetrites), teised vastavalt nende veeremitöö (mõõdetuna bruto tonnkilomeetrites) omavahelisele proportsioonile. Eesti omapäraks on, et avalikku raudtee reisijateveoteenust osutavad ettevõtted

[4] Juurdepääsu tagavad põhiteenused – läbilaskevõime taotluste läbivaatamine, jaotatud läbilaskevõimeosa kasutada andmine, raudtee sõlmjaamade, ooteplatvormide ning tee-, side- ja turvanguseadmete kasutamise ja toimimise tagamine, raudteeliikluse korraldamine ning raudteeveoettevõtjale jaotatud läbilaskevõimeosa kasutamiseks vajaliku teabe edastamine. (Raudteeseadus 2008)

on vabastatud raudteeinfrastruktuuri kasutustasu püsivkuludel põhineva osa tasumisest, mis tekitab põhjendatud kahtlusi ristsubsideerimise olemasolus.



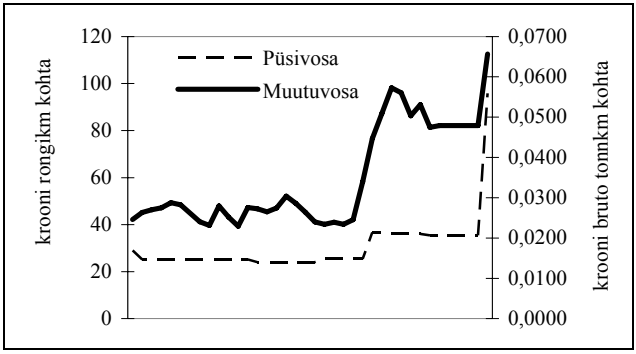
Joonis 9. Tasu arvutamise üldised põhimõtted raudteeinfrastruktuurile juurdepääsu tagavate teenuste eest. (Raudteeinfrastruktuuri ... 2004; Raudteeinfrastruktuuri ... 2007)

Autor on oma varasemates publikatsioonides analüüsinud erinevate hinnakujundus- (piirkulu meetod, hinnakõrgendi meetod, täiskulu meetod, *pay-and-go* meetod, Ramsey-Boiteux' printsiip, Rothengatteri mudel) ja hinnakalkuleerimismeetodite (ühe-, kahe- või mitmeosaline tariif) kasutatavust Eestis kujundatud transpordipoliitilises keskkonnas. (Koppel 2006) Autori hinnangul on piisava nõudluse olemasolul täiskulu meetod raudteeinfrastruktuurile juurdepääsu hinnakujunduses aktsepteeritav meetod, kuna ta on asjaolu tõttu, et infrastruktuuri kasutustasu tonni kohta veomahtude lisandudes väheneb, atraktiivne ka veoettevõtjatele.

Olukord aga muutub, kui nõudlus raudteekaubavedude turul järsult langeb (vt joonis 10). Eesti Raudtee infrastruktuuri majandamise kuludeks liiklusgraafikuperioodil 2007/2008 prognoosis Raudteeinspektsioon[5] juurdepääsu tagavate põhiteenuste osas

[5] Alates 01.01.2008 jaotati Raudteeinspektsiooni funktsioonid Tehnilise Järelevalve Ameti raudteeteenistuse ning Konkurentsiameti raudtee- ja energiateenistuse vahel. Raudtee infrastruktuuri kasutustasu määramine jäi Tehnilise Järelevalve Ameti pädevusse. (Raudteeseadus 2008)

ca 900 mln krooni. Uue metoodika rakendamisel ulatuksid need autori hinnangul (sõltuvalt kapitali kaalutud keskmisest hinnast) 1,1–1,3 mld kroonini. Arvestades asjaolu, et eeldatav veomaht Eesti Raudtee infrastruktuuril jääb edaspidi püsima 2008. aasta jaanuarikuu tasemele, suureneb infrastruktuuri kasutustasu liiklusgraafikuperioodil 2008/2009 võrreldes 2007. kalendriaasta esimese nelja kuu keskmisega 3,8 korda püsivkuludel ja 2,7 korda muutuvkuludel põhinevas osas[6]. Taandatuna kaubatonnile tähendab see (sõltuvalt veomarsruudist) keskmist infrastruktuuritasu suurusjärgus 40 kuni 50 krooni, mis kujunenud turusituatsioonis on raudteeveoettevõtjatele vastuvõetamatu.



Joonis 10. Tasu dünaamika infrastruktuurile juurdepääsu tagavate põhiteenuste eest perioodil mai 2005 kuni juuni 2008, püsivosa vasakul ja muutuvosa paremal teljel. (Tehnilise Järelevalve Amet 2008; 2008 autori prognoos[7])

Eesti transpordipoliitika näeb ühe alavisioonina ette kvaliteetse transpordiinfrastruktuuri olemasolu aastal 2013 (Transpordi … 2007), seega on muutunud aktuaalseks vastuse otsimine küsimusele, kas transiidiklaster üldisemalt ja Eesti raudteeettevõtjad eraldi on võimelised tagama sellise visiooni realiseerumise. Kooskõlas Transpordi arengukavaga aastateks 2006–2013 kavatseb AS Eesti Raudtee investeerida 2008–2017 raudteesse ja raudteerajatistesse 2007. a püsivhindades 5,0 mld krooni, millest 1,3 mld krooni loodetakse katta Euroopa Liidu struktuurivahenditest (sh Rail Baltica projekti elluviimiseks eraldatud vahendite arvel). Tähtsamateks investeerimisobjektideks on Tartu-Valga raudteelõigu kapitaalremont võimaldamaks reisirongide kiiruse tõstmist 120 km/h, samuti elektriraudtee kontaktvõrgu ja veoalajaamade kapitaalremont, reisiplatvormide vastavusseviimine eurostandarditega, eritasandiliste raudteeületuskohtade ehitus, Koidula piirijaama ehitus jms avalikku huvi omavad projektid. (AS Eesti Raudtee 2007)

[6] Siinkohal on eeldatud, et kõik raudteeveoettevõtjad loobuvad liiklusgraafikuperioodil 2008/2009 neile eraldatud läbilaskevõime osadest, mis ei ole potentsiaalsete veomahtude teenindamiseks minimaalselt vajalikud – autori märkus.

[7] Prognoosimisel on eeldatud, et kaubaveomaht Eesti Raudtee infrastruktuuril jääb liiklus-graafikuperioodil 2008/2009 2008. kalendriaasta esimese kuu tasemele. Antud eeldusest on lähtutud ka Eesti Raudtee äriplaanis aastateks 2007–2017. (AS Eesti Raudtee 2007)

Järeldused

Käesoleva uurimistöö eesmärk oli kvalifitseerida 2007. aasta aprillisündmuste mõjusid Eesti raudteetranspordile. Analüüsi tulemusena teeb autor alljärgnevad järeldused.

1. 2007. aasta viimase kaheksa kuu rahvusvaheliste vedude kogumaht vähenes võrreldes 2006. aasta kuukeskmiste näitajatega 47,9%, ning 2008. aasta esimesed kuud ei anna lootust nende taastumisele. Raudteekaubavedude ümberorienteerumine transiitvedudelt kohalikele vedudele ei taga raudteeinfrastruktuuriettevõtjate ja raudteeveoettevõtjate jätkusuutlikkust.
2. Venemaa varjatud majandussanktsioonide reaalset eksistentsi kinnitab asjaolu, et Küprosel registreeritud valdusfirmadele kuuluvad Eesti raudteekaubaveoettevõtjad on suutnud senised veomahud säilitada. Pärast 2007. aasta aprillisündmusi vähenes Eesti Raudteega konkureerivate ettevõtjate veomaht ainult lühiajaliselt. Järgnevatel kuudel nende veomaht taastus ja 2007. aasta lõpus alustas kasvu. Riigile kuuluva Eesti Raudtee osatähtsus raudteevedudes on vähenenud 2004. a kuukeskmiselt 94,4%-lt 2008. a jaanuarikuu 50,1%-le.
3. Eelmises punktis toodud järelduse põhistab seni AS Eesti Raudtee teenindada olnud veomahtude suundumine teistesse Balti riikidesse. Eesti turuosa Balti riikide rahvusvaheliste kaubavedude turul vähenes 2006. aasta 33,1%-lt 25,8%-le 2007. aastal.
4. Eestis raudteeinfrastruktuuri kasutustasu arvutamiseks kasutatav täiskulu hinnakujundusmeetod ei ole rakendatav langeva turu tingimustes. Peamine raudteeettevõtja kuulub riigikapitalile ja teda iseloomustab suur investeerimisvajadus avalikes huvides. Reisijateveoks vajalike investeeringute kaasfinantseerimiseks ja erinevate veoliikide ristsubsideerimise vältimiseks on vajalik raudteereisijateveo toetuste suurendamine infrastruktuuri kasutustasu maksmiseks infrastruktuuriettevõtjatele rohkem kui 200 mln krooni võrra aastas, millele lisanduksid otsetoetused reisijateveoinfrastruktuuri rajamiseks ja renoveerimiseks (lisaks eraldistele Euroopa Liidu struktuurivahenditest) *ca* 230 mln krooni ulatuses aastas aastatel 2008–2010.[8]

Seega on Eesti transpordipoliitika põhieesmärkide saavutamine raskendatud järgmistel asjaoludel: pärast 2007. aasta aprillisündmusi on Venemaalt lähtuvate transiitvedude maht oluliselt vähenenud, kuna nad on administratiivsete meetmetega suunatud naaberriikidesse ja Venemaa sadamatesse; olulises ulatuses teenindavad järelejäänud osa Eesti Raudteega konkureerivad raudteeveoettevõtjad; on tekkinud vastuolu raudteeinfrastruktuuri investeerimisvajaduse ja raudteeinfrastruktuuri kasutustasu suuruse vahel.

Kujunenud situatsioonis on Eesti eelarve- ja transpordipoliitika kujundajatel möödapääsmatu loobumine põhimõttest, et riik osaleb raudteeinfrastruktuuri investeerin-

[8] Hinnangu andmisel ei ole arvestatud Edelaraudtee Infrastruktuuri AS investeerimisvajadusega ega investeeringutega raudteereisijateveoks vajalikku veeremisse – autori märkus.

gute finantseerimises ainult teatud tingimustel. Enne Eesti 2009. aasta riigieelarve menetlemist tuleb leida ammendavad lahendused raudteetranspordi ees seisvatele probleemidele, mis eelkõige seisnevad rahaliste vahendite kroonilises defitsiidis ja poliitilise toetuse puudumises.

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DIE SCHATTENWIRTSCHAFT IN DER BUNDESREPUBLIK DEUTSCHLAND UND IHRE URSACHEN

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Einleitung

Die Existenz der Schattenwirtschaft ist ein Hinweis darauf, dass es für Wirtschaftssubjekte ökonomisch rentabel ist, aus der offiziellen Wirtschaft eines Landes abzuwandern. Anders als in der offiziellen Wirtschaft müssen in diesem Bereich keine Steuern und Abgaben entrichtet werden und die Kosten vielfältiger staatlicher Auflagen entfallen. Während größere Unternehmen heutzutage über die Möglichkeit verfügen, ihre Produktion an günstigere Standorte im Ausland zu verlagern, besteht eine solche Ausweichoption für die immobilen Produktionsfaktoren nicht. Für Kleinunternehmen und viele Individuen ist daher oftmals das legale oder illegale Ausweichen in die Schattenwirtschaft die einzige Möglichkeit übermäßigen staatlichen Eingriffen in den Wirtschaftsablauf entgegenzuwirken.

Eine wachsende Schattenwirtschaft signalisiert somit, dass die institutionellen und gesetzlichen Rahmenbedingungen eines Landes aus der Sicht der Bürger wohlfahrtsmindernd sind. Demgegenüber hätten wirtschaftspolitische Maßnahmen, die zu einer Rückverlagerung von Aktivitäten aus der Schattenwirtschaft in die offizielle Wirtschaft führen, eindeutig wohlfahrtssteigernde Wirkungen. Die Schattenwirtschaft nutzt wegen geringer Markttransparenz die Vorteile der Arbeitsteilung nicht optimal. Auch würden die Kosten verringert, die durch die Illegalität entstehen. Zudem würde der Staat höhere Einnahmen erzielen und könnte so seine Aufgaben besser erfüllen. Schließlich würde dem Verfall gesellschaftlicher Normen entgegengewirkt, der daraus resultiert, dass immer mehr Bürger wegen der hohen Gewinnchancen bei ihren wirtschaftlichen Aktivitäten auch in die Illegalität gedrängt werden.

Um herauszufinden, durch welche konkreten wirtschaftspolitischen Maßnahmen sich schattenwirtschaftliche Aktivitäten in die offizielle Wirtschaft überführen lassen, bedarf es zunächst einer Analyse des Umfangs und der Entwicklung der Schattenwirtschaft in Deutschland. Dem schließt sich die Identifikation möglicher Ursachen für eine Betätigung in der Schattenwirtschaft an. Darauf aufbauend sollen Vorschläge für eine Reform der wirtschaftlichen Rahmenbedingungen in Deutschland gemacht werden. Eine Erhöhung der Strafen und eine Intensivierung der Kontrollen für eine illegale wirtschaftliche Betätigung, die gegenwärtig in der Öffentlichkeit auf große Zustimmung stoßen, soll in diesem Zusammenhang nicht behandelt werden. Sie stellen lediglich ein Kurieren an den Symptomen dar und beseitigen die Ursachen nicht. In der Folge dürften wirtschaftliche Aktivitäten nicht in die offizielle Wirtschaft zurückverlagert werden, sondern unterbleiben. Zudem haben Untersuchungen von Feld, Larsen (2006: 107) “keinen konsistenten Einfluss der Politik der Abschreckung auf die Wahrscheinlichkeit, schwarz zu arbeiten, feststellen können.”

Was versteht man unter Schattenwirtschaft und welche Bedeutung hat sie?

Allgemein umfasst die Schattenwirtschaft all jene wirtschaftlichen Aktivitäten, die eine gesamtwirtschaftliche Wertschöpfung darstellen und nicht in die Berechnung des Bruttoinlands- bzw. Bruttonationalproduktes eingehen.[1] Die Gründe dafür liegen vor allem darin, dass bestimmte Tätigkeiten gemäß den Konventionen der Volkswirtschaftlichen Gesamtrechnung (VGR) nicht ausgewiesen werden. Dazu zählen vor allem bedarfswirtschaftlich orientierte Aktivitäten der privaten Haushalte wie z.B. Haus- und Gartenarbeit, Do-it-yourself-Aktivitäten, Kindererziehung, Nachbarschaftshilfe, Mitarbeit bei privaten Hilfsorganisationen. Dieser Bereich wird im Folgenden als *Selbstversorungswirtschaft* bezeichnet. Während die Selbstversorgungswirtschaft legal ist, sind die erwerbswirtschaftlich orientierten Aktivitäten der *Untergrundwirtschaft* zumeist illegal und werden aus diesem Grund verheimlicht. Wichtigste Erscheinungsform der Untergrundwirtschaft ist die *Schwarzarbeit,* bei denen sozialversicherungsrechtlichen und steuerlichen Pflichten nicht nachgekommen wird. Schwarzarbeit liegt auch dann vor, wenn ein Gewerbe nicht ordnungsgemäß angemeldet ist oder wenn ein Handwerk ausgeübt wird, ohne dass ein Eintrag in die Handwerksrolle erfolgt ist.

Die in der Literatur verfügbaren Angaben über den Umfang und die Entwicklung der Schattenwirtschaft liefern ein eher vages Bild. Dies ist jedoch nicht verwunderlich, werden doch ex definitione die Aktivitäten entweder offiziell nicht erfasst oder können nicht erfasst werden. Zudem messen die verwendeten Verfahren[2] zum Teil unterschiedliche Teilaspekte der Schattenwirtschaft. Unstrittig ist jedoch, dass die Schattenwirtschaft in Deutschland eine Größe erreicht hat, die sie zu einem bedeutenden Faktor bei der Messung der wirtschaftlichen Aktivität in Deutschland macht. Dabei dürfte die Selbstversorgungswirtschaft mit einem Umfang von rd. einem Drittel des offiziellen Bruttoinlandsprodukts (BIP) der derzeit bedeutendste Sektor der Schattenwirtschaft sein. Für die Untergrundwirtschaft ist eine Größenordnung von rd. 15 v.H. wahrscheinlich, der entsprechende Wert für die Schwarzarbeit liegt bei knapp 5 v.H. (vgl. Tabelle 1). Betrachtet man das jährliche Wachstum, so scheint die Schattenwirtschaft weiter zu expandieren, in den siebziger, achtziger und neunziger Jahren sogar rascher als die offizielle Wirtschaft. Wichtigste Sektoren für die Erbringung schattenwirtschaftlicher Aktivitäten dürften das Baugewerbe und die privaten Dienstleistungen sein.

[1] Zur genaueren Abgrenzung der Schattenwirtschaft vgl. Langfeldt (1984).
[2] Für einen Überblick über die verwendeten Schätzverfahren vgl. Langfeldt (1984) und Schneider (2003).

Tabelle 1. Schätzungen über Umfang und Entwicklung der Schattenwirtschaft in Deutschland

Methode	Bereich	Jahr	Wertschöpfung in v.H. des BIP	Tendenz	Quelle
Befragung	Schwarzarbeit	1974	3,6		IfD Allensbach (1975)
Befragung		2000	4.1	abnehmend	Feld, Larsen (2005)
		2005	3.1		
Bargeld-nachfrage	Untergrund-wirtschaft	1970	12.1	steigend	Langfeldt (1984a)
		1980	12.6		
Bargeld-nachfrage		1980	9.2	steigend	Schneider, Enste (2000)
		1990	11.8		
		2000	14.7		
unbeobachtbare Variablen		1970	5.8	steigend	Frey, Weck (1984)
		1980	8.2		
unbeobachtbare Variablen		1980	10.8	steigend	Schneider (2004)
		1990	12.2		
		2000	16.0		
		2004	16.4		
unbeobachtbare Variablen		1980	9.4	steigend	Pickhardt, Sarda (2006)
		1990	11.4		
		2000	16.3		
Wertschöpfung Haushalts-produktion	Selbstversor-gungswirtschaft	1992	31.0	abnehmend	Schäfer (2004)
		2001	29.0		
Do-it-yourself Aktivitäten		1970	3.9	steigend	Feld, Schmidt, Schneider (2007)
		2005	5.0		

Kernproblem der Schattenwirtschaft: die große Schere zwischen Produzenten- und Konsumentenlohn

Bevor im Folgenden auf mögliche Ursachen für eine wachsende Schattenwirtschaft und ihre Konsequenzen für die Wirtschafts-, Finanz- und Gesellschaftspolitik eingegangen wird, soll zunächst exemplarisch die Grundproblematik, nämlich die große Differenz zwischen Produzenten- und Konsumentenlohn, dargestellt werden. Als *Produzentenlohn* bezeichnet man den Betrag, den ein Arbeitnehmer nach Abzug aller Steuern und Sozialversicherungsbeiträge pro geleistete Arbeitsstunde erhält. Der *Konsumentenlohn* ist der Betrag, den ein privates Wirtschaftssubjekt bei einem offiziellen Unternehmen für eine entsprechende Arbeitsstunde bezahlen muss. Je größer die Differenz zwischen dem Produzenten- und dem Konsumentenlohn ist, desto eher wird ein Wirtschaftssubjekt geneigt sein, die Leistungen entweder eigenständig zu erstellen (Do-it-yourself), sich der Hilfe von Freunden und Verwandten zu bedienen (Nachbarschaftshilfe) oder einen Schwarzarbeiter zu engagieren.

Ein anschauliches Beispiel für die große Differenz zwischen dem Produzenten- und dem Konsumentenlohn liefert die folgende Musterrechnung des Landesinnungsverbandes des Maler- und Lackiererhandwerks in Schleswig-Holstein für das Jahr 2006.

Tabelle 2. Stundenverrechnungspreis für Maler und Lackierer, €

Nettolohn	9.14
Steuern und Abgaben (Annahme 30 v.H. des Bruttoarbeitslohns)	3.91
Arbeitslohn (Stundenlohn Malergeselle)	13.05
Lohnnebenkosten (bezahlter Urlaub, Feiertagslohn, Krankengeld, Weihnachtsgeld, vermögenswirksame Leistungen, Arbeitgeberanteil zur Renten-, Arbeitslosen- und Pflegeversicherung, Berufsgenossenschaft)	10.96
Verwaltungs- und allgemeine Geschäftskosten	14.62
Selbstkosten des Unternehmens pro Stunde	38.63
Zuschlag für Wagnis und Gewinn (10 v.H.)	3.86
Stundenverrechnungspreis Kunde ohne MWSt	42.49
Mehrwertsteuer (MWSt) 19 v.H.	8.07
Stundenverrechnungspreis Kunde mit MWSt	50.56

Quelle: Landesinnungsverband des Maler- und Lackiererhandwerks.
Schleswig-Holstein, Stand: August 2006.

Der tarifvertraglich ausgehandelte Stundenlohn für einen Malergesellen beträgt € 13.05, nach Abzug von annahmegemäß 30 v.H. für vom Arbeitnehmer zu entrichtende Steuern und Abgaben verbleiben dem Arbeitnehmer € 9.14. Um sich eine entsprechende Arbeitsstunde eines Kollegen am offiziellen Markt kaufen zu können, müsste ein Betrag von € 50.56 aufgewendet werden. Ein Arbeitnehmer muss also mehr als 5 Stunden arbeiten, um sich im Austausch eine Arbeitsstunde eines anderen Arbeitnehmers mit gleicher Qualifikation leisten zu können.

An diesem Beispiel, das nicht nur für das Bauhandwerk sondern auch für viele Dienstleistungsbereiche repräsentativ sein dürfte, wird die Kernproblematik der Schattenwirtschaft deutlich. Der große Keil, den staatliche Aktivitäten zwischen Produzenten- und Konsumentenlohn treiben, verspricht allen beteiligten Akteuren beim Ausweichen in die Schattenwirtschaft hohe Renditen. Am ausgeprägtesten sind die Anreize für das legale Ausweichen in Do-it-yourself-Aktivitäten und in Nachbarschaftshilfe. Aber auch bei der Beschäftigung eines Schwarzarbeiters, sein Stundenlohn ist gegenwärtig in einer Größenordnung von € 15–20 anzusetzen, sind die ökonomischen Vorteile gegenüber der Beschäftigung einer offiziellen Arbeitskraft sehr ausgeprägt, die Kosten betragen lediglich rd. ein Drittel.

Aus der detaillierten Kalkulation des Stundenverrechnungspreises wird deutlich, dass zum weitaus überwiegenden Teil der Staat die Verantwortung für die große Schere zwischen Produzenten- und Konsumentenlohn trägt. Hohe Steuern und Abgaben tragen dazu ebenso bei wie die vielfachen Regulierungen wirtschaftlicher, sozialer und administrativer Art[3], die für die Unternehmen mit erheblichen Kosten verbunden sind. Vielen der durch den Staat verursachten Belastungen stehen

[3] Eine Übersicht über die vielfältigen Regulierungen findet sich bei Enste und Hardege (2006).

durchaus Leistungen des Staates für die Arbeitnehmer und die Unternehmen gegenüber. Aus der Sicht der Betroffenen sind Leistungen und Gegenleistungen wegen der in den Systemen enthaltenen Umverteilungselemente aber vielfach nicht äquivalent.[4] Entsprechend ist die Bereitschaft zu freiwilligen Zahlungen von Seiten der Wirtschaftssubjekte gering, und der Staat muss zur Finanzierung seiner Aufgaben auf Zwangsabgaben zurückgreifen.

Die Ursachen der Schattenwirtschaft im Einzelnen

Im Folgenden soll an Hand der in der Literatur[5] diskutierten Ursachen überprüft werden, wie groß die Anreize für eine wirtschaftliche Betätigung in der Schattenwirtschaft sind bzw. wie sie sich im Zeitablauf entwickelt haben. Die vorangegangenen Überlegungen haben bereits gezeigt, dass die Schattenwirtschaft Folge eines übermäßigen staatlichen Eingriffs in den privaten Sektor ist. Daneben werden vor allem strukturelle Veränderungen des Arbeitsmarktes und der sozialen Sicherungssysteme sowie ein Wertewandel in der Bevölkerung als mögliche Ursachen genannt. Die verschiedenen Ursachen sind nicht unabhängig voneinander, gleichwohl sollen sie bei den folgenden detaillierteren Ausführungen einzeln analysiert werden.

Die **Belastung mit Steuern und Sozialabgaben** werden weithin als wichtigste Ursache für die Existenz der Schattenwirtschaft angesehen.[6] Je höher die Einkommen in der offiziellen Wirtschaft belastet werden, desto größer wird der Anreiz für die Leistungserbringer sein, die Aktivitäten im Schatten anzubieten. Die durchschnittliche Belastung eines ledigen Arbeitnehmers in Deutschland durch Einkommensteuer und Sozialversicherungsabgaben (in v.H. des Bruttolohns einschließlich der Arbeitgeberbeiträge zur Sozialversicherung) ist von einem Wert von 40.8 v.H. im Jahr 1979 auf den Rekordwert von 52.3 v.H. im Jahr 1997 gestiegen, seither hat sie sich auf einen Wert von rd. 50 v.H. zurückgebildet. Innerhalb der OECD-Länder wird Deutschland dabei nur von Belgien übertroffen. (OECD 2007: 463) Die marginale Belastung der Arbeitnehmer, der für die Aufnahme von Schwarzarbeit eine noch größere Belastung zukommt, ist nochmals rd. 10 Prozentpunkte höher. (Boss *et al*. 2007: 23) Leicht dämpfend auf die Schwarzarbeit hat sich die 2003 erfolgte Einführung der Mini-Jobs ausgewirkt. Mini-Jobs sind Einkommen im Nebenjob, die nicht dem Haupteinkommen zugerechnet werden und stattdessen pauschal besteuert werden. Allerdings wurde hier der Steuersatz 2006 von 25 auf 30 v.H. erhöht.

Auch für die Nachfrager entsteht durch die zu entrichtende Mehrwertsteuer eine steuerliche Belastung, wenn sie offiziell Leistungen nachfragen. Durch Geschäfte "ohne Rechnung" können sie dieser Belastung entgehen. Der Normalsatz der

[4] Das fehlende Äquivalenzprinzip wird von Schäfer (2006) zu Recht als Kernproblem bei wirtschaftspolitischen Reformmaßnahmen angesehen, die eine Rückverlagerung von wirtschaftlichen Aktivitäten aus dem Schatten an das Licht bewirken könnten.

[5] Stellvertretend für die große Zahl der Publikationen, die sich mit den Ursachen der Schattenwirtschaft beschäftigen, seien hier genannt Langfeldt (1984b), Schneider (2003), Enste (2003) und Schäfer (2006).

[6] Zu diesem Ergebnis kommen beispielsweise Tanzi (1999) sowie Schneider und Enste (2000).

Mehrwertsteuer in Deutschland ist seit der Einführung der Steuer in der jetzigen Form im Jahr 1968 ausgehend von einem Wert von 10 v.H. kontinuierlich erhöht worden, zuletzt im Jahr 2007 von 16 auf 19 vH. Auch durch die Abschaffung der Eigenheimzulage im Jahr 2006 ist für private Hausbauer der Anreiz geringer geworden, offizielle Unternehmen zu beschäftigen. Um dem damit verbundenen Anstieg der Schattenwirtschaft entgegenzuwirken, hat die Bundesregierung in begrenztem Umfang für private Haushalte eine steuerliche Absetzbarkeit von Aufwendungen für Erhaltungs- und Modernisierungsmaßnahmen im Wohnbereich sowie für haushaltsnahe Dienstleistungen und die Kinderbetreuung eingeführt.

Die **Ausgestaltung der sozialen Sicherungssysteme** hat ebenfalls einen großen Einfluss auf die Schattenwirtschaft. Da es sich bei den meisten staatlichen Transferzahlungen um arbeitsfreie Einkommen handelt, besteht grundsätzlich die Möglichkeit, durch eine Tätigkeit in der Schattenwirtschaft – bei einem vergleichsweise geringen Arbeitseinsatz – unter Einschluss der Sozialleistungen ein gleich hohes oder sogar höheres verfügbares Einkommen als in der offiziellen Wirtschaft zu erlangen.

Ein solcher Anreiz dürfte vor allem für Arbeitskräfte mit geringer beruflicher Qualifikation bestehen, bei ihnen ist die Differenz zwischen den staatlichen Lohnersatzleistungen (Arbeitslosengeld II) und dem offiziellen Lohnniveau vergleichsweise gering. Nach Berechnungen von Boss *et al*. (2005: 24) haben insbesondere gering qualifizierte Alleinverdiener mit Kindern kaum einen finanziellen Anreiz, insbesondere wenn ihr potentieller Arbeitsplatz im Dienstleistungssektor und/oder in den neuen Bundesländern liegt. Darüber hinaus besteht für ALG II – Bezieher das Problem, das das bei einem Hinzuverdienst in der offiziellen Wirtschaft das erzielte Einkommen fast vollständig auf die staatlichen Transfers angerechnet wird. Bereits bei einem Hinzuverdienst von € 125 beträgt die marginale Belastung 85%. (Boss *et al*. 2007: 18) Bei derart ausgestalteten Anreizen dürfte für viele der derzeit rd. 5 Mill. Bezieher von Arbeitslosengeld II und vergleichbaren Leistungen allein eine Arbeitsaufnahme in der Schattenwirtschaft interessant sein. Um dem entgegenzuwirken und die Arbeitswilligkeit der Betroffenen zu testen, wurden von staatlicher Seite die so genannten "Ein-Euro-Jobs" eingeführt. Wenn Transferbezieher solchen Jobs nachgehen, reduziert sich ihre potentiell für Schwarzarbeit zur Verfügung stehende Zeit.

Die Vielzahl der in Deutschland bestehenden **staatlich administrativen Regulierungen** ist eine weitere wichtige Ursache für die Existenz der Schattenwirtschaft. In diesem Bereich entstehen im Gegensatz zur offiziellen Wirtschaft keine Bürokratiekosten. Betrachtet man die ständig steigende Zahl von Gesetzen, Verordnungen, Vorschriften, Richtlinien, Ausführungsbestimmungen usw., mit denen der Staat die wirtschaftliche Betätigung reguliert, dann ist trotz aller Bekundungen von Seiten des Staates noch keine Entlastung für die Unternehmen erkennbar. Nach einer Untersuchung des Instituts für Mittelstandsforschung aus dem Jahr 2004 werden vor allem klein- und mittelständische Unternehmen von der im internationalen Vergleich hohen Regulierungsdichte überproportional mit Kosten belastet. Pro Mitarbeiter und Jahr müssen rd. € 4400 aufgewendet werden, um den verschiedensten Meldepflichten und Vorschriften nachzukommen. Eine weitere Untersuchung hat

ergeben, dass kleine und mittlere Unternehmen 4 bis 6% ihres Umsatzes für Bürokratiekosten ausgeben. (Enste, Hardege 2006: 1)

Von besonderer Bedeutung für die Schattenwirtschaft sind Regulierungen, die Unternehmensgründungen hemmen und somit den Übergang von der Schattenwirtschaft in die offizielle Wirtschaft erschweren. Bis zur Handwerksrechtsnovelle vom 01.01.2004 musste ein spezieller Befähigungsnachweis in Form der Meisterprüfung abgelegt werden, bevor die Erlaubnis zur Gründung eines Handwerksbetriebes erteilt wurde. Dieser "Meisterzwang" ist seither deutlich eingeschränkt worden, er gilt nur noch für 41 Handwerksbereiche und es besteht auch ohne Meisterprüfung für Gesellen, die eine sechsjährige Berufserfahrung an verantwortlicher Stelle nachweisen können, die Möglichkeit sich selbständig zu machen. Zudem ist in Deutschland eine Unternehmensgründung komplizierter als in anderen Ländern. So dauert hier die Gründung einer GmbH in der Regel 24 Tage und es müssen 9 verschiedene Behörden kontaktiert werden, die entsprechenden Werte für Australien betragen 2 Tage und 2 Behörden. (Enste, Hardege 2006: 5)

Die für die Schattenwirtschaft bedeutungsvollsten **Regulierungen** betreffen den **Arbeitsmarkt**. Die Eingriffe des Staates sind vielfältig. So gibt es im Bereich des gesetzlichen Arbeitnehmerschutzes Regelungen, die Arbeitnehmer vor Überforderung (Arbeitszeitschutz), Unfällen (Betriebs- und Gefahrenschutz), den Risiken allgemeiner Vertragsfreiheit (Kündigungsschutz, Sozialplanpflicht) schützen sollen. Als besonders gravierend erweist sich die vom Staat gebilligte und abgesicherte Einschränkung des Wettbewerbs auf dem Arbeitsmarkt. Durch die Globalisierung im Allgemeinen und die Integration der Transformationsländer im Besonderen hat sich das weltweit verfügbare Angebot an Arbeitskräften sprunghaft erhöht. In der Folge sind auch in Deutschland – insbesondere im Niedriglohnbereich – die Löhne unter Druck geraten. Der Staat versucht auf vielfältige Weise dem entgegenzuwirken. Der Marktzutritt ausländischer Arbeitskräfte auf den deutschen Arbeitsmarkt wird mengenmäßig beschränkt, zusätzlich gibt es gesetzliche Regelungen (Entsendegesetz, EU-Dienstleistungsrichtlinie) die verhindern sollen, dass ausländische Arbeitskräfte, die in Deutschland bei Unternehmen ihres Heimatlandes tätig sind, unterhalb des Lohnniveaus in Deutschland entlohnt werden. Gleichzeitig führte der Staat in einigen Bereichen der Wirtschaft Quasi-Mindestlöhne ein, indem tarifvertraglich vereinbarte Lohnuntergrenzen für allgemeinverbindlich erklärt wurden. Gegenwärtig mehren sich die Stimmen, die für alle Bereiche der Wirtschaft solche Mindeststandards bei den Löhnen definieren wollen. Faktisch existiert durch die sozialen Sicherungssysteme – wie bereits beschrieben – ein Mindestlohn in Höhe von rd. € 4.50 pro Stunde.[7]

[7] Das angestrebte Mindestlohnniveau ist doppelt so hoch. So liegen derzeit die nach dem Entsendegesetz festgelegten Mindestlöhne für Westdeutschland (Ostdeutschland) in Euro pro Stunde bei: Bauhauptgewerbe 10.40 (9.00), Dachdeckerhandwerk 10.90 (10.00), Elektrohandwerk 9.20 (7.70), Gebäudereinigung 7.87 (6.36) sowie Maler und Lackierer 7.85 (7.15). Der jüngst für allgemeinverbindlich erklärte Lohn bei Postdienstleistungen beträgt 9.80 (9.00) Euro.

Der Versuch, die Besitzstände der beschäftigten Arbeitnehmer in Deutschland zu sichern, hat die offiziellen Beschäftigungschancen der begünstigten Personengruppen verschlechtert. Es überrascht daher nicht, dass im Jahr 2004 in Deutschland die Arbeitslosenquote der Geringqualifizierten (Arbeitskräfte ohne weiterführenden Schul- und Berufsabschluss) mit einem Wert von 20.5 v.H. mehr als drei Mal zu hoch wie im Vereinigten Königreich (6.6 v.H.) ausfiel. Ein ähnlich dramatisches Bild ergibt sich für die Langzeitarbeitslosen (Dauer der Arbeitslosigkeit länger als 1 Jahr); ihr Anteil an den Arbeitslosen insgesamt betrug 2004 51.8 v.H. gegenüber 21.4 v.H. im Vereinigten Königreich. (OECD 2005) Für die genannten Gruppen stellt die Arbeitsaufnahme in der Schattenwirtschaft häufig die einzig realistische Chance einer Arbeitsaufnahme dar. In der Schattenwirtschaft gibt es keine Lohnuntergrenzen, die Löhne können sich entsprechend den Knappheitsverhältnissen bilden. Für Arbeitskräfte aus dem Ausland, die keine Aussicht auf eine Aufenthaltserlaubnis und daran geknüpfte Arbeitserlaubnis haben, stellt die Schattenwirtschaft ebenfalls die einzig mögliche Form der Betätigung dar. Diese Personengruppe findet insbesondere bei haushaltsnahen Dienstleistungen und bei der Betreuung älterer Menschen eine Beschäftigung.

Fördernd auf die Schattenwirtschaft hat sich auch die lange Zeit anhaltende Tendenz zur Verringerung der offiziellen Arbeitszeit ausgewirkt. Wer offiziell weniger arbeiten kann oder will als es seinen individuellen Präferenzen entspricht, wird Arbeit in die Schattenwirtschaft verlagern. In Deutschland ist die Wochenarbeitszeit in der Industrie von 42.2 Stunden im Jahr 1980 auf 37.2 Stunden im Jahr 2004 zurückgegangen, seitdem steigt die Wochenarbeitszeit wieder an (2006: 38.3 Stunden).[8] Lange Zeit war es zudem das Bestreben der Tarifvertragsparteien und der Politik die Lebensarbeitszeit zu verkürzen. So ist nach Berechnungen von Eurostat bis zum Jahr 2000 in Folge umfangreicher staatlicher Anreize für eine Frühverrentung das faktische Erwerbsaustrittsalter bis auf 60.6 Jahr zurückgegangen. In den Folgejahren sind die Anreize sukzessive abgeschwächt worden, und das durchschnittliche Renteneintrittsalter erhöhte sich bis zum Jahr 2006 auf 61.9 Jahre.

Der im Vergleich zu anderen Ländern deutlich umfangreichere gesetzliche Kündigungsschutz hat ebenfalls Bedeutung für die Schattenwirtschaft. Je rigider der Kündigungsschutz ist und je höher die zu zahlenden Abfindungen für die Unternehmen sind, desto vorsichtiger werden die Unternehmen bei der Neueinstellung von Mitarbeitern sein und desto größer wird folglich das Arbeitskräftepotential für die Schattenwirtschaft sein. Seit der Reform des Arbeitnehmerüberlassungsgesetzes im Jahr 2004 greifen die Unternehmen bei steigendem Arbeitskräftebedarf bevorzugt auf Zeitarbeiter zurück, obwohl die Kosten je geleisteter Arbeitsstunde höher als bei Eigenbeschäftigung sind.

[8] Dahinter verbirgt sich das erfolgreiche Bemühen, die internationale Wettbewerbsfähigkeit der deutschen Industrie zu verbessern. Eine Arbeitszeitverlängerung ohne Lohnausgleich senkt die Lohnstückkosten der Unternehmen ohne dass die Mitarbeiter Einkommenseinbußen hinnehmen müssen.

Als weiterer Einflussfaktor für die Schattenwirtschaft kann die **Einstellung der Bürger gegenüber dem Staat** und den von ihm gesetzten Rahmenbedingungen angesehen werden. Wenn die Bürger subjektiv empfinden, dass die Ansprüche des Staates aus Steuern und Sozialabgaben zu hoch sind, werden sie eher zu Schwarzarbeit bereit sein. Angesichts der weiterhin hohen Belastung mit Abgaben selbst von Beziehern kleiner und mittlerer Einkommen, kann es nicht verwundern, dass in weiten Teilen der Bevölkerung Schwarzarbeit noch immer als Kavaliersdelikt angesehen wird. So gaben im Jahr 2007 in einer im Auftrag der Initiative Neue Soziale Marktwirtschaft von TNS-Emnid-Institut durchgeführte repräsentative Befragung drei Viertel aller Befragten an, sie glaubten ihre Nachbarn würden Arbeiten "ohne Rechnung" vergeben. Nur 3.6% wären bereit, ein solches gesetzwidriges Verhalten zur Anzeige zu bringen. Zu ähnlichen Ergebnissen gelangt die Studie "Moral 2007" des Instituts für Demoskopie Allensbach. Dabei wurde nur von 25% aller Befragten Schwarzarbeit als Aktivität bezeichnet, "die man unter keinen Umständen tun darf". Demgegenüber verurteilen 71% der Bevölkerung den unberechtigten Bezug von Krankengeld, Arbeitslosenunterstützung und anderen sozialen Leistungen. Steuerhinterziehung wird von 49% der Befragten als schwerwiegendes Vergehen bezeichnet. Insgesamt dürfte die subjektive Bereitschaft für Schwarzarbeit trotz intensiver staatlicher Aufklärungsarbeit und Strafverfolgung weiterhin als hoch einzuschätzen sein.

Welche Auswirkungen hat die Schattenwirtschaft?

Für die Beurteilung der Schattenwirtschaft sind die **Auswirkungen auf die Ressourcenallokation** und das gesamtwirtschaftliche Wachstum von großer Bedeutung. Es spricht viel dafür, dass unter den gegenwärtigen institutionellen und gesetzlichen Rahmenbedingungen die gesamtwirtschaftliche Wohlfahrt durch die Existenz der Schattenwirtschaft erhöht wird. Im Vergleich zur offiziellen Wirtschaft ist die Schattenwirtschaft eine Marktwirtschaft im ursprünglichen Sinn. Hier signalisieren Preisänderungen vor allem Veränderungen in den Knappheitsrelationen. Es herrscht Wettbewerb, denn der Marktzutritt kann im Gegensatz zur offiziellen Wirtschaft nicht beschränkt werden. Auch Arbeitskräfte, die wegen der rigiden Preisstrukturen auf dem offiziellen Arbeitsmarkt keine Beschäftigung finden, können sich hier betätigen. Viele Aktivitäten, die in der Schattenwirtschaft stattfinden, würden zu den in der offiziellen Wirtschaft herrschenden Preisen wegen der bestehenden Budgetrestriktion der privaten Haushalte nicht nachgefragt. Die Schattenwirtschaft leistet somit einen wichtigen Beitrag zur Versorgung der Bürger mit Gütern und Diensten. Zwischen der Schattenwirtschaft und der offiziellen Wirtschaft bestehen umfangreiche Komplementaritäten. Die Schattenwirtschaft nutzt Vorleistungen der offiziellen Wirtschaft, umgekehrt gilt dies auch. Es hat sich somit eine Arbeitsteilung zwischen offizieller Wirtschaft und Schattenwirtschaft herausgebildet. Die Schattenwirtschaft ist dabei vorrangig auf arbeitsintensive und weniger komplexe Produktionen spezialisiert, während die offizielle Wirtschaft Vorteile bei komplexen, kapitalintensiven Produktionsprozessen hat.

Unstrittig ist, dass in der Untergrundwirtschaft Effizienzverluste durch Kontroll- und Verbergungskosten auftreten. Wegen der Illegalität der Aktivitäten und der damit

drohenden Strafen von Seiten des Staates werden Schwarzarbeiter für ihre Tätigkeiten eine Risikoprämie fordern. Da eine solche Risikoprämie nicht als Entgelt für bestehende Unsicherheiten hinsichtlich der zukünftigen Entwicklung der relativen Preise angesehen werden kann, ist sie wohlfahrtsmindernd. Das gleiche gilt für Kontrollkosten, die dem Staat entstehen. Hinzu kommt, dass es in der Schattenwirtschaft Anbietern und Nachfragern erschwert wird, miteinander in Kontakt zu treten, dadurch steigen die Informationskosten. Auf der Nachfragerseite erhöht die Illegalität ebenfalls die Unsicherheit, Haftung und Gewährleistung lassen sich nicht mehr einklagen.

Die Tatsache, dass die Wirtschaftssubjekte trotz der angeführten negativen Effekte auf die Leistungen der Untergrundwirtschaft zurückgreifen, kann nur bedeuten, dass die Nachteile von den Vorteilen übertroffen werden. Die negativen Effekte sind daher vor allem als starkes Argument zu sehen, Anreize für eine freiwillige Rückverlagerung von Aktivitäten in die offizielle Wirtschaft zu setzen.

Über die mit der Schattenwirtschaft verbundenen **distributiven Wirkungen** lassen sich nur Vermutungen anstellen. Wie die umfangreich anekdotische Evidenz zeigt, ist es für Bezieher höherer Einkommen leichter möglich legal Steuern zu vermeiden, da sie sowohl Informations- und Kenntnisvorteile als auch umfangreichere Gestaltungsmöglichkeiten haben. Auch die illegale Steuerhinterziehung dürfte dieser Gruppe leichter fallen, da beispielsweise die Verlagerung von Einkünften in das Ausland mit erheblichen Transaktionskosten verbunden ist. Demgegenüber bestehen bei der großen Mehrheit der Arbeitnehmer angesichts des bei der Lohnsteuer angewendeten Quellenabzugs kaum Möglichkeiten der Steuervermeidung und der Steuerhinterziehung. Schwarzarbeit und Do-it-yourself-Aktivitäten sind daher für Bezieher kleiner und mittlerer Einkommen wohl die vorherrschende Möglichkeit, sich dem Zugriff des Staates zu entziehen. Diese Überlegungen lassen vermuten, dass die Einkommensverteilung durch schatten wirtschaftliche Aktivitäten tendenziell nivelliert wird.

Wenn wirtschaftliche Aktivitäten von der offiziellen Wirtschaft in die Schattenwirtschaft verlagert werden, dann führt dies auf den ersten Blick zu **Einnahmeausfällen bei den öffentlichen Haushalten** und bei der Sozialversicherung. Angesichts des beträchtlichen Umfangs der Schattenwirtschaft erscheinen die Einnahmeausfälle aus der Sicht des Staates bedrohlich. Wie bereits dargestellt, würden viele der jetzt in der Schattenwirtschaft produzierten Güter und Dienstleistungen zu den Konditionen der offiziellen Wirtschaft nicht nachgefragt und somit auch nicht produziert werden. Folglich entstünden keine Einnahmen für den Staat. Für eine Überschätzung der mit der Schattenwirtschaft verbundenen Einnahmeausfälle des Staates spricht auch, dass schattenwirtschaftliche Aktivitäten zusätzliche Nachfrage nach Gütern der offiziellen Wirtschaft generieren, so werden die bei Schwarzarbeit verwendeten Rohstoffe und Vormaterialien nach wie vor in der offiziellen Wirtschaft gekauft. Daraus fließt dem Staat Mehrwertsteuer zu. Zudem dürften auch die in der Schattenwirtschaft erzielten Einkommen zu einem großen Teil als Nachfrage in die offizielle Wirtschaft zurückfließen.

Häufig unterschätzt wird die Schattenwirtschaft im Hinblick auf **das Verhältnis zwischen Bürgern und Staat**. Jede freiheitliche Gesellschaft ist darauf angewiesen, dass Gesetze, die die Beziehung zwischen Staat und Bürgern regeln, allgemein akzeptiert werden. Je größer die Zustimmung der Bevölkerung ist, desto geringer sind für den Staat die Kosten der Durchsetzung der Gesetze. Auch für die Bürger sind Ehrlichkeit und Vertrauen wohlfahrtssteigernde Effekte. Ein Staat, der durch falsch gesetzte Anreizsysteme eine große Zahl von Bürgern der moralischen Versuchung aussetzt, die Gesetze nicht zu befolgen, riskiert einen Verfall der gesellschaftlichen Normen, die die Grundlage jedes marktwirtschaftlichen Systems und jeder freiheitlichen Gesellschaftsordnung bilden.

Was zu tun ist

Als wesentliche Ursache für die schattenwirtschaftlichen Aktivitäten wurden die vielfältigen Eingriffe des Staates in den Wirtschaftsprozess und die hohe Steuer- und Abgabenbelastung identifiziert .Es bedarf also einer spürbaren Verringerung der staatlichen Regulierungsdichte, insbesondere auf dem Arbeitsmarkt. Zudem sollten die staatlichen Aufgaben daraufhin überprüft werden, ob sie von den Privaten effizienter erledigt werden können. Eine Verringerung der Staatsquote würde die Konsolidierung der öffentlichen Haushalte voranbringen und gleichzeitig Raum für Steuersenkungen schaffen. Steuerliche Entlastungen sollten vor allem bei den mobilen Produktionsfaktoren ansetzen, damit diese nicht aus der offiziellen Wirtschaft abwandern. Neben der Verlagerung von Fertigungen ins Ausland gilt es auch einer Verlagerung von Aktivitäten in die Schattenwirtschaft entgegenzuwirken. Zu diesem Zweck sollte ein ermäßigter Mehrwertsteuersatz für haushaltsnahe Dienstleistungen und für die in handwerklichen Leistungen für private Haushalte erbrachten Arbeitsleistungen festgesetzt werden. Diese Maßnahme würde die bestehenden Abzugsmöglichkeiten im Rahmen des Einkommensteuersystems ersetzen

Angesichts der absehbaren Alterung der Bevölkerung ist im jetzigen System der Sozialversicherungen eine weitere Erhöhung der Beitragssätze wahrscheinlich. Um die damit verbundenen Anreize für eine Ausweitung der Schattenwirtschaft zu verhindern, bleibt als Alternative nur eine Abkopplung der Sozialversicherungsbeiträge von den Arbeitsentgelten und eine stärkere Ausrichtung der Beitragszahlungen an den allgemeinen Versicherungsprinzipien. Praktisch würde dies bedeuten, dass ab einem Stichtag alle Arbeitnehmer ihren Arbeitslohn inklusive des Arbeitgeberanteils zur Sozialversicherung ausgezahlt bekommen.[9] Da danach der Arbeitgeberanteil entfällt, würde zukünftig verhindert, dass der Keil zwischen Produzenten- und Konsumentenlohn noch größer wird. Die Versicherten unterlägen einer allgemeinen Versicherungspflicht und würden die Beiträge aus allen Einkünften und nicht nur aus den offiziellen Arbeitseinkommen bestreiten. Die Zahlungswilligkeit der Beitragzahler würde deutlich höher ausfallen, wenn Beitragszahlungen und Gegenleistungen der Sozialversicherungssysteme als äquivalent empfunden werden. Dies

[9] Ein solcher Vorschlag findet sich bei Schäfer (2006: 11).

beinhaltet, dass sich die Höhe der Beiträge nicht ausschließlich am Einkommen sondern vor allem an den individuellen Risiken der Versicherten bemisst.

Bei der Reform der Sozialtransfers gilt es darauf zu achten, dass die mit der Anrechnung von offiziellen Einkommen verbundene implizite Grenzbelastung, die gegenwärtig fast durchgängig in einer Größenordnung von 90% liegt, deutlich abgesenkt wird. Eine sinnvolle Alternative zum gegenwärtig praktizierten System ist das vom Sachverständigenrat vorgestellte Kombilohnmodell (SVR 2006; Ziffer 250ff). Der Leitgedanke des Modells besteht darin, für ALG II-Bezieher den Anspruch auf staatliche Unterstützungsleistungen in Höhe des bisher gezahlten Arbeitslosengelds II von einer Gegenleistung abhängig zu machen. Bei Einführung des Modells würde einem ALG II-Empfänger bei Aufnahme einer regulären Tätigkeit die Hälfte des Hinzuverdienstes verbleiben. Im Gegenzug erfolgt eine Absenkung des Regelsatzes für erwerbsfähige Leistungsempfänger um 30 v.H. Beide Maßnahmen würden die Arbeitsbereitschaft im offiziellen Niedriglohnsektor erhöhen und so das für die Schattenwirtschaft zur Verfügung stehende Arbeitsangebot verringern. Kombilöhne sind eine bessere Maßnahme als Mindestlöhne, da sie Arbeitsplätze in der offiziellen Wirtschaft schaffen und nicht vernichten.

Alle genannten Maßnahmen tragen dazu bei, dass auf freiwilliger Basis Aktivitäten aus der Schattenwirtschaft in die offizielle Wirtschaft zurückverlagert werden und sind somit wohlfahrtssteigernd.

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REGIONAL INCOME DISPARITIES AND CONVERGENCE: THE PERFORMANCE OF ESTONIA IN COMPARISON WITH THE EU

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Introduction

In the light of globalization, which produces both winners and losers within and between countries, the regional dimension of income inequality, convergence and growth is attracting a considerable research and policy interest. Following the Stolper-Samuelson theorem (1941), it is possible to predict that owners of relative rich endowment factors may be the winners from globalization and integration processes and of relative poor factors may be the losers of these processes. But there are several other theoretical explanations and plenty of empirical studies providing various conclusions that allow us to argue that globalization has not affected inequality on average. According to the World Development Report (2003), globalization has mostly reduced inequality between countries. At the same time, there are plenty of empirical studies emphasizing that inequality within countries is increasing. (e.g. Kanbur, Venables 2005; Chen, Sapshord 2005) Besides, the relationship between income inequality and growth is still a debated issue, which can be summarized by the Shakespearian-like dilemma "is inequality good or not good for growth". There are still no clear theoretical explanations and/or overall accepted empirical evidence about this relationship that allow us to predict exactly what the consequences of increasing or declining income inequality may be. It is also not fully clear is regional income divergence definitely something to fight against.

Therefore this paper aims to offer some empirical insights in the debated issues described above, providing more distinct information on regional income disparities and convergence in the new EU member state Estonia, a small post–socialist economy having been faced with quick economic growth and rather high income inequality during the recent decade. Regional income disparities and convergence in Estonia are analyzed in comparison with the results of the studies that explore regional convergence in EU countries and their NUTS-3 level regions. (see Paas, Schlitte 2007; 2006) We also analyze other aspects of equality and welfare by measuring convergence in household's disposable income and compensation of employees at the NUTS-2 level. Since Estonia as a small country is one region at the NUTS-2 level, we use county level data about household member's average income, average hourly wage and average pension provided by Estonian Statistical Office.

We cannot use Estonian county level data for estimating spillover effects, since the number of Estonian counties is only 15. Therefore we employ municipality level data about physical persons' income tax provided by Estonian Tax and Customs Board. We estimate convergence processes on both levels, the level of counties and local municipalities, also testing for spillover effects and spatial heterogeneity. We are aware that the regional GDP data and physical persons' income tax in some sense show different patterns of regional development. Despite of that we still share

opinion that there already exist some positive spillovers of growth centers to rural, more remotely situated and poor regions of the country.

The paper consists of the following sections. Section 2 shortly presents a theoretical framework and section 3 methodological framework for exploring regional income disparities and convergence. Section 4 gives a short overview of data used for the analysis. Section 4 gives an empirical insight into regional income disparities and convergence in GDP *per capita* levels in Estonia and compares the results of the analysis with the respective information about the regional disparities in EU. Section 6 discusses other measures of regional welfare than GDP *per capita* and provides results of the convergence analysis of households' income. Section 7 provides some concluding remarks and policy implications.

Theoretical for exploring regional income disparities and convergence

In recent years there has been a growing interest in exploring the relationship between income inequality and growth. A natural starting point of this debate is well-known as Kuznets hypothesis. (Kuznets 1955) According to this hypothesis, inequality rises in early stages of development and falls as economic development proceeds. Since then, several theoretical models as well as empirical studies have been developed, which provide contradictory results (see overview by Ravallion 2005). Thus, it is possible to argue that the relationship between income inequality and growth is not stable over time and depends on the stage of a country's development. The development stage of a country is characterized by different role of capitals as the engines for economic growth. One of the widely accepted opinions is that in early stages of industrialization, the accumulation of physical capital is the prime engine of growth and therefore the relationship between inequality and economic growth is positive. Once the economy has passed the initial development stage, the accumulation of human capital is the prime engine of growth and therefore the relationship may be the opposite. A more egalitarian distribution of income allows more people to invest in education.

Moreover, empirical studies show different patterns of the relationship between inequality and growth. Early studies have supported the viewpoint that inequality reduces economic growth. (Alesina, Rodrik 1995; Deiniger, Squire 1996) But more recently several other studies based on using larger data samples and more sophisticated econometric techniques provide results that vary depending on the time period and countries under investigation as well as methods applied for analysis. Thus, empirical results confirm the important role of business cycles as well as emphasize the necessity to apply proper estimation techniques. Additionally, new questions have risen about the relationship between spatial inequality and development. (Kanbur, Venables 2005) Spatial inequality is a dimension of overall inequality which has added significance when spatial and regional divisions align with political and social tensions. The exploration of spatial dimensions of inequality also needs the implementation of special methodological approaches that allow us to test spatial dependence and to take it into consideration while explaining empirical

results. If spatial dependence is not taken into account by empirical studies, the results may often be biased and fail to give a profound picture of the real life.

Plenty of studies investigating regional disparities and convergence which have been carried out since the beginning of the 1990s (e.g. Barro, Sala-i-Martin 1995; Armstrong 1995; Tondl 2001; Le Gallo *et al*. 2003; Arbia, Piras 2004) allow us also to give some additional empirical insights into this relationships. Since regional convergence is a long run phenomenon, convergence studies usually observe longer time spans of 15 years or more. Analyses observing regional convergence over a couple of decades found varying rates of convergence over time, showing that the speed of convergence over shorter periods may deviate significantly from the long run average. (e.g. Barro, Sala-i-Martin 1995; Armstrong 1995) However, long run convergence analysis covering the enlarged EU is not feasible at the time. Due to the significant changes in accounting and production systems during the transition and EU enlargement processes, income data for the time before the middle of the 1990s cannot often be reasonably interpreted; in many cases these data are even missing.

Methodological framework

In order to examine regional catching up processes, regional GDP *per capita* disparities and differences in households' purchasing power in EU and in the counties and municipalities of its' small member state Estonia, β-convergence analysis is applied in this paper.

The concept of β-convergence is based on the traditional neoclassical growth model and it postulates that the poor economies grow faster than the rich ones. If regions differ only in initial income levels and capital endowment per worker, they converge towards an identical level of per capita income. This is referred to as absolute β-convergence. By contrast, conditional convergence emphasizes on spatial heterogeneity in growth factors leading to different growth paths. In the case of conditional convergence, where regions are marked for example by differences in institutions, technology, economic structures or qualification of the work force, regions converge towards different steady-state income levels. With respect to EU policy aiming at regional equity, absolute convergence is the appropriate concept to be used. However, considering the variety of regions in Europe, including large structural differences, conditional convergence might be more realistic. The crucial role played by national specifics, such as differences in national policies, legislation, tax-systems, etc., has been stressed in several studies on regional growth and convergence. (e.g. Armstrong 1995)

β-convergence is defined as a negative relationship between initial income levels and subsequent growth rates. In order to test the regional β-convergence, we use the common cross-sectional OLS approach with *per capita* income growth as a dependent variable and the initial income level as an explanatory variable:

(1) $\ln\left(\frac{y_{i0+T}}{y_{i0}}\right) = \alpha_0 + \alpha_1 \ln(y_{i0}) + \varepsilon_i$

where

y_{i0} – initial GDP *per capita* in region *i*,

T – number of years in observation period,

α_0, α_1 – parameters to be estimated,

ε_i – normally and independently distributed error term.

Estimations based on equation (1) are referred to as absolute β-convergence. In order to account for country specific effects, dummy variables for countries could be applied to allow testing for conditional convergence:

(2) $\ln\left(\frac{y_{i0+T}}{y_{i0}}\right) = \alpha_0 + \alpha_1 \ln(y_{i0}) + \sum_{j=1}^{N} \alpha_{2j} c_{ij} + \varepsilon_i$

where

c_{ij} = 1 if region *i* belongs to country *j*; c_{ij} = 0 otherwise;

α_{2j} – parameters for dummy variables.

When the estimated coefficient α_1 is negative, the poor economies tend to grow faster than the rich ones. The annual rate of convergence β, can be obtained from the equation $\beta = -\ln(1-\alpha_1)/T$, where T denotes the number of years between the initial and the final year of observation.

Another common indicator to characterize the speed of convergence is the so-called half-life τ, which can be obtained from the expression: $\tau = \ln(2)/\beta$. The half-life shows the time that is necessary for half of the initial income inequalities to vanish.

Spatial dependence can be taken into account by application of a spatial weight matrix *W*, which is supposed to capture spatial structure and intensity of spatial dependence. The specification of the matrix may be influential on regression results. However, there are various possibilities to specify a spatial weight matrix. Because there is usually no a priori information about the exact nature of spatial dependence, the choice for the design of the spatial weights is somewhat arbitrary. (Niebuhr 2001; Le Gallo *et al*. 2003) A common approach is the concept of binary contiguity where the elements of the matrix w_{ij} = 1, if region *i* and region *j* share a common border or are within a certain distance range to each other and w_{ij} = 0 otherwise. (e.g. Rey, Montouri 1999)

Anselin (1988) suggests two different model specifications in order to deal with the respective forms of spatial dependence. Both models are estimated with the maximum likelihood (ML) method. In the spatial error model (SEM), spatial dependence

is restricted to the error term. Hence, average *per capita* income growth is explained adequately by the convergence hypothesis. Therefore, the SEM is an appropriate model specification for the nuisance form of spatial dependence:

(3) $\ln\left(\frac{y_{i0+T}}{y_{i0}}\right) = \alpha_0 + \alpha_1 \ln(y_{i0}) + \sum_{j=1}^{N} \alpha_{2j} c_{ji} + \varepsilon_i$ with $\varepsilon_i = \lambda[W \cdot \varepsilon]_i + u_i$

where

λ – spatial autocorrelation coefficient,

$[W \cdot \varepsilon]_i$ – the *i*-th element of the vector of the weighted errors of other regions,

c_{ij} = 1 if region *i* belongs to country *j*; c_{ij} = 0 otherwise,

ε_i , u_i – normally and independently distributed error terms.

The spatial lag model (SLM) is suitable when spatial dependence is of the substantive form, where regional growth is directly affected by the growth rates in surrounding regions. Growth spillovers from neighbouring regions are incorporated through the inclusion of a spatially lagged dependent variable on the right-hand side of the equation:

(4) $\ln\left(\frac{y_{i0+T}}{y_{i0}}\right) = \alpha_0 + \rho\left[W \cdot \ln\left(\frac{y_{i0+T}}{y_{i0}}\right)\right]_i + \alpha_1 \ln(y_{i0}) + \sum_{j=1}^{N} \alpha_{2j} c_{ji} + \varepsilon_i$

where

ρ – the spatial autocorrelation coefficient,

$\left[W \cdot \ln\left(\frac{y_{0+T}}{y_0}\right)\right]_i$ – the *i*-th element of the vector of weighted growth rates of other regions.

A specific problem associated with *β*-convergence is that it does not necessarily imply a reduction in variation of regional income levels over time. (Barro and Sala-i-Martin 1995) However, *β*-convergence is a frequently used concept because it allows controlling for various effects on the convergence process. Furthermore, it can be useful to explore the data on the development of regional income disparities besides conducting a formal *β*-convergence analysis.

Data

Conducting regional income inequality as well as convergence analysis, it has to be kept in mind that the choice for the level of regional aggregation may impact the outcome. Applying same methods on different spatial scales may yield to different results. On the one hand, spatial heterogeneity and spatial interaction may be covered when the observational units are relatively large. On the other hand, using a very low level of regional aggregation increases the danger of slicing functional regions into parts. In the latter case, economic activities within a homogenous, functional region may be wrongly detected as spatial autocorrelation. (see also Le Gallo *et al*. 2003)

In principle, the choice for the level of spatial aggregation has been somewhat arbitrary in previous empirical studies. Except for very few studies employing relatively low levels of spatial aggregation (e.g. Niebuhr 2001), regional disparities and convergence processes in Europe have so far ordinarily been analyzed at the NUTS-2 level or higher levels of regional aggregation. This can be explained by the improved data availability first of all at higher levels of regional aggregation in EU. In the analysis conducted by Paas and Schlitte (2007; 2006) and the results of which are used for comparison the Estonia's regional income pattern in the framework on the EU-25, the cross-section database consists basically of NUTS-3 level regions. The size of the sample used for the comparison consists of 861 regions, of which 739 regions belong to the EU-15 and 122 to the new member states. As income measure, GDP *per capita* data measured in purchasing powers standards (PPS) taken from the Eurostat database are used in the referred study. (*Ibid*.)

Estonia has five NUTS-3 level regions: North-Estonia (Põhja-Eesti), West-Estonia (Lääne-Eesti), South-Estonia (Lõuna-Eesti), North-East Estonia (Kirde-Eesti) and Central-Estonia (Kesk-Eesti). If we compare the range of regional income disparities in Estonia and EU-25 (table 1), we see that regional heterogeneity is significantly higher when observational units are larger. In 2003, the top income level in Inner London West, UK, with 477% of the average income level of the EU-25, was more than twenty times higher than the one of the poorest region Latgale, Latvia, with 21%. Furthermore, in the two sub-samples, the EU-15 and the NMS, there is a wide gap between the lowest and the highest income levels. The income level in the poorest region in the EU-15 – Tamega, Portugal, with 37% – was thirteen times lower than the respective income level of the richest region. The income level in the richest region of the NMS – Warsaw, Poland, with 139% – was 6.6 times higher than the average per capita income in Latgale. The range of regional income disparities in Estonia is 142,932 EEK or around 3.5 times; and that is significantly large considering the possible consequences that may weaken social cohesion having negative impact on sustainable economic development in long run.

Table 1. The highest and the lowest income levels in the EU at NUTS-3 level, 2003 (EU-25 = 100)

	Average	Minimum	Maximum
EU-25	100.0	21.1 (Latgale, Latvia)	477.0 (Inner London West, UK)
EU-15	109.1	36.7 (Tamega, Portugal)	477.0 (Inner London West, UK)
NMS	52.9	21.1 (Latgale, Latvia)	139.3 (Warsaw, Poland)
Estonia	51.1	31.8 (Kirde-Eesti)	78.9 (Põhja-Eesti)

Source: Eurostat; see also Paas, Schlitte 2006.

The NUTS-2 level regions are not functional regions and they do not correspond to the administrative-territorial structure of Estonia. Therefore, GDP data of the 15 Estonian counties are used in this paper. In Estonia, collecting data about GDP on the county level started at the year 2000. In the same year, the methodology of calculating overall GDP in Estonia was changed. For that reason we can use only

very short time period (2000–2005) for exploring regional GDP *per capita* disparities and convergence on the level of the Estonia's counties.

Since we consider that regional GDP is not the only and maybe even not the most appropriate measure of regional standard of living, we also apply Eurostat data for households' disposable income measured by purchasing power parities and compensation per employee at the NUTS-2 level. The last indicator was not directly available by Eurostat, but we calculated it by dividing the compensation of employees (millions of EUR) by the number of employees in the region, as suggested by López-Rodríguez and Faíña (2006). For Estonian regional analysis, we used data for household member's average income, average wage and average pension levels, because on the NUTS-2 level, Estonia is just one region and no within-country analysis could be conducted. In some cases, data are available for the period 1996–2004, which gives us an opportunity to investigate convergence in people's income since quite beginning of the transition period.

Data on smaller aggregation levels (municipalities) are not available for GDP or other welfare indicators used in this study. In order to analyze income disparities on the level of Estonian municipalities (n = 241), we use the amount of income tax received by the municipality divided by the number of inhabitants as a proxy of wealth. The respective data are available thanks to the database of the Estonian Tax and Customs Board. Since Estonian municipalities are very small, commuting between place of residence and place of work is very likely and a physical person's income tax may not be the most appropriate measure of the wealth of a municipality. We are aware of this limitation of our study but for examining regional income disparities on the level of local municipalities, these are the only data available at the moment. We have also taken into account that there have been some administrative changes due to the amalgamation of some municipalities during the observable period (2000–2005) and therefore respective calculations have been made.

Disparities and convergence in levels of regional GDP *per capita* in Estonia

Resulting from the prosperous economic reforms during post-soviet transition coupled with low-wage but comparatively skilled labour force, Estonia attracted large amounts of foreign direct investments and created good conditions favouring quick economic growth. As a consequence, Estonia succeeded to achieve high growth rates already during the EU pre-accession period (around 6–8% *per* year) and this high growth rate also continued after joining the EU (8.1% in 2004; 10.5% in 2005 and 11.4% in 2006; see Estonian Economy… 2007). Economic growth in the period 2000–2005 was also quick in the counties of the country (see figure 1) varying between 49 and 118%. The lowest economic growth occurred in the central part of Estonia, in Järva county. We can see from the figure that divergence may be assumed, richer regions – Harju and Tartu counties have higher growth rates.

Regional disparities in GDP *per capita* are rather high in Estonia. The minimum and maximum level of GDP *per capita* differed more than three times and these differences increased slightly during the years under observation. The level of the

GDP *per capita* was the highest in Harju county and the lowest in Jõgeva county during all years under observation. The average value was higher than the medium, which indicates that most counties of Estonia had GDP *per capita* under average. It is mainly due to the very high level of GDP *per capita* in Harju county compared to other Estonian counties.

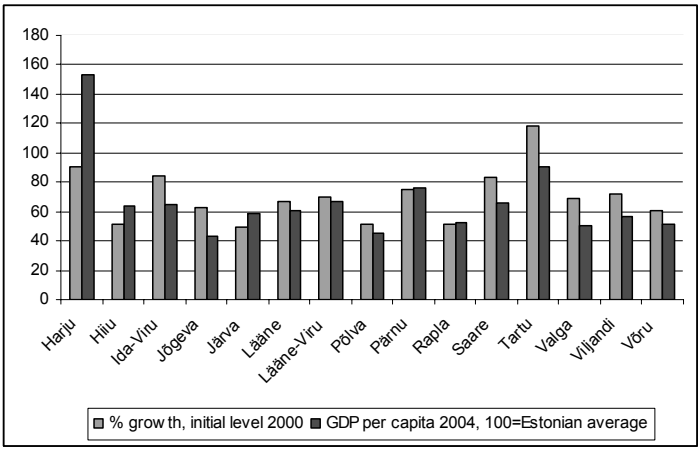

Figure 1. GDP *per capita*, % growth and the 2004 level.

In this section we also test for the absolute convergence in case of GDP *per capita* in Estonian counties. We use the common cross-sectional OLS approach with *per capita* GDP growth as dependent variable and the initial GDP *per capita* level as explanatory variable (see equation 1). It resulted that the convergence parameter is positive as assumed after taking a glance at data, but statistically insignificant. The value of the determination coefficient, $R^2 = 0.097$, is also very low. Evidently the sample is too small and/or homogenous for achieving statistical significance.

Anyway, we must consider the situation in Estonia, a former socialist country and a new EU member state differs from the situation in both – the EU-15 countries. According to Paas and Schlitte (2007), the enlarged EU (EU-25) experienced a significant between-countries catching-up of GDP *per capita* levels converging at an average rate of 2% p.a. Taking national effects into account, estimated convergence rates decrease substantially. There is no significant convergence process going on within the countries of the EU-25 at the NUTS-3 level and regional GDP *per capita* levels within the countries of the NMS actually diverge at a rate of 1.5% p.a. (*Ibid*.) Hence, within the countries of the NMS richer regions tend to grow faster than poorer ones. Consequently, regional development processes measured by the changes in GDP *per capita* on the counties' level in Estonia generally follows the overall pattern of the NMS.

We conclude that regional disparities within countries tend to increase. But is it something to fight against? Economic theories as well as previous empirical studies do not give a clear answer to that question (see the part 2 of the current paper). There is no doubt that alleviating poverty should be on of the most important target of economic policy measures. But divergence in GDP levels may also indicate to the concentration of production processes to regions, where it is more efficient and leads to higher growth. Also, more and more values are based on the development of info- and communication technologies, which reduces the significance of physical location and magnifies possibilities for spillovers. Developed infrastructure and info-technology gives us a chance to consume goods that are produces far away from us, without even going out from our house. This may indicate that also other measures of regional welfare should be analyzed than regional GDP *per capita* as we do in the next section.

Convergence in people's purchasing power in EU and Estonia

In this section, we provide evidence that convergence has occurred in people's purchasing power. At the EU level, we use Eurostat data for household's disposable income *per capita* (in PPS) and the ratio of compensation of employees and the number of employees. The second measure is a proxy for average wage, as suggested by Jesús López-Rodríguez and J. Andrés Faíña (2006). The sample consists of these EU NUTS-2 level regions, for which the data are available. Figure 2 indicates that growth in people's purchasing power has been faster in poorer regions.

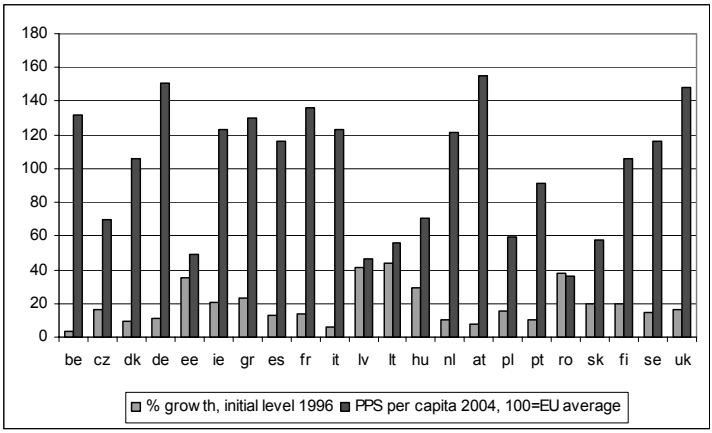

Figure 2. Household's disposable income, % growth and the 2004 level.

We now estimated convergence in household's disposable income (PPS per inhabitant) and found significant evidence on the convergence processes while analyzing both – NUTS-2 level regions and European countries. The results indicate that differences between regional living standards have decreased during the observable

period 2000–2004. Both convergence coefficients are negative and statistically significant on the 0.01 level (see table 2).

Table 2. Convergence coefficients for household's disposable income, EU countries 2000–2004

Disposable income *per* household	Regions, n = 258, R^2 =27.2%		Countries, n = 22, R^2 = 68.8%	
	Coefficient	Standard error	Coefficient	Standard error
Intercept	1.164***	0.105	1.548***	0.201
Initial level 2000	–0.112***	0.011	–0.152***	0.022

Source: Eurostat, authors' calculations

For controlling the results, we also took under observation another personal income indicator – the ratio of compensation of employees and the number of employees as a proxy for average wage. The patterns of these two variables are similar (see figure 3 and table 3).

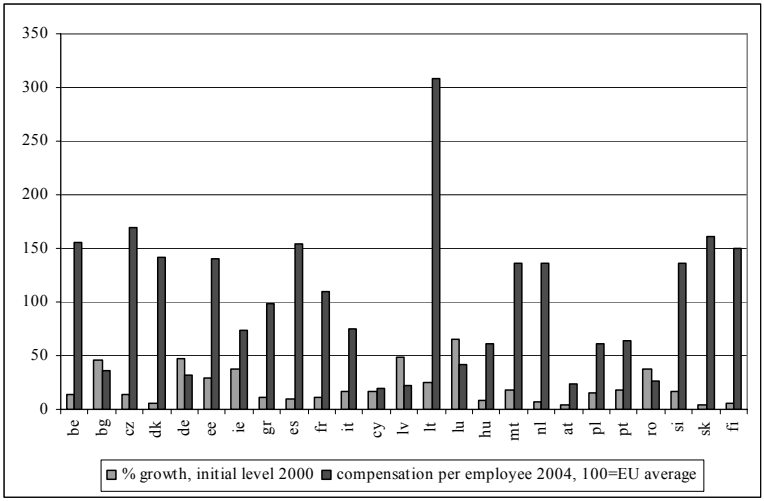

Figure 3. Compensation per employees, % growth and the 2004 level.

Growth rates of compensation per employee are also higher in regions with lower initial levels. It indicates that average wages tend to converge. Regression analysis supported this assumption, convergence coefficients were negative highly statistically significant.

Now we concentrate on differences in personal income levels in Estonia. At first we estimate convergence processes in household member's average income, average hourly wage and average pension. Then we go for regional income disparities analysis on the municipality level, exploiting the data for physical income tax *per capita*, received by municipality.

Table 3. Convergence coefficients for compensation of employees, EU countries, 2000–2004

Compensation *per* employee	Regions, n = 261, R^2 =41%		Countries, n = 25, R^2 =43.6%	
	Coefficient	Standard error	Coefficient	Standard error
Intercept	0.428***	0.022	0.424***	0.051
Initial level 2000	–0.100***	0.007	–0.088***	0.018

Source: Eurostat; authors' calculations.

All of these indicators show different tendencies from the GDP *per capita* levels. We found significant evidence on convergence in personal income indicators between Estonian counties (see table 4). Thus we can conclude that purchasing power of European Union inhabitants rather moves towards equalizing, despite the increase in regional GDP *per capita* disparities.

Table 4. Convergence coefficients for household member's average income, average hourly wage and average pension, Estonian counties 2000–2005

n = 15	Income per houshold member, R^2 =39.4%		Wage, R^2 =11.2%		Pension, R^2 =34.2%	
	Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error
Intercept	2.904***	0.664	1.562***	0.419	3.842***	0.884
Initial level 2000	–0.289***	0.088	–0.279*	0.133	–0.481***	0.162

Source: Estonian Statistical Office; authors' calculations; n = 15.

The analysis of income disparities in the municipalities of Estonia bases on the personal income tax data provided by the Estonian Tax and Customs Board. Contrary to the results of the regional disparities in GDP *per capita* in Estonia, receipts of physical persons' income tax have also grown faster in poorer municipalities. For county level developments, see figure 4.

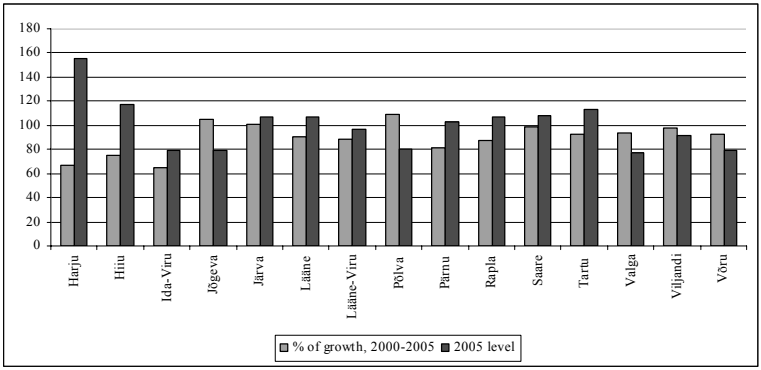

Figure 4. Receipts of physical persons' income tax *per capita*, % growth and the 2005 level.

Estonian municipalities are very heterogenous. The differences between minimum and maximum income proxies are high, but it is mainly due to the great amount of income growth in Harju and Tartu counties. While observing the same indicators for municipalities, we see that the quotient of maximum and minimum is rather stable (exceptional year is 2003) or has decreased slightly.

In the next step of our regional convergence analysis, we estimate regression models to examine, whether the convergence in physical persons' income tax receipts per capita has occurred in Estonia. At first, we investigate the regression results on the county level, and then we estimate the equations for absolute and conditional convergence (with county dummies) to consider possible effects of structural conditions that may differ across counties (see equations 1 and 2). We also estimated convergence equations taking into account possible spatial interactions (see equations 3 and 4, using row-standardized contiguity based and distance based weight matrices.

We can conclude from the above that the differences in individual income measured by the receipts of physical persons' income tax have decreased on both levels, in counties and municipalities. Hence, the income convergence occurs. The inclusion of county dummies for testing conditional convergence did not change the results much; though, all coefficients for dummies had positive signs and some of them were statistically significant. Table 5 presents estimation results for absolute convergence on the county and municipality levels. In the last column, spatial lag model estimates, using the weight matrix based on contiguity, are shown for comparison.

Table 5. Estimators of the convergence equations for income per capita on the county and the municipality levels of Estonia

Variable	Counties, n = 15 R^2 =39.2%		Municipalities, n = 241 R^2 =38.2%		Spatial model, n = 241	
	Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error
Intercept	0.780***	0.047	0.888***	0.014	0.813***	0.068
Initial level 2000	–0.196***	0.062	–0.274*	0.022	–0.249***	0.073

Source: Estonian Statistical Office; authors' calculations.

The results of our spatial econometric estimations indicate that there is spatial dependence neither in nuisance (equation 3) nor in substantive form (equation 4). One explanation to these results can be the smallness of the sample in use. In order to test the hypothesis about spatial dependence correctly, the sample size should be sufficiently large. The sample for analyzing regional income convergence on the EU-25 NUTS-3 level was around three times larger (n = 861).

Though, it is more likely that Estonian economic structure differs from the ones of bigger regions. Estonian municipalities and even counties are very small and thus distances between them are almost diminishing, compared to large European regions, which act as independent economic units. Small distances increase the mobility of both – people and goods enough to make the borders of administrative units and

economic units to differ significantly. In Estonia, a only few bigger towns serve as centres for counties in which they locate and even for neighbouring counties. A large share of the residents of rural municipalities work in towns, use infrastructure and other benefits of towns and commute daily or weekly between these towns and their residential municipalities. Thus not the nearest municipalities but the nearest centres probably have very strong influence on the economic structure of municipalities, which excludes establishing spatial interactions by standard spatial econometric analysis methods. Though, we could assume that spillovers take place faster in case of small regions, because innovations achieved in one area, soon become available for the neighbouring ones. Therefore areas with high potential for innovations and technological progress should be strongly supported. It would probably not lead to convergence, but definitely increases overall welfare through spillover effects.

The estimations based on the EU-25 NUTS-3 level sample lead to the conclusion that the substantive form of spatial autocorrelation is present in the regional income data of the EU-25. (Paas, Schlitte 2007) The results of this analysis also indicated that OLS estimates were not seriously biased. The conclusion was that national macroeconomic factors appear to be more influential on regional growth than spatial spillovers. (*Ibid*.) To put it differently, spatial spillovers seem to stop at national borders. Similar results were found by Bräuninger and Niebuhr (2005) for NUTS-2 level regions in Western Europe and for NUTS-2 level regions in the enlarged EU. Thus, our results for Estonia are generally in line with the overall regional growth and income convergence pattern in EU-25 indicated by the previous empirical studies.

In conclusion, regarding the GDP *per capita* measured on the level of counties, we noticed divergence, but while regarding several personal income individual income indicators, we found evidence of convergence. Overall welfare and people's purchasing power have shown convergence in both – EU and Estonia. We argue that divergence in GDP *per capita* on the level of counties is a result of more effective distribution of production inputs and therefore, accumulation of capital in places, where production is more effective and all regions benefit from these developments due to spillovers. This aspect definitely deserves further investigation.

Concluding remarks and policy implications

Estonia as the new member state belongs to the periphery of the EU having had one of the highest growth rates in the EU during the recent years. Examining GDP *per capita* in the counties of Estonia shows significant regional disparities. There is a core-periphery structure with high income levels in the capital region, Harju county, and low income levels in peripheral regions. It worth pointing out that the core-periphery structure with relatively high income levels in the centre of the EU and relatively low income levels in peripheral regions is characteristic also for the EU.

In recent years, there has occurred divergence in regional GDP levels within many EU countries. Based on the NUTS-3 level spatial econometric data analysis,

regional spillovers, especially within countries, take place. Inequality between counties' GDP *per capita* levels has also increased in Estonia. Though, the authors consider that increases in within-country disparities may be the consequence of the concentration of production processes to regions, where it leads to gains in efficiency. Due to huge developments in info-technology, communication technologies and overall globalization, differences in regional GDP levels may not be something to definitely fight against. Analyzing other income indicators like disposable income per household and compensation per employee, we can admit that convergence has occurred, which indicates that people's welfare has increased faster in poorer regions. We found significant evidence on convergence in average personal income indicators like disposable income per household and the ratio of compensation of employees and the number of employees in the region on the EU NUTS-2 level. Estonian data at the county level, measured by household average income, average wages or pensions and at the municipality level, measured by physical person's income tax *per capita* received by municipality, show statistically significant convergence processes.

But is regional income divergence definitely something to fight against? The authors of this paper share opinion that this is not always the case. Considering concrete circumstances and measuring benefits and losses in overall welfare is definitely needed before employing economic policy measures that should lead to convergence. Divergence in regional GDP levels may indicate to the concentration of production inputs in regions, where it is more efficient. In the light of globalization and huge development in info technology and communication systems, differences in GDP *per capita* levels and growth rates may just be a part of the overall progress, of which, due to spillover effects, also poorer regions benefit and that with less social expenditures, than it would take by public redistribution of income. According to our opinion, the convergence process should not be the target itself. Of course, leading to convergence should sometimes definitely serve as a measure to alleviate poverty and helping to achieve the necessary aid for starting catching-up processes for the poorer regions. Though, maybe even more attention should be paid to elate people in highly developed areas for using their potential to achieve even greater development, which finally benefits for all inhabitants, including the ones of the poorer regions.

In European Union, the development level of communication systems and infrastructure injures that people in poorer regions sooner or later (depends on the magnitudes of spillovers) also gain from technological achievements made in other regions, and that with less social costs than it would take by extensive public income redistribution processes. Significant amount of attention should be paid to inspiring people in highly developed areas to use their complete potential for obtaining new achievements, of which again people in all regions finally gain. By our opinion, advantages from spillovers could be even much more effective, when cross-border co-operation and interactions between EU countries achieve higher levels. This will probably not lead to convergence in regional GDP *per capita* levels, but definitely to progress in overall development.

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AN ASSESSMENT AND EVALUATION OF INNOVATION POLICY: THE CASE OF ESTONIA

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Tallinna Tehnikaülikool

Introduction

Economic growth, global competition, technological change, innovation, innovation systems, innovation clusters and networks, a knowledge-based economy and a knowledge-based society constitute a substantial and popular subject of research for scholars and researchers from a number of academic fields, a challenging matter of analysis and concern for policy analysts, policy makers and public servants as well as being a very important subject of management for entrepreneurs in any country. Estonia has Skype, the genome project, e-government and e-elections. It has also experienced success in the radical innovation of its monetary and taxation policies. Estonia is known world-wide for its developmental success story, but the country has made no overall radical progress in innovation to guarantee the long-term continuation of this success.

According to numerous authors, creativity, knowledge, technological change and innovation are four of the most significant factors of economic growth and the development of an economy (Marshall 1920: App. A. 11; Schumpeter 1942: 84–85; Nelson 1993: 3; Freeman 1995: 10; Rosenberg 1995: 179; Bruland 1998: 167; Lundvall 2000: 2; Kattel, Kalvet 2005: 17), the formation of industrial policy (Lundvall 1988: 362; Nielsen 2003; Dahlman, Routti, Ylä-Anttila 2005: 3, 6) and a new challenge in the transition to a knowledge-based economy (Tijssen 2002: 509). Professor Erik S. Reinert (1999) warns, "*Nations which stop innovating do not keep their standard of living; they lose their standard of living even though they keep the same efficiency.*"

A large number of economists, as well as technological change, policy, system and innovation theorists (Schumpeter 1939; Kline, Rosenberg 1986; Perez 1986; Lundvall 1988) have defined and treated innovation differently according to content, size, nature, and types; but the modern understanding of innovation includes at least three generic attributes: the aspects of change/novelty, economics/commerce and uncertainty (Arrow 1962; Rosenberg 1995: 171; Caenegem 2007). Different authors (Hughes 1987: 64; Porter 1990: 1998; Patel, Pavitt 1994; Bruland 1998: 167; Etzkowitz, Leydesdorff 2000: 5) have introduced a different treatment of the enablers, preconditions and success factors of innovation. The innovation process is dynamic (Lundvall 2000: 2; Newman 2005), non-linear (Kline, Rosenberg 1986; Newman 2005), social (Alic *et al*. 1992, McElroy 2003), self-organizing (Fuchs 2004: 18) and interactive (Giget 1997; Edward 2000). Innovation systems are complex (Kline, Rosenberg 1986; Hughes 1987: 64), social (Cooke 1998: 11; Lundvall 2000: 2, 24), dynamic (Lundvall 2000: 2; Carlsson *et al*. 2002: 244) and self-organizing (Rycroft 2003b: 2). Innovation policy (hereinafter IP) has a very complex organisation, a diverse and many-sided structure, and outcomes (positive and nega-

tive, expected and non-expected, direct and indirect) affecting all of society (Rycroft, Kash and Adams 1995: 5). The creation of an IP is also an unknown and unknowable exercise (Rycroft 2003a: 4).

A common feature characterising Estonia's Economic Policy (hereinafter EP) and IP is the great number and complex structure of various strategic and policy documents, action plans, programmes and projects. The most general document is the Estonian National Strategy on Sustainable Development up to the year 2030 "Säästev Eesti 21" (Hereinafter SE21, Sustainable Estonia 21), which represents, with its fundamental values and nature- and human-centred approach, a philosophical platform for the preparation, interpretation and assessment of all other EP and IP related documents. The most relevant documents among those outlining economic growth, technological development, research and development, and innovation activities are the "Estonian Action Plan for Growth and Jobs 2005–2007" (EAPGJ), which replaces the document Eesti Edu 2014 (EE2014, Estonia's Success 2014), the R&D strategy for 2007–2013 "Teadmistepõhine Eesti II" (TEII, Knowledge-based Estonia II), the domain strategies, the state budget strategy for 2008–2011, "Estonia's National Development Plan 2006", Estonia's National Changeover Plan, as well as many other domestic, European Union and international strategies, development plans and programmes. In addition to these, EP and IP are also influenced by strategic documents of other structural policies and domains.

The assessment and evaluation of policies are crucial elements of success in every stage of the policy cycle. (Papaconstantinou, Polt 1997: 9; Shelton 1997: 15) It is highly unlikely that IP implementation can be successful without a proper ex ante and ex post assessment and evaluation (relevant and timely feedback) with high quality, relevant and timely gauges. (Milbergs 2004: 19) The author strongly supports the arguments of different authors (Berg *et al*. 2004; Newman 2005) who argue that development and policy processes, including the innovation process, require an appropriate and sufficient assessment and evaluation system (system of feedback). Without assessment and evaluation one cannot be sure whether and at which speed processes move towards or away from expected goals. (Jordan, Streit 2001: 7–15) However, due to the inherent merit of uncertainty and self-organization of economic and innovation process, even the most perfectly designed assessment and evaluation systems do not give sufficient assurance that the desired goals will be achieved. Designing a coherent, integral assessment and evaluation system for IP integrated with an assessment and evaluation system for EP is far from an easy, cheap, quick and risk-free process, because assessment and evaluation depend on the assessment culture that is an inherent part of the national and global culture as well as a number of sub-cultures such as ethnic culture, organizational culture, etc. (Cameron, Quinn 1999: 10; Cameron, Sine 1999: 21) In addition, the means-ends connections are not clear (Cameron 1980: 70–71), more than one strategy produces the same outcome (Cameron 1980: 71), subunits are not tightly connected (Cameron 1980: 71), and goals are multiple, changing and ambiguous (Cameron 1980: 78). According to Cameron (1980: 70), a class of organizations exists – organized

anarchy- for which none of the four recognized effectiveness evaluation approaches[1] are appropriate. Many government organizations and other participants in the EP and IP implementation processes resemble a kind of organized anarchy.

The aim of this article is to provide an overview of the generic problems and practical aspects of innovation policy assessment and evaluation issues in a small country based on the example of Estonia and to suggest some ideas concerning the principles and design of the framework for an integrated assessment and evaluation model of IP for a small country.

The author performed this particular research based on the qualitative approach of methodology. The more general theoretical basis of this paper rests mainly on the evolutionary economics, system, process, innovation, clusters, networks, and the self-organizing theories, plus others as well. The author performed a wide-scale structural search of the relevant theoretical, scientific, and research publications. On the basis of the results of the qualitative analysis and a synthesis of collected information, the author prepared a sample of gauges concerning the characteristics of the outcome and impact of an IP. The author conducted a search and a qualitative analysis of the Estonian strategy and policy documents, deciding to focus on the most relevant from the point of view of the research field. The selected strategy and policy documents concerning innovation and IP were qualitatively analyzed for semantics and content. The author researched the IP implementation assessment and evaluation tools and gauges as well and analysed them critically. On the basis of the results of the data collected, analyzed and interpreted, the author designed general principles for devising an early draft of a theoretical evaluation and assessment system model and presented some ideas for improving the current system of IP policy assessment and evaluation in Estonia.

Development of Innovation Policy Implementation in Estonia and Problems Concerning Assessment and Evaluation

IP implementation arrangements are at a very early stage in Estonia,[2] thus actually there is the possibility of assessing and evaluating mostly the inputs, activities and some outputs of innovation-related work, the national innovation system (NIS) itself and NIS components, but not the interim and final outcomes and impact of IP in the sense of support for the economic growth and development of society. However, a theoretical possibility of assessing and evaluating the outcomes and impact of IP in Estonia exists in the future too, because there are a number of criteria and indicators for that purpose in the relevant IP documents. To some extent it is already possible

[1] The goal, the system resource process models, and the strategic constituencies approach (Cameron 1980: 68).

[2] "Teadmistepõhine Eesti I" (TEI, Knowledge-based Estonia I) was approved by the Estonian Parliament (Riigikogu) on 06.12.2001¸ "Eesti Edu 2014" (Estonia's Success 2014) was worked out in 2003, SE21 was approved by the Riigikogu in September 2005, "Estonian Action Plan for Growth and Jobs 2005–2007" was approved by the Government of Estonia on 13.10. 2005 and TEII was approved by the Government of Estonia on 23.11.2006.

to evaluate the trends of Estonia's innovation development process compared to the respective trends in other European Union Member States and the world by using some criteria and indicators. In order to assess and evaluate the success of innovation policy as a sub-process of EP, it is possible to use several tools devised by different European Union and global organizations[3]: it is possible to indirectly evaluate Estonia's success in the IP implementation process and compare the results to those recorded in the World Competitiveness Scoreboard[4], the Innobarometer, the Global Summary Innovation Index (GSII), etc. For example, based on the World Competitiveness Scorebook of the IMD, Estonia occupied the 22nd position (out of 55 states) in 2007 (19th in 2006, 26th in 2005, 28th in 2004). (IMD 2008, 2007, 2006)

According to the GSII scores, Estonia's GSII is 0.34, whereas the GSII of Finland, the best performer[5], is 0.76 and the average GSII of the EU25 is 0.50. Thus, Estonia did not make it into the group of the "next-best performers"[6] in 2006, but was among the following countries (Hollanders, Arundel 2006). According to Hollanders and Arundel (2006), "*Estonia is alike in absolute and relative performance and is far behind the innovation leaders, their different relative performance structure might be one explanation for this performance lag.*" According to Gallup (2006: 4),

[3] By using international assistance, it is possible to assess and evaluate the progress, outcomes and impact of innovation policy success by using various sets of criteria to some extent. The tools devised by various European Union institutions provide certain opportunities to do just that. For example, there exists the Trend Chart Innovation Policy in Europe (Trend Chart workshops, European Innovation Scoreboard, The Annual Synthesis Report, Innobarometer, etc). Estonia has been represented and described by 21 innovation policy gauges, the gauges are described by 24 data fields, and countries have been described using 9 indicators. The European Commission publishes an "Annual Innovation Policy Trends and Appraisal Report", etc. The structural units of the European Union maintain overviews by use of thorough packages of innovation policy gauges.

[4] IMD uses 20 competitiveness factors in 4 groups as follows: Economic Performance (Domestic Economy, International Trade, International Investment, Employment, Prices), Government Efficiency (Public Finance, Fiscal Policy, Institutional Framework, Business Legislation, Societal Framework), Business Efficiency (Productivity, Labour Market, Finance, Management Practices, Attitudes and Values), and Infrastructure (Basic Infrastructure, Technological Infrastructure, Scientific Infrastructure, Health and Environment, Education). (IMD 2007)

[5] Esko Aho, Chairman of the SITRA, argues that "the success of Finnish society is based on education. Good basic education, well-organised professional training and the net of universities reaching the most gifted persons are the warrants of the implementation of the skills of Finns. Finland did have opportunities to offer strong professional knowledges in developing technologies and also basic skills of nation to implement those". (Aho 2005: 32)

[6] Based on the ranking of their GSII scores, the countries can be divided into groups. Finland, Sweden, Switzerland, Japan, the USA, Singapore and Israel are the leaders of global innovation. The first three of these countries are also the most innovative countries in the 2005 EIS8. The next-best group of performers includes Germany, Denmark, the Netherlands, Canada, the UK, the Republic of Korea, France, Iceland, Norway, Belgium, Australia, Austria, Ireland, Luxembourg and New Zealand. The next group of following countries includes Hong Kong, the Russian Federation, Slovenia, Italy, Spain, the Czech Republic, Croatia, Estonia, Hungary and Malta. The group of lagging countries includes Lithuania, Greece, China, Slovakia, South Africa, Portugal, Bulgaria, Turkey, Brazil, Latvia, Mexico, Poland, Argentina, India, Cyprus and Romania.

the percentage of companies acting in a cluster-like environment in Estonia is only 9%, whereas in the United Kingdom cluster-like environments dominate the landscape (at 84%). Our low ratio of companies acting in a cluster-like environment is a warning signal as regards the country's economic sustainability, because clusters are considered to be prominent vehicles of increased innovation and competitiveness. (Porter 1998: 77; Mytelka, Farinelli 2000: 27; Gallup 2006: 3; Hargreaves, Shaw 2006: 153)

The State Audit Office of Estonia evaluated the activities of Enterprise Estonia in product development and the activities of the Ministry of Agriculture in commissioning applied research. As a result, both Enterprise Estonia (Kivine 2004) and the Ministry of Agriculture (Kõrge 2003) received rather harsh judgements. The State Audit Office has justified their grounds for criticising the Government of the Republic regarding the sphere covered by innovation policy.

The "Annual Innovation Policy Trends and Appraisal Report: Estonia 2004–2005"[7] records the results of IP implementation in Estonia. The report highlights 8 strengths, 13 weaknesses, 5 opportunities and 7 threats as regards IP in Estonia (Kurik, Terk 2005: 4). If one compares the positive side (strengths and opportunities) of the results with the negative one (weaknesses and threats), it can be seen that the number of threats and weaknesses is more than that of opportunities and strengths. One can also see that the strengths and opportunities are predominantly central to the related strategies, infrastructure and programmes; i.e., to inputs and outputs, whereas the weaknesses and threats are more content-related. Thus, Estonian policymakers have to focus more on the content-related weaknesses and threats in order to avoid regression in the IP implementation process.

The authors of the most significant document presenting the input of IP in Estonia – the SE21 – have concluded that "*there still exists the threat of becoming a cheap source of outsourcing, as Estonia has no purposeful innovation policy, and the market only cannot ensure it.*" (SE21 2005: 37) It is difficult, though not impossible, to argue with this statement in 2007, although the situation in 2005 was somewhat better than in 2004. (IMD 2006) It is important to remember that in the big success story of Finland's economic development the major sources of its success were innovation, the creation of knowledge and creativity. (Dahlman, Routti, Ylä-Anttila 2005: 1) In addition, the Finnish state strongly supported innovation activities, thus contributing to their success,[8] (Dahlman, Routti, Ylä-Anttila 2005: 6; Moen, Lilja 2005: 359–360) and the participation of state-owned industrial enterprises was significant (Dahlman, Routti, Ylä-Anttila 2005: 7; Moen, Lilja 2005: 363). Kattel and Kalvet (2005: 12) claim that: "*Estonia's economy today is not sustainable in the directest meaning of the word*", and the authors of the SE21 (2005, 37) criticise the current model of the so-called little-interfering state from the point of view of

[7] The report for 2006 was unavailable at the time this article was written.
[8] Here it is appropriate to point out that according to Arthur (1989), subsidizing and protecting new industries in order to capture foreign markets policies is debatable.

sustainability. The authors of the SE21 (2005: 46) consider the basis of success to be the adoption of a knowledge-based society model; i.e., social innovation. The preconditions for a knowledge-based society are an open and free society (Friedman 1962: 133), free people (Näpinen 1994: 169), an environment placing a high value on knowledge (Conner, Prahalad 1996: 477; Teece 1981, 1998), experience and skills (Mytelka, Farinelli 2000: 22), as well as education and a proper educational system (Carlsson *et al*. 2002: 242; Dahlman, Routti, Ylä-Anttila 2005: 11) favouring the upbringing of persons who can fit into a knowledge-based society with a liberal outlook on the world. Innovation is a significant source of a knowledge economy and a knowledge economy is recognized to be a major source of a knowledge society. (Hargreaves, Shaw 2006: 46) Knowledge is strongly recognized as the main driver, source and stimulus of innovation. (Gilbert, Pyka, Ahrweiler 2001; Hargreaves, Shaw 2006: 45–46) There is very little room to acknowledge that the abovementioned crucial preconditions have been met in Estonia.

According to the Global Competitiveness Index's (GSI), rankings, Estonia is still climbing up in the competitiveness rankings. (Lopez-Claros *et al*. 2006: xvii) When comparing the 2005 and 2006 results, it can be stated that Estonia has not made any significant progress. Estonia's CSI ranking for 2006 is 25 on 26 in 2005. Although Estonia is experiencing a positive trend at the moment, the country is only in transition from an efficiency-driven stage to an innovation-driven stage. (Lopez-Claros *et al*. 2006: 13) According to Lopez-Claros and colleagues (2006: 11), efficiency-driven competitiveness becomes increasingly driven by better education and training, efficient markets, and the ability to harness the benefits of existing technologies. As for the innovation-driven stage, one is only able to sustain higher wages and the associated higher standard of living if one's businesses are able to compete with new and unique products. At this stage, companies must compete through innovation, and/or producing new and different goods using the most sophisticated production processes. Estonia occupies the 32nd place ranked by innovation factors (*Ibid*.: 16), the 35th place ranked by business sophistication[9] (*Ibid*.: 22) and the 30th place ranked by innovation.[10] (*Ibid*.: 22) Even though Estonia ranks 16th from the point of view of technological readiness[11] (Porter 2006: 20), the country dropped to the 35th place by the Business Competitiveness Index (BCI) in 2006 – back down to the level of 2003. (Porter 2006: 60) That fact should be considered as a warning sign in the context of economic development and

[9] According to Lopez-Claros and colleagues (2006: 11), business sophistication is particularly important for productivity at the upper end of the global value chain, and is gauged by the quantity and quality of local suppliers, well-developed production processes, and the extent to which companies in a country are turning out the most sophisticated products.

[10] According to Lopez-Claros and colleagues (2006: 11), innovation is particularly important for countries that have reached the high-tech frontier, as it is the only self-sustaining driver of growth.

[11] "The technological readiness pillar thus complements the innovation pillar, described below, as it aims to gauge the existing technological infrastructure and the ability of a country to absorb technology from home or abroad, while the innovation pillar assesses the economy's ability to produce brand new technologies." (Porter 2006: 20)

sustainable growth, because the strength of a business' competitiveness is of utmost importance for sustainable growth in the global market.

Innovation Policy Assessment and Evaluation in Estonia

In the context of managing any policy, including EP and IP, policymakers have to perform a sufficient analysis of the problem to be solved including the available and required inputs, the preconditions, enablers, obstacles, environment, etc., before implementing the policy in question (clarification of the concept of the policy implementation process). Only after this has been done can a later assessment and evaluation be carried out. Based on the results of an analysis and synthesis of the before-mentioned IP documents, it can be concluded that the ex ante analysis performed in the IP planning stage has not been of sufficiently high quality. When talking about internal connections between the different components of innovation policy, it is possible to state that no adequate ex ante analysis of the possible impact, counter-impact and by-impact, as well as the causal relations between the planned inputs and activities *vis-à-vis* the impact, has been performed in Estonia. However, there are some indications that an ex ante analysis has been done in some respects in the case of IP documents at every level. Nevertheless, in Estonia the IP documents (excl SE21), their annexes and application documents manifest a sufficient ex ante analysis of neither the interaction (co- and counter-effects) between the IP and other policies nor the recommended and forecasted co-effects and by-effects. It is incomprehensible how the possible progress, outcomes and impact are to be assessed, evaluated and gauged in the future, as the strategy documents, their annexes and explanatory notes do not include a precise description of the situation from the starting point (point 0). The State Audit Office formulated the main problems of public administration in 2000[12] (Parts 2000). It cannot be denied that some progress has really taken place since then, but these questions are still acute and relevant from the point of view of analysing, assessing and evaluating IP. The situation in Estonia is about the same as in West Virginia, USA, according to Hedge.[13] Although there is evidence that some appropriate gauges helping to assess and evaluate the outcomes and impact of IP exist, a more important problem is that Estonia lacks an integral model involving a comprehensive system of gauges enabling the assessment and evaluation of both the success of the IP process and its interim results regarding its

[12] The State Audit Office formulated the main problems of public administration already in 2000, asking from the government: "How is separating policy-making and implementation of policy going to be ensured? How is differentiation between the main activities and supporting activities of public administrators going to be ensured? How is customer-centeredness going to materialise upon rendering public services and performing public functions? What is administrative responsibility and how do respective processes initiated or materialised posterior to entry into force of a draft? Is the ministry going to be turned into a policy-making body and refrain from the task of policy implementation or rendering of services?"

[13] D. M. Hedge (2007) claims: "While considerable attention has been paid to training analysts-to-be, much less attention has been paid to those who consume policy analysis – policymakers and administrators. That has been a serious and costly mistake. In all too many cases, policy analysis is either not used or riot used properly because the practitioners for whom policy analysis was ostensibly provided lacked an understanding of the nature of policy analysis."

impact on the interaction of all research, development and innovation policies (and EP as well). Estonia does not have a system of aggregated gauges that would enable one to observe IP in an integral and coherent context with all of its different levels and complexities. The fact that the outputs, outcomes and impacts of every single policy or strategy are going to be assessed and evaluated using a package of criteria and indicators, which may even show something in the case of a single strategy or policy, does not yet mean that the general picture of the process is monitored adequately and the success of IP has been ensured. Furthermore, one can hardly find traceable links between IP and EP. According to Katz (2000: 24), evaluation in the social sciences needs a set of indicators that adjust for the effect of size on recognition, impact and collaborative activities when comparing the performance of groups, institutions and nations. Nevertheless, the system of gauges for the assessment and evaluation of the SE21 is thorough and well weighed. (SE21 22, 25, 70) Thus, Estonia has an excellent home-made benchmark for constituting a system of gauges, but a lot of work needs to be done to work out a relevant set of gauges for IP.

When using the different tools of the EU or global organizations to monitor the development or regression of implementing an IP, one has to realize that comparisons like that often involve some dangers as countries are not in a comparable situation from the point of view of an IP impact assessment and they do not have similar goals and objectives. These instruments are useful for observing any movement in the larger scheme of things, but they do not fit in properly with the particularities of each country in the sense of characteristics inherent to the peculiar goals and objectives of each particular country. Furthermore, world-wide and Europe-wide instruments are focused on inputs, the environment (enablers, drivers, inhibitors, actors, etc.) and outputs in an unbalanced way, but the outcomes and impact (Milbergs, Vonortas 2004: 21, 31–34) are only slightly within their focus and scope. For example, there are 12 Global Innovation Scoreboard (GIS) indicators divided into 5 groups[14] (Hollanders, Arundel 2006: 5), but only two indicators in the 'Applications' group express the development or regression of innovation policy implementation from the viewpoint of impact. The European Innovation Scoreboard uses data for 25 indicators divided over 5 broad innovation dimensions (Hollanders, Arundel 2006: 30), but only three[15] of all the indicators express the development or regression of innovation policy implementation from the aspect of impact. According to Milbergs and Vonortas (2004: 21), "*particular attention needs to be given to defining consistent and internationally comparable metrics for innovation demand, knowledge flows, intangible assets, public policy factors, regional innovation net-*

[14] Innovation drivers (New S&E graduates, a labour force with completed tertiary education, researchers per million population), knowledge creation (Public R&D expenditures, business R&D expenditures, scientific articles per million population), diffusion (ICT expenditures WITSA/IDC), applications (exports of high-tech products, share of medium-high/high-tech activities in manufacturing value added), intellectual property (EPO patents per million population, USPTO patents per million population, Triad patents per million population).

[15] SMEs innovating in-house (% of SMEs) of the group 'Innovation & entrepreneurship,' 'Exports of high technology products as a share of total exports' and 'Sales of new-to-market products' (% of turnover) of the group 'Applications.'

works, infrastructures and management practices". There is no doubt that this is important in the very early process phase and is the only way to focus on the inputs, enablers, drivers, actors, activities and outputs, but in more mature phases it is essential to pay attention to the outcomes and impact as well. This statement does not mean that one has the right to switch focus from inputs, enablers, drivers, actors and outputs to only outcomes and impact in a later process phase. Instead, there should be more than one centre of focus and these should be reasonably balanced, taking into account the specific context and life cycle of the process. (USCOTA 1995: 31) Concentrating on results as well as inputs is crucial, because according to Porter (1998) "*modern competition depends on productivity, not on access to inputs*".

The set of IMD criteria (2007) is more informative in the meaning of the outcome of IP implementation. However, when one tries to use a number of these criteria to assess the effectiveness of IP implementation, one will face a significant problem as well. There is no clear, reliable and easy method or technique of finding out exactly how much the success of IP contributes to the success of different aspects in each country or whether there are any links between economic growth or the wealth of society and IP policy implementation. Finding proper indirect gauges is not an easy task either because according to Tijssen (2002: 510), "*what is easy to gauge is hard to correlate and what is easy to correlate is hard to gauge*".

The authors of the SE21 have formulated four prerequisites for innovative success.[16] (SE21 2005: 59) The criteria and indicators to be incorporated in the set of gauges concerning the development or regression of IP have to reflect movement in the context of the abovementioned prerequisites as well.

Some Ideas Concerning the Design of an Integrated IP Assessment and Evaluation Model for Estonia

The author offers a preliminary broad theoretical vision of the principles and framework for designing a tailor-made coherent integral system of IP assessment and evaluation for Estonia. As stated in previous chapters, the author is of the opinion that a coherent integral system of assessment and evaluation of the IP implementation process should be taken under treatment differently in the three main phases of the process: 1) the preparatory and start phase; 2) the smooth running phase and 3) the mature phase. For these three phases of the innovation process it is essential to have different sets of gauges as well, because each phase of the process has a need

[16] "First – the introduction of the principles of knowledge-based management into state governance. The aim is to move from interest-based (sub-) decisions towards inclusive and knowledge-based strategic management in making decisions that determine the development of the society. Second – changes in the creation and use of intellectual resources. As intellectual resources constitute the key resource of a knowledge-based society, a significant increase in and making the best use of this resource is an inevitable precondition for the entire model to take effect. Third – bringing human-nature relations into conformity with the principles of a knowledge-based society. Fourth – the establishment of sufficient support for movement towards a knowledge-based society, since a substantive shift cannot be achieved without it."

for very different information in order to make the right decisions. The gauges listed in sets further on are not meant to be a minimum or complete number of gauges, but are used only as illustrative examples.

Gauges for the preparatory and start phase

In the preparatory and start phase, gauges have to be put together in a manner that, firstly, consists of a set of a sufficient number of the most relevant gauges (criteria and indicators) reflecting the different types of inputs (the financing/funding of innovation (Kattel, Kalvet 2005: 24); the involvement of foreign capital in research and development (Chew, Chew 2003)) contributed to by the public, private and third sectors. This set of gauges is important for the ex ante assessment of the existence and availability of the resources needed for a viable start of the process. In the later phases of the process, it also enables reflection on the development or regression of IP implementation against more major and general goals and objectives driven by or impacted on by IP in line with the most relevant and significant strategy and policy documents of the particular state in question. This set of gauges is the most important because they show the actual effectiveness of the process concerning its impact, more narrowly in the economy and more widely in society. Thirdly, this set of gauges enables one to reflect on the merits and dynamics of innovation and IP in the later phases of the process in a particular country, region or sector of the economy (see Table 1).

Table 1. Enables in later phases of process reflect the merit and dynamics of innovation and IP

Perez 1986: 2	the merit of innovation
Lee, Wang 2003	innovation model
Rabson, Marco 1999	type of innovation
Meyer, Loh 2004	innovation application field
Handyside, Light 1998	structural aspects of IP
Alders, Leede, Looise 2002	socio dynamic aspects of IP
Lee, Kwun 2003	character of innovation system
Frederick 2004	character of innovation process
Tsai, Wang 2005, 254	gauges
Meng 2005: 104	elements of innovation system
Gallup 2006: 6	indicators

This group of gauges is rather a system of meta-information concerning innovation organisation which mainly serves the interests of policy analysts, researchers and scientists.

The author's opinion is that a set of a sufficient number of the most relevant gauges reflecting the different types of inputs contributed to by the public, private and third sectors should consist of at least the amount of total and relative funding allocated to innovation policy implementation. This should include the amount of funding (cross domestic and foreign investments, etc.) for innovation and innovation-related activities, products, and processes; the total and relative amount of innovation bearers

(students, academicians, researchers, civil servants, employers, employees, and RD&I institutions); the total and relative number of patents and trademarks available; the inventions available;[17] the technologies available; the capability for innovation, etc. There is no single "right" and permanent way of composing this group of gauges. One has the possibility of finding suitable gauges from the different tools of the European Union and relevant global organizations, but those have to fit the domestic peculiarities of the country in question as well.

Gauges for the smooth running phase

A set of a sufficient number of the most relevant gauges (criteria and indicators) has to be put together for the smooth running phase reflecting the occurrence and dynamics of thrust, determiners, catalysts, drivers, inhibitors in the particular country, region and sector of the economy (see Table 2).

Table 2. Gauges (criteria and indicators) reflecting the occurrence and dynamics of thrust, determiners, catalysts, drivers, inhibitors in the particular country, region and sector of the economy

Luggen, Birkenmeier, Brodbeck 2005: 80	innovation potential
Chew, Chew 2003	innovation capability
Luggen, Birkenmeyer, Brodbeck 2005: 71	innovation competence
Lane, Klavans 2005: 186	thrusts
Wonglimpiyarat 2005	catalysts
Bruland 1998: 167	determiners
Lopez-Claros *et al*. 2006 : 4	drivers
Gallup 2006: 3	the role and activity of government
Meng 2005: 104	the role of private sector
Meng 2005: 104	the activity of private sector
Frederick 2004	the needs of businesses
Bullock, Mountford, Stanley 2001: 9	innovation process management
Bruland 1998: 176–177	the methods of obtaining new knowledge
Preiss, Spooner 2003	inhibitors
Gray, Allan 2002	rigidities
Lee, Wang 2003	tools
Preiss, Spooner 2003	intra-organisational factors
Preiss, Spooner 2003	external factors

Secondly, changes in various environments (economic, political, legal and cultural), the type of economy (Lee, Wang 2003) and the operators/agents of the economy (Preiss, Spooner 2003) where innovations have to occur and IP has to be implemented in the transition to an innovation-driven economy and knowledge-based society. Thirdly, the success or failure of performance in the meaning of outputs is covered. These three sets of gauges are relevant in order to show progress or

[17] The author is confident that the number of available patents, trademarks and inventions has to be dealt with primarily as inputs to IP, not only as outputs or the outcome of an innovation process.

regression and the vitality of the process as well as characterizing the peculiarities of innovation organization in a particular country. These sets are useful to policy makers, analysts, researchers and scholars.

The author is of the opinion that a set of a sufficient number of the most relevant gauges reflecting the environment (state and changes in economic, political, legal and cultural environments) relevant to the transition to an innovation-driven economy and knowledge-based society should consist of at least the type and condition of the national economy and society; the state of culture, including risk assuming culture, flexibility and adaptability); the innovation potential of businesses, households and the public sector; the availability of skills; the quality of the labour force; different thrusts, catalysts, determiners, restrictions and inhibitors of innovation; the infrastructure supporting innovation; the availability of risk assuming capital and venture capital; the initiative and activity of the government; the initiative and activity of businesses; the initiative and activity of RD&I institutions; the number of clusters; the model and type of the innovation system; investment incentives in innovation fields, etc. The author would like to emphasise that those gauges should not be treated and recognized as primarily reflecting the outcome or impact of IP implementation, but mostly as enablers, drivers, inhibitors, rigidities or other types of factors. The number of the latter may be treated as gauges expressing the interim outcome and impact of the IP implementation process, but not as gauges expressing the final goals.

The following gauges may be considered as gauges (criteria and indicators) reflecting the success or failure of performance regarding output: the amount and ratio of the total and direct investments in RD&I, T&IT, technological development by the state, local government, businesses and RD&I institutions/agents; the number of patents, trade marks, and inventions; improvement and changes of the innovation model, system and processes; achievement in higher education; the transfer of knowledge; the programmes, projects and other gauges driving or supporting innovation; the number of innovations in an organization, process, product or technology; the number of economic agents implementing innovation in the field of an organization, process or system; the development and application of technology, etc. At the same time some of those gauges act as gauges of input as well. There are plenty of possibilities for choosing the appropriate gauges to measure the success or failure of the IP implementation process addressing the results of performance in the sense of outputs. One has the possibility of finding a lot of those in the GIS, the Global Competitiveness Index (GCI), the Business Competitiveness Index (BCI) or in many other sources. It is important not to forget that the outputs or performances completed are not proper gauges for assessing outcomes or impacts in their most inherent sense. However, sometimes their number may reflect a directional trend regarding interim impact.

Gauges for the mature phase

A set of gauges with a sufficient number of gauges (criteria and indicators) has to be designed for the mature phase of innovation process reflecting the outcomes and

impact on society. This set has to enable one to assess the development or regression of IP implementation against more major and general strategic goals and objectives driven by or impacted on by IP in line with the most relevant and significant strategy and policy documents of the particular state in question. This set of gauges is the most important because they show the actual effectiveness of the process regarding impact, more narrowly in the economic sense and more widely in the social sense. A set of a sufficient number of the most relevant gauges reflecting the development or regression of IP implementation assessed against the general goals and objectives driven by or impacted on by IP in line with the most relevant and significant strategy and policy documents of the particular state in question derive from very particular norms and strategy and policy documents. For example, in the case of Estonia, these inputs arise from the Constitution of Estonia, the SE21, the EAPGJ, the TEII, etc. Gauges reflecting the inherent nature of the outcome and impact are those which address any change in the state of the economy and wealth of society in a broader meaning. The author is of the opinion that the set of sufficient gauges reflecting the outcome and impact of an IP includes the following: (see Table 3).

Table 3. Gauges reflecting the outcome and impact of an IP

amount of export of innovative products
amount of export of innovative services
amount of export of innovative technologies
the share of export of innovative products, services, technologies from total export
employment and unemployment ratios
the overall productivity of business
productivity in industry
productivity in agriculture
productivity in services
the total final energy consumption
the total final energy consumption per capita
Internet users
the number of e-services in the government
the number of e-services in local self-government units
the number e-services in businesses
the number of e-services in third sector
the ratio of e-services in the government
the ratio of e-services in local self-government units
the share of high-tech exports from manufactured exports
life expectancy at birth
the human development index
the amount and ratio of pollution
the amount and ratio of consumption of fresh water
the “ecological footprint”
etc.

The author recognizes that trying to design and implement an integral system for the assessment and evaluation of IP impact, including on economic growth and the rise in the wealth of society, is a significant challenge and may end with a low probability of success due to very different objective and subjective reasons. However, each

group of gauges and any single particular gauge in a group have to be very thoroughly, considerately, systematically and creatively composed. All gauges have to be selected in a manner which enables one to work all of them to show a general integral picture and shows the particular development of each particular policy or sub-policy as well. There is no single "right" and permanent way of composing this group of gauges. The possibilities of succeeding are much greater if all the abovementioned groups of gauges, subgroups of gauges and particular gauges of each group match concurrently with the particular national interests, needs and characteristics as well as with gauges recognized by and used in the relevant European and global organizations concerning innovation and IP implementation. This is an additional factor contributing to the process of designing a more complex, sophisticated and resource consuming IP implementation assessment and evaluation system. The second crucial and tricky factor is that an assessment and evaluation system relevant and fruitful for the starting phase of the innovation policy implementation process is dissimilar to the one applicable and effective for the smooth running or mature phase. This means that such a system of assessment and evaluation is like a moving target, not only in the meaning of an IP life cycle, but also in the sense of the life cycle of a particular society. According to Mahmood and Rufin (2005: 339), the role of the government depends on the technological development of society. The third significant matter is that innovation policy related to different strategies, programmes, projects and actions are in very different phases of implementation simultaneously. Consequently, the assessment and evaluation system should be designed taking into account that very characteristic as well.

Due to the limited space of this article, the author is not going to provide his own deep and more detailed views of designing a coherent integral system of IP assessment and evaluation for Estonia here, but will elaborate on it in a future article.

Conclusions and Proposals

According to Professor Carlotta Perez (2001: 4), the focus nowadays is on the "*need to strengthen human capital and increase capacity for innovation*". Perez (2001: 25) argues that "*staying in the race demands growing support from the environment and constant innovation, intensive investment and probably very skilful manoeuvring in terms of markets and alliances*". According to Burton (1999, 16), the situation can be improved by "*a "Post-Schumpeterian" framework is proposed, based on four key elements: Knowledge Creation; Knowledge Protection; Collaborative Business Arrangements for Knowledge Creation; and Diffused Entrepreneurship/Entrepreneurial Management*". There is plenty of room for improvement as regards implementing these elements into day-to-day life in Estonia.

The research papers of various authors (Kattel, Kalvet, Kurik, Terk) refer to the fact that in Estonia, the main emphasis lies on technological innovation. However, society demands a broader approach to innovation in Estonia; otherwise, the benefits from innovation would be very modest and would not meet the expected inherent state of an innovation-driven economy, a knowledge economy and a knowledge-based society in the Republic of Estonia by the expected deadline.

Estonia has to acknowledge the statement by Lopez-Claros, Altinger, Blanke, Drzeniek and Mia: "*... the most competitive economies in the world will typically be those where concerted efforts have been made to frame policies in a comprehensive way, that is, those which recognize the importance of a broad array of factors, their interconnection, and the need to address the underlying weaknesses they reveal in a proactive way*". (Lopez-Claros *et al*. 2006: 5)

There has been no all-inclusive, integral and systemic evaluation or monitoring with the aim of assessing the effect and interim impact of IP, although IP coordinators commission single project-based audits and assessments. Kurik and Terk (2005: 14) claim that policy gauges are evaluated systematically at more significant milestones. There is not enough evidence to concur completely with this opinion, yet.

Estonia, particularly the government of Estonia, has to make a new thrust in the fields of innovation and IP implementation in order to achieve considerable progress in the development of its economy. The scope of those thrusts must also include the design, implementation and maintenance of a coherent integral system of assessment and evaluation of IP. In order to escape the current waddling around and avoid reaching a total standstill, Estonian innovation policy makers should:

- move from the bureaucratic, activity- and output-based assessment and evaluation approach to the impact-centred assessment and evaluation approach. However, this does not mean that input-oriented, output-oriented and activity-based assessment and evaluation approaches are useless;
- to select a relevant set of criteria and indicators characterising innovation policy as regards its impact in the best way possible and compile them into an integral and comprehensive system of gauges, which will be used to regularly assess and evaluate all innovation policy effects, including co-effects and counter-effects;
- to create prerequisites for strategic administration, including generation of an assessment and evaluation system for strategies. A systemic collection, assessment and evaluation of necessary information, along with the existence of a competent assessment and evaluation centre with the *Riigikogu* or the State Chancellery would be of great help. A competent assessment and evaluation centre should also coordinate the commissioning of external audits, assessments, evaluations and peer reviews;
- to annually compile and publish innovation policy progress reports concerning the most important outcomes and impacts as well.

In a small country where IP resources as inputs are very limited, it is of the utmost importance to have a country-wide coherent IP assessment and evaluation system which will provide a proper and forehanded possibility of correcting any unexpected events or trends using inputs and outputs, otherwise the advantages of the country being small – cultural and institutional flexibility and an openness to external influences (Oinas 2005: 1237) – will be lost. However, one has to remember that preserving rationality in economics – perfect, logical, deductive rationality – is extremely useful in generating solutions to theoretical problems, but in fact it demands much more human behaviour than it can usually deliver. (Arthur 1994: 406)

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REVENUE BASE OF ESTONIAN LOCAL GOVERNMENTS, REGIONAL DISPARITIES AND ECONOMIC PROBLEMS IN THE MUNICIPALITIES OF THE CAPITAL CITY AREA

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Introduction

The analysis of regional socio-economic development within our towns and cities has, until now, been generally treated in isolation, in other words, distinct units. In reality, an important trend in Estonian institutions, and primarily in the case of larger cities, is the period relating to the market economy in the aftermath of independence, (at least from the mid-1990's when the real estate market was formed), which has been connected to the origin of urban sprawl and urban areas. For that reason, numerous social, economic and environmental problems are evaluated independent of the status of the settlement and often independent of administrative boundaries and regions.

From statistics institutions of some countries, one can acquire data of cities only by sections of urban areas (*Principal Urban Area*). For example, according to the "City population" internet database, the population of Copenhagen (1,145.8 hundred thousand people) is solely taken from the urbanized area (*Principal Urban Area*). Similarly, it is known that within historical administrative boundaries, Copenhagen's population is half of that. In the case of Helsinki, the city's population is given as 564.5 thousand, and yet, the capital city area (*Principal Metropolitan Area*) population (1,027.3 thousand) is added. The aforementioned also applies to Stockholm where, within the city's administrative region, 782.9 thousand people live, whereas the capital city region is inhabited by 1,889.9 thousand people. It is significant to note that these complex urban areas play an increasingly important role in European Union (hereafter "the EU") regional politics.

It is commonly believed that the larger the city, the larger its area of influence. The concentration of the population is also a very important factor, including the percentage of the population of the city compared to that of the state, and its relation to the populations of other cities. In Estonia, 30% of its citizens live in the capital city. Within mainland Europe, this index is slightly larger only in Latvia, where one third of the country's citizens live in Riga. This circumstance confirms the need to study the socio-economic importance of the capital city area in Estonia.

This article analyzes the various joint economic problems of the capital city of Estonia, primarily the income base of the capital city and its surrounding towns and cities and the collaboration of service delivery of this region's municipalities. Furthermore, at the Union of Capitals of the European Union's (UCEU) 47th interna-

tional conference held in Tallinn in 2007, a declaration was passed which recognized that[1]: "*European Capital Cities are not only the seats of governments. They are the cultural and economic centres of Europe, vessels of identity, and places for tens of millions of the most productive and creative European citizens to live and work. The international competitiveness of the country as a whole depends upon the development of its capital, which is generally the country's centre of innovation, the engine of its economic growth as well as the source of most of its revenues.*"

The authors of this article aim to analyze the following questions:

1. How can Tallinn as a capital city be defined and what characterizes its "golden circle" economy, primarily in connection to the income base of the municipalities?
2. How is economic growth influenced by income diversity of the municipalities, particularly in the context of personal income tax?
3. Is the city of Tallinn, for many distant regions (as one occasionally hears or reads), a "vampire" or rather a "donor"?
4. How does collaboration of services occur in Tallinn and its municipalities and what solutions can be utilized in developing the capital city area's administrative model?

An essential part of the empirical database used in this article was gathered in 2007 at the request of Tallinn's Municipality and Tallinn University of Technology regional political chair's research article "Understanding the Capital City Area and Fundamental Urban Politics and Basic Developmental Directions".

Determining the Capital City Area Boundaries and Certain Socio-political Indicators

Based on Champion's (2001) assessment, the urban area consists of the core city and its surrounding heartland, which forms the core city's administrative region and whose inhabitants predominantly work in the core city. Different studies have given this amount as 15%, but also 25%. (Jauhiainen 2002) The well-known Estonian urban geographer, University of Tartu Professor Jussi J. Jauhiainen has noticed that Tallinn's urban sprawl area extends 40 to 60 km from its administrative boundaries. This means that the capital city area's eastern and south-eastern border extends to Loksa and Aegviidu (70 km from Tallinn), to Rapla on the south and to Paldiski, 50 km to the west. (Jauhiainen 2002; Tallinn and surrounding … 2007) From a public administrative standpoint, the urban area can be defined as originating from the construction of a rational administrative model. In any case, defining the capital city area is debatable and depends on what is being studied (oscillating migration, collaboration of service delivery in the municipalities, national administrative structure, etc) and which problems need to be addressed.

[1] Available at: http://www.uceu.org/PDF/PDF_UCEU_Decl_EN.pdf.

For the purposes of this article, Tallinn can be defined chiefly by the capital city area and its nine surrounding municipalities (Jõelähtme, Harku, Kiili, Saku, Saue, Rae and Viimsi town and Maardu and Saue city). In general, these towns and cities are called Tallinn's 'golden circle municipalities' and are the main urban sprawl area of Tallinn. The municipalities have at least three common characteristics – rapid current account growth in recent years, a large percentage of people working in Tallinn and above average income tax accrual per capita (Table 1).

Table 1. Population and personal income tax accrual of Tallinn and its surrounding municipalities

		Population 01.01.2007	Share, %	Income tax in 2007, 1000 EEK	Share, %
1.	TALLINN city	398,599	83.3	3,562,420	80.6
2.	Maardu town	16,486	3.4	123,257	2.8
3.	Saue town	5,754	1.2	63,588	1.4
4.	Harku rural municipality	9,501	2.0	116,349	2.6
5.	Jõelähtme rural municipality	5,456	1.1	54,324	1.2
6.	Kiili rural municipality	3,615	0.8	38,899	0.9
7.	Rae rural municipality	9,161	1.9	97,040	2.2
8.	Saku rural municipality	8,194	1.7	91,825	2.1
9.	Saue rural municipality	8,013	1.7	88,120	2.0
10.	Viimsi rural municipality	13,527	2.8	181,417	4.1
	Region total	478,306	100.0	4,417,237	100.0

Source: Population registry, authors' calculations.

The urban area of Tallinn is similar to that of Estonian southern neighbour Latvia. This similarity lies in the increased population of the capital city and its adjoining municipalities versus the decrease of the general population, just as the capital city dominates over the rest of the country. This aspect distinguishes the urban areas of both Tallinn and Riga from that of Helsinki, where Helsinki, Espoo and Vantaa are more or less on par.

Table 2. The population of Riga City and its surrounding municipalities

		01.01.2007	Share, %
1.	Riga pils	722,485	88.73
2.	Balozi pils	4,565	0.56
3.	Salaspils novads	21,595	2.65
4.	Adazu novads	8,496	1.04
5.	Babite pagasts	6,746	0.83
6.	Carnikava novads	5,825	0.72
7.	Garkalne novads	5,781	0.71
8.	Kekava pagasts	12,825	1.57
9.	Marupe pagasts	11,017	1.35
10.	Olaine pagasts	6,387	0.78
11.	Stopini novads	8,567	1.05
		814,289	100.00

Source: The Latvian Office of Statistics (LV Centralas Statistika Parvalde).

It should also be pointed out, that the analysis of capital city areas of other countries in the EU shows the weightiness of the country's economy even when the capital city's share of the country's population is smaller, even under 10% (e.g. Belgium, Poland, Sweden). The GDP *per capita* of municipalities are, in general, higher than in the remaining regions of the country (Table 3).

Table 3. Economic activity in the capital city region (2004)

State	State, GDP/capita	Region	Region, GDP/capita
EU-27	21,502.9		
Estonia	6,914.0	North-Estonian region	10,810.4
Latvia	4,823.8	Riga region	8,843.7
Lithuania	5,275.3	Vilnius region	7,568.0
Poland	5,341.8	Mazovieckie region	8,091.4
		Warsawa city	15,050.0
Finland	29,065.7	Uusimaa region	39,577.3
Sweden	31,256.8	Stockholm region	43,045.8
Hungary	8,143.0	Budapest region	16,717.8
Belgium	27,792.1	Brussels region	55,441.8
Bulgaria	2,518.3	Sofia region	3,724.2
Czech Republic	8,543.7	Prague region	17,849.0
Slovakia	6,291.5	Bratislava region	14,341.6

Source: Eurostat.

It is relevant to note that 75% of Tallinn's citizens live in Harju County. Of the remaining counties, the only county centre with a share over 50% of the county's population is Tartu County; however, no one is greater than two-thirds.

Personal income tax as a source of revenue for Tallinn's urban area municipalities and regional income diversity

According to Estonian Constitution the state budget and local governments budgets are separated and local authorities have their own independent budget. The main sources of Estonian municipal revenue are as follows (see Table 4).

An interesting economic-political problem in recent years is the way economic growth has occurred and how the resulting rise in prosperity of the populace has affected regional income diversity throughout Estonia. Analysis of income tax contributions shows the persistence and further deepening of income diversity. To make the analysis significant, Harju County was distinguished from Tallinn's municipalities.

Table 4. Local Government budget 2004 and 2007, 1000 €

	2004	%	2007	%
Taxes	390,808	47.57	675,961	52.49
- personal income tax	354,356	43.13	629,772	48.91
- land tax	30,414	3.70	35,304.1	2.74
- local taxes	6,038	0.73	10,885.8	0.85
Income from economical activities and property	89,839	10.94	114,426	8.89
Equalization fund	59,667	7.26	93,313	7.25
Block grant from State Budget	152,635	18.58	206,084	16.00
Earmarked grants for current expenditures from State Budget	31,426	3.83	32,596.9	2.53
Investment grants from State Budget	33,581	4.09	61,016.7	4.74
Transfers from foundations and NGO-s	9,801	1.19	23,386	1.82
Sale of property	33,201	4.04	36,860.7	2.86
Other revenues	20,586	2.51	44,093.1	3.42
Revenues	**821,545**	**100.00**	**1,287.738**	**100.00**

Source: Ministry of Finance of Estonia, author's calculations.

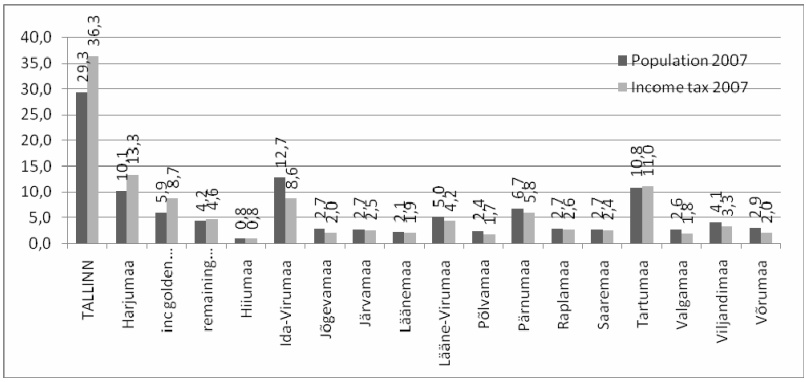

Figure 1. Population and personal income tax accrual rate in 2007. (Ministry of Finance, Income tax 2002–2007; population registry, authors' opinions)

Until the year 2007, Harju County (and Tallinn) was the only county, where the income tax accrual share exceeded the population share. According to results based on the year 2007, Tartu County also barely exceeded this margin (thanks to the accruals of Tartu city) and Hiiumaa reached the margin.

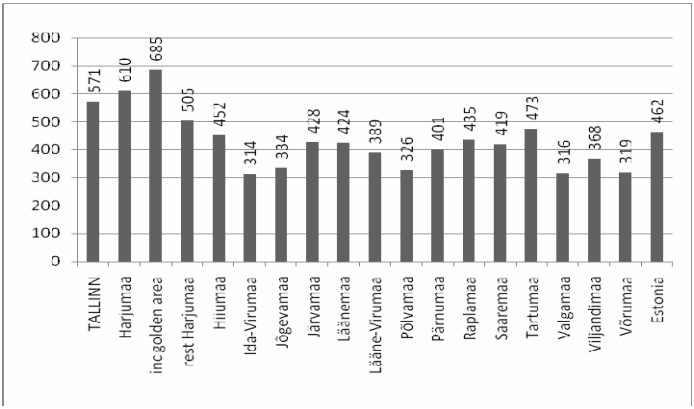

Figure 2. Income tax contributions per capita in 2007, €. (Ministry of Finance, Income tax 2002–2007; population registry, authors' opinions)

Income tax *per capita* shows that the regional income diversity that has occurred over the years, continues to endure. (Trasberg 2000; Ulst 2000) It is evident that accruals in Tallinn and the segment of Harju county knows as the 'golden circle', are distinctly higher. At the same time, it should also be recognised that the remaining Harju County average, although lower than in Tallinn and the 'golden circle', exceeds that of other counties. Considerably lower tax revenue is in Ida-Viru, Jõgeva, Põlva, Võru and Valga counties. On average, these same counties had the lowest income tax revenues as well in 2000, according to a study from the University of Tartu's Institute of National Economy. (Ulst 2000)

As well, income tax absolute growth characterised in Figure 3 confirms the persistence and deepening of income diversity. This is particularly vivid in the growth of accruals in Harju County and primarily, the 'golden circle' (excluding Tallinn). Evidently it is conditional upon ongoing urban sprawl and the convergence of the more affluent populace within the boroughs and outlying towns of Tallinn. Although the remaining Harju County growth exceeds the average contribution of Estonia, it is nevertheless smaller than Tallinn and Tartu counties corresponding indices.

The relative growth of income tax accruals *per capita* was greater than average in the counties where the absolute income tax accrual was, on average, lower (Figure 4). This can be explained on the one hand, that in the case of lower absolute accrual, even a small absolute rise gives a larger growth percentage. On the other hand, it can presume the income growth of those counties inhabitants, tax culture improvement and economic recovery.

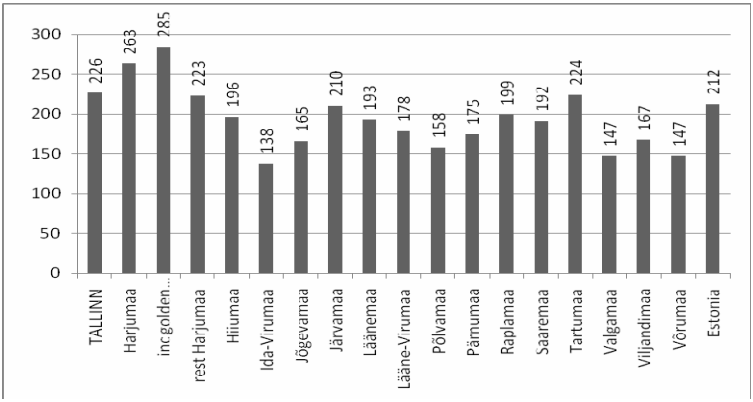

Figure 3. Absolute income tax growth *per capita*, € (2004–2007). (Ministry of Finance, Income tax 2002–2007; population registry, authors' calculations)

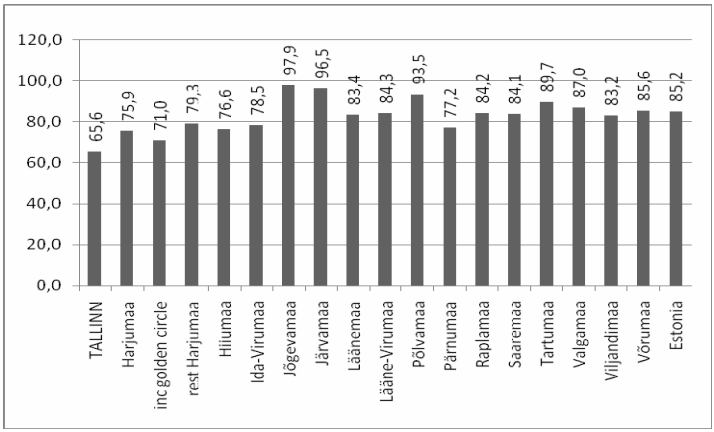

Figure 4. Income tax accrual relative growth *per capita*, % (2004–2007). (Ministry of Finance, income tax 2002–2007; population registry, authors' calculations)

The preceding analysis looked at Estonia as a whole and confirmed that income diversity between Tallinn's urban areas and the rest of Estonia has increased, in spite of the relatively fast growth rate of the counties. Subsequently, income tax accrual dynamics of Tallinn's 'golden circle' municipalities from the years 2004 to 2007 is analyzed (Figure 5).

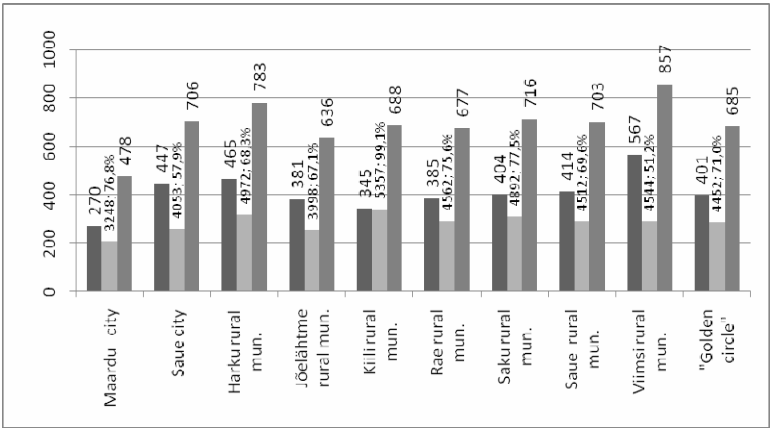

Figure 5. *Per capita* income tax of Tallinn's 'golden circle' municipalities, € (2004–2007) and the absolute and relative growth. (Ministry of Finance, Income tax 2002–2007; population registry, authors' calculations)

The capacity of income tax accrual confirms that the 'golden circle' municipalities of Tallinn can be distinguished as many jointly distinctive groups. General conclusions are as follows:

- The city of Saue and the rural municipalities of Harku and Viimsi represent background indicators, the so-called early stages of urban sprawl. Although Viimsi can still be characterized by rapid population growth and concurrent income tax accrual absolute growth, the relative growth is on a decline since average accruals per capita are already so high. According to the authors' assessment, the rural municipality of Harku is approaching this same margin. The average income tax accrual in the city of Saue, in the authors' opinion, will not increase as a consequence of migration, due to a lack of further opportunities for residential construction.
- The rural municipality of Kiili is an example of a rapid urban sprawl target area. Whereas the initial population of this borough was small compared to other urban area municipalities, one can conclude that the greater than middle income populace that has settled in this municipality has determined both the absolute and relative growth of income tax accruals.
- The rural municipalities of Rae, Saku and Saue characterize the group of boroughs which, differing from Kiili, had initially a greater population and, therefore, the effect of the average wealthy migrant on the relative growth of accruals was smaller. A greater rate of population growth in these boroughs has occurred since 2004, the so-called second stage of urban sprawl.
- Active urban sprawl of the rural municipality of Jõelähtme has been discarded, supposedly thanks to its location and the unsuitability of residential construction in Tallinn's surrounding neighbourhoods.

The effect of income tax calculation methods on the municipalities and the state's revenue base

Over the last dozen years, income tax calculation methods and rates in the cities and boroughs have changed many times. Income tax law (RT I 1993, 79, 1184, par. 8) which came into effect on January 1, 1994, gave a 26% rate held back from a natural person's income, from which 52% was accrued to the local government. In 1998, the law was changed (RT I 1998, 61, 679) and the local government received 56% of income tax, or 14.56% of gross income excluding deductions. This same relationship was continued in the 1999 adopted income tax law (RT I 1999, 101, 903), while important changes in income tax calculation took place in 2004. The old system's principal drawback was the municipalities' dependence on basic tax exemptions. Chapter four of the Income Tax Act proceeds from a resident natural person's right to make income tax deductions. The annual basic tax exemption beginning in 2006 is 24,000 kroner's (1554 €) per years, or 2000 kroner's (128 €) per month. (RT I 2003, 88, 587) This exemption is available to everyone who receives any kind of income, without exception. In addition to this, a resident person is allowed certain deductions during a taxation year, such as homeownership loan interest payments, education expenses, donations and professional association dues. Every change to allowed deductions has directly influenced the revenue base of the municipalities.

The parliamentary coalition formed after the 2003 election began to decrease the income tax rate and to gradually increase the annual basic exemption minimum. The continuation of the former system would have meant the automatic decrease in the revenue base of the municipalities and possible corruption to European municipal charters and constitutions enacted for municipal fiscal autonomy. For that reason, a principal change in income tax calculation methodology was made for municipal government and accruals were no longer calculated as a percentage of total income, but rather a percentage of a natural person's taxable income (without deductions). As of 2003, (RT I 2003, 88, 587) 11.4% of a person's taxable income was accrued to the municipalities. Henceforth, this rate was increased on a yearly basis, in 2007 it was 11.9% (RT I 2004, 89, 604 – 11.6%; RT I 2005, 36, 227 – 11, 8%; RT I 2006, 55, 406 – 11.9%).

The new methodology left all risks arising from deductions and income tax rates to be carried by the state. Tax evaders should know that Latvia's income tax law was used in Estonia until the 1994 established system. Act 26, page 4 stipulates that if changes in the law are made to the annual basic exemption minimum or deduction rate, the accompanying effects on the municipal government's revenue base and the corresponding compensation should be foreseen in the state budget.

The equalization fund apportioned from the state budget is meant for the economically weaker municipalities of Estonia but is not based on classic redistribution principles. Even though the formula for distribution of the equalization fund is based on objective criteria, it is dependent on the input amount of annual political agreements. (Trasberg 2002) Even so, one can raise the premise that sums accrued from income tax to the state can be used for the formation of the equalization fund and

thus, a larger portion of the state income tax accrual should come from economically wealthier municipalities.

In situations where the state has allowed for deductions and the richer populace has taken deductions in a large capacity is different by county, and requires a separate answer to the question, does the municipal government's revenue base, independent of deductions, not cause a situation where the wealthiest municipalities (including Tallinn and its 'golden circle') accrue a smaller percentage to the budget than the poorest counties?

In 2006, on the basis of data from the Tax and Customs Board, a total of 21,507 billion kroner (1,374 billion €) in deductions were declared and applied (incl. the basic income tax exemption). Included in this, Tallinn declared (and applied) 6.95 billion kroner (0,44 billion €), or 32% of Estonia's gross amount and Harju County 2.36 billion kroner (0,15 billion €), or 10.9% of Estonia's gross amount.

Taking into account the percentage of the municipal governments accrued gross income by corresponding year and the state's accrued income tax rate, Table 5 ventures a theoretical income tax share divided between the state and municipalities.

Table 5. Theoretical distribution of personal income tax between state and municipalities, %

	State budget	KOV
2004	56.1	43.9
2005	51.7	48.3
2006	48.7	51.3

Source: Ministry of Finance, income tax 2002–2007 (03.01.08), author's calculations.

The local governments theoretical share has successively increased and, in addition to the aforementioned point, the reason for the increase in the municipalities' accrued income tax rates is because of income tax rate lowering (in 2004 the income tax rate was 26%, 2005, 24% and in 2006, 23%). The income distribution presented in the above table is still purely theoretical, since presumably, no deductions can be made on taxable income. In actuality, the situation is otherwise and, as previously noted, all risks connected to deductions and income tax rate cuts are carried by the state budget.

Unfortunately, the Ministry of Finance and the Tax and Customs Board statistics does not permit individual municipality sections to ascertain how the corresponding city or borough should divide accrued income tax between the national and local budgets. Existing data allows for statistics exclusively by county, whereas only data from the city of Tallinn can be separately brought forth. Data from the Ministry of Finance's municipal districts income tax accrual from 2004 to 2006, as well as the Tax and Customs Board 2004, 2005 and 2006 filed income tax returns were used to carry out the analysis. It should be noted, that the methodology used is deficient because it takes into account deductions that are made on filed income tax returns.

Those individuals, who are not required to file income tax returns, do not reflect the aforementioned data, although deductions in the form of annual basic exemptions are nevertheless used. Based on statistics from the Tax and Customs Board, this kind of deduction by county is impossible to differentiate.

Originating from previously mentioned restrictions, it is possible to calculate the state accrued portion maximum share by county. This means that the actual accrued portion to the state remains somewhat smaller than the calculations mentioned (Table 6).

Table 6. Income tax return held back portion *per capita* in 2004 and 2006

	County	2004	2006		County	2004	2006
1.	Tallinn	41,6	46,5	9.	Põlva	37,8	42,3
2.	Harju	41,8	49,8	10.	Pärnu	42,2	46,8
3.	Hiiu	48,2	50,8	11.	Rapla	40,6	45,5
4.	Ida-Viru	36,3	39,4	12.	Saare	44,2	49,5
5.	Jõgeva	37,2	42,2	13.	Tartu	39,9	44,4
6.	Järva	43,9	50,0	14.	Valga	35,0	40,1
7.	Lääne	42,3	47,4	15.	Viljandi	38,7	43,0
8.	Lääne-Viru	38,8	43,5	16.	Võru	36,2	41,3
Total for Estonia		**40,5**	**45,4**				

Source: Tax and Customs Board, income tax return summaries 2004, 2006, author's calculations.

Table 7. State budget and taxpayer's budgetary accrued income tax rate by county section on the basis of income tax return data summary from 2004–2006

	2004		2005		2006	
	State budget	KOV	State budget	KOV	State budget	KOV
Tallinn	42,7	57,3	33,8	66,2	28,9	71,1
Harju	43,7	56,3	35,1	64,9	29,5	70,5
Hiiu	38,5	61,5	26,4	73,6	20,6	79,4
Ida-Viru	34,3	65,7	21,9	78,1	12,5	87,5
Jõgeva	34,0	66,0	19,5	80,5	12,5	87,5
Järva	36,0	64,0	24,1	75,9	18,2	81,8
Lääne	38,2	61,8	26,4	73,6	20,4	79,6
Lääne-Viru	39,0	61,0	28,9	71,1	22,2	77,8
Põlva	32,8	67,2	19,1	80,9	13,2	86,8
Pärnu	36,4	63,6	24,3	75,7	18,5	81,5
Rapla	39,5	60,5	28,6	71,4	22,5	77,5
Saare	36,8	63,2	24,0	76,0	19,3	80,7
Tartu	39,3	60,7	29,3	70,7	23,1	76,9
Valga	36,1	63,9	22,4	77,6	15,5	84,5
Viljandi	37,0	63,0	24,2	75,8	18,1	81,9
Võru	35,0	65,0	20,4	79,6	15,1	84,9
Total	**40,1**	**59,9**	**30,0**	**70,0**	**24,3**	**75,7**

Source: Ministry of Finance, income tax 2002–2007 (03.01.08), Tax and Customs Board, income tax return summaries 2004, 2005, 2006, author's calculations.

On the basis of Table 7, it may be concluded that the income tax accrued by Tallinn and its urban area municipalities accrues a larger percentage of income to the state budget than other municipalities, even taking exemptions into account. In the opinion of the authors, this is because incomes in Tallinn and Harju County are so high that the corresponding balance of deductions is still small (see Table 5). One needs to take into account that the basic part of deductions comes from the annual basic exemption and that benefit is used without exception by all income earners. Likewise, this effect is smaller, the larger the taxpayers absolute income. As shown in table 6, the state's accrued portion is smallest in those counties where *per capita* contribution was the lowest average in Estonia. The given index correlation coefficient is –0.94.

The development of the urban areas of Tallinn presumes collaboration

In the summer of 2007, the municipality of Tallinn requested a study to be carried out by the chair of regional politics at Tallinn University of Technology. The purpose of this study was to question the capital city's surrounding counties and cities leaders and gather information on the mutual collaboration of service delivery, primarily the shortcomings and future possibilities. The study's main object was Tallinn's urban sprawl-affected area.

To date, urban sprawl in Estonia has been studied primarily by its self-organizing aspect. This is also the case in the capital city area. For example, the University of Tartu's geography department's study tracking the location and migration of people, using mobile telephones. These valid studies give an overview of the flow of movement of the populace within a region, etc. The problem for social experts is, to what extent is urban sprawl and all that is connected to it, ruled by societal self-organization and market economy (real estate prices, automobile and public transportation costs, etc.).

The municipalities of Tallinn saw opportunities for collaboration in universal education, public transportation, waste economy and joint planning actions. In addition to these areas, were denoted the development of public waterworks and sewage, planning and construction of road networks, and the planning of cemeteries and recreation areas.

The answer to the question "what is hindering improved collaboration between the municipalities of the capital city area?" is, among other things:

1. Collaboration does not occur because the income base of the municipalities allows them to manage independently.
2. Collaboration occurs when necessary and as little as possible.
3. The politicians from each town and city wishes to see its own municipality at an advantage.
4. Collaboration should be longer term than one municipal council electoral period (4 years).
5. Collaboration is feared by municipal council members who represent the interests of the inhabitants (electorate) of a smaller district and so, choose to be

uncooperative not only with neighbouring towns or cities but also with their own hometown centre.

6. Especially with the location of educational institutions (beginning with pre-school institutions), politicians have given permission for the development of their own village, hamlet or other inner town section, whereby a rational inter-town educational network is difficult to imagine, not to mention that area's collaboration with other municipalities.
7. Legal obstacles hinder cooperation between towns and cities, for example the organization of public transportation.
8. The present margin of authority seems to favour competition between municipalities and this inhibits collaboration, since the principle "collaboration through competition" is not understood.
9. The situation in Tallinn's regional waste economy, where the final deposit is in private hands and is the cause of excess expenditures for waste management.

In a democratic society, public administration, including local bodies, is there to help direct societal processes in the publics' best interest. According to local government organization law (3: 7), their one assignment is to deliver a public service under the most favourable conditions. Actually the concept "service delivery" should have a broader treatment. The mission of the municipalities is to guarantee the delivery of services for the inhabitants of its towns or cities, regardless of whether they are rendered for their own agencies or undertakings or in partnership with business organizations or non-governmental organizations; or purchasing services from private enterprises or some other municipality's agencies or undertaking institution or partnership with business or non-governmental organisations. This raises the fundamental question: should services be delivered only to the inhabitants of one's own town or city or should this be more widespread? This problem became reality a few years ago in connection with the public transportation system of Tallinn, where the towns and cities surrounding the capital city did not feel it necessary to contribute to its financing, and were serviced exclusively from the budget of the capital city's subsidized public transport. The authors believe that every town and city should have an independent budget, whereby they can observe the principle to deliver public services to its inhabitants under optimum conditions. Reputedly, from the results of this argument, Harju County's Public Transport Centre was formed as a collaborative institutional format.

Of fundamental importance is the question which we refer to as the collaboration between municipalities. Is studying in the school of another town or city still collaboration? Or is it rather a bookkeeping operation, wherein occurs a balanced account. In the authors' opinion, the municipal districts can speak of collaboration only then, when self-organized operations for the consumption of services attempt to direct and coordinate on the part of public administrative institutions, in a lawful and organized manner.

An important task for public administration is, in accordance with regulations, to create a legal and economic space that answers to the needs and opportunities of society (at any given stage) and allows for the rise in the well-being of its inhabi-

tants. In certain cases, the creation of a legal space may demand the acceptance of respective by-laws, although the municipal body's regulations will often suffice. For the creation of both legal and economic spaces (including respective administrative structures) it is practical to become acquainted with the experiences of the collaborative units of capital cities in other countries (first and foremost Helsinki).

The building of a management model for the capital city area urban sprawl presents a serious challenge for public administration and municipal experts. In the capital city area, administrative organizational regulations can be isolated into three different models (Barlow 1993, 1994): the unitary city model, the two-tier city model and the polycentric model. The city of Tallinn presents a polycentric model: the capital city area is divided between many independent and equal status municipalities and lacks a so-called higher level of regional municipalities, collaboration is voluntary and self-organized. It should be emphasized that the legal system of Estonia does not allow for a different version of capital city area collaboration. This raises the question as to whether the development of the urban sprawl region should be exclusively in the authority of society's self-organized and market economy (real estate prices, car and public transportation costs, etc). The voluntary collaborative model generally works in the democratic and administrative culture in western and northern Europe.

Already in 1956, Charles Tiebout brought forth a hypothesis which later was named the Tibeout hypothesis. (Tibeout 1956) The idea behind this hypothesis is that the wealthier and, therefore, higher income municipalities can afford supplementary public services which entice new inhabitants to the administrative territory. Even though a reasonable competition between municipalities is necessary for development, it is in the public interest for the regions to progress in a healthy and balanced way and this includes the capital city area. The municipal district legal by-laws of Estonia promotes a competition between the municipalities, whether that be in reference to the residency registration question, various subsidies, kindergarten spots, etc. As previously pointed out in the study carried out by Tallinn University of Technology competition is one of the most important factors which impede collaboration. (Capital City area … 2007)

Taking into account the domineering function of Tallinn's capital city area (Table 2) an administrative order model based on a two-tier municipal model does not suit this area. And in the framework of Estonia's unitary municipal system, it is pointless to establish a two-tier system state in one part. Presumably this would give rise to many legal problems. A considered alternative could be a so-called mandatory collaborative model, worked out and applied in a similar way to Helsinki's collaborative formation established by the Helsinki Urban area Collaborative Region or Latvia's regional developmental act established for planning areas. (Vanags, Vilka 2006) According to the authors, the Helsinki model would suit the municipalities of Estonia's capital city collaborative organization and, in certain domains (public transportation, waste management, planning, etc) authorize equivalent collaboration similar to Finland.

Summary

The economic growth in Estonia in recent years has impacted the income base of municipalities and foremost, income tax accrual. For the municipalities of Tallinn's 'golden circle', this has meant the profitable growth of income tax accrual. In comparison, economically weak counties, regardless of rapid development, have not lost regional income. Large and deepening regional income disparities hint at the need for reforms in the municipal equalization fund. Separate from income taxes, the state budget equalization fund is not in its present form dependent on economic growth and, therefore, does not answer to the actual needs of the municipalities. The utilized support system mechanism does occur, although not on the principal of solidarity, i.e. at the expense of the wealthy. Similarly, the equalization fund's input amounts are not dependent on income tax accruals but rather on the question of political agreements. Large regional income disparities are not a problem specific to Estonia, it is also known in the other Baltic States. (see also Vanags, Vilka 2006)

In the complicated economic climate of 2008, it is more difficult to predict the forward dynamics of Tallinn's 'golden circle' municipalities' income tax accrual. It should be taken into consideration that in 2008, income tax accruals are dependent on the number of inhabitants of a town or city as of December 31, 2007. Hence, one can predict the income tax revenue absolute growth in 2007 by the number of additional inhabitants. Similar growth depends primarily on a healthy economy, although a slowdown in economic growth affects all regions of Estonia.

The authors demonstrated that Tallinn and its urban area 'golden circle' municipalities accrue a larger amount of income tax in terms of both percentage and estimation into the state budget than economically weaker regions and thus, redistribution of income occurs, although circuitously. Secondly, the author's analysis revealed that, due to the methodology used for income tax calculation and distribution, the state's accrued income tax share continues to decrease. The gradual lowering of the income tax rate and the overall increase of the annual basic exemption assumes the need to carry out adequate calculations and substantiated solutions to assure the ongoing capability of the municipalities' income base. In the coming years the income tax rate will continue to decrease by one percentage point per year (in 2008 it is 21%, by 2011, 18%), basic annual tax exemption increase and the establishment of additional tax exemptions from the first child onwards (as of 2008). In principal, it is possible to use the gross income of an individual exclusively as a standard component of income base.

To improve service delivery to the inhabitants of the urban area of Tallinn, it would be practical to legalize the collaboration of the capital city area's municipalities and alter the present voluntary collaboration within certain counties, into mandatory collaboration.

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KOOLI ROLL KOHALIKE OMAVALITSUSTE EELARVETES

Olev Raju
Tartu Ülikool

Probleemi püstitus

Käesolevas kirjutises ei püstitata küsimust kohalike omavalitsuste olemusest ega nende (optimaalsetest) funktsioonidest. Meie lähtume Eestis de facto välja kujunenud situatsioonist, kus kohalike omavalitsuste majanduslik tähtsus on suhteliselt tagasihoidlik, moodustades 2007. aasta l8,4% SKPst. Soomes oli vastav näitaja 19,6%, Rootsis 25,0% ja Taanis koguni 33,4% SKPst. (DEXIA) Kuna ka Eesti SKP inimese kohta on (sõltuvalt arvutamise metoodikast) 2–3 korda madalam kui neis riikides, on selge, et kohalike omavalitsuste roll Eestis on märksa tagasihoidlikum. Eestis ei vastutata kohalikud omavalitsused sisuliselt tervishoiuteenuste, tööhõive, korrakaitse ja päästeteenuste eest. Vaatamata kohalike omavalitsuste funktsioonide osa teatud laienemisele viimastel aastatel on piiratud nende roll ka haridusteenuste ja sotsiaalhoolekande teenuste osutamisel.

Kuid ka selliste piiratud funktsioonide hulga täitmiseks napib kohalikel omavalitsustel rahalisi vahendeid; nende eraldamise süsteem aga ei rahulda. Nappiva eelarve juures otsivad kohalikud omavalitsused võimalusi kulude kärpimiseks. Pea kõigis kohalikes omavalitsustes on omavalitsuste eelarve suurimaks kuluallikaks haridus: kool, koolieelsed lasteasutused ja ka koolivälised lasteasutused, nagu spordikoolid, huviringid jms. Siit on hakanud levima ka arusaam, et kool on kohaliku omavalitsuse eelarvele suureks finantskoormaks. Meie püstitame hüpoteesi – kool toob kohaliku omavalitsuse eelarvesse sisse vähemalt samapalju, kui kulutab. Mis puutub koolieelsetesse lasteasutustesse, siis siin on pilt keerulisem – neid pole kaugeltki kõigis (eelkõige kõige väiksemates) kohalikes omavalitsustes ja ka kulutuste tase on ülimalt erinev. Kuna ka koolieelsete lasteasutuste statistika on mittetäielik, siis vaatamata situatsiooni küllaltki suurele analoogiale me neid siinkohal põhjalikult ei vaatle. Piirdutakse nende käsitlemisega vaid seal, kus see on hädavajalik tervikliku pildi saamiseks.

Analüüsi selguse huvides tuleb kõigepealt peatuda kohalike omavalitsuste finantseerimise süsteemil Eestis. Selle käigus näidatakse isiku tulumaksu ja tasandusfondide – s.o. kohalike omavalitsuste nende rahastamiskanalite, mis sõltuvad koolist – osa kohalike omavalitsuste eelarvete kogutulus. Hüpoteesi tõestamiseks vaatleme seejärel kohalike omavalitsuste kulusid koolidele. Põhjalikuma vaatluse alla tulevad tänu kooli olemasolule kohaliku omavalitsuse eelarvesse (täiendavalt) laekuvad summad. Viimaste puhul on oluline leida võimalusi ka kaudsete, vahendatud, laekumiste kasvõi ligikaudseks hindamiseks.

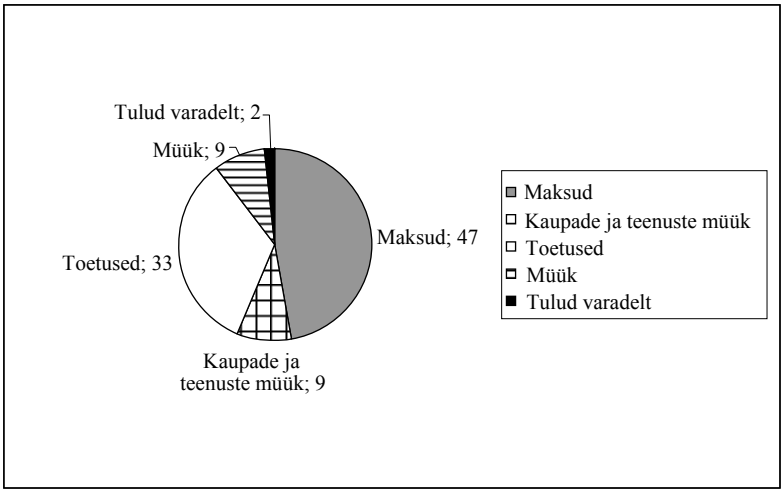
Analüüs baseerub dominantselt Rahandusministeeriumi 2006. aasta andmetele, sest 2007. aasta esialgsed kokkuvõtted ei olnud artikli kirjutamise momendil veel paljudes lõikudes esitatud teaduslikuks analüüsiks sobiva korrektsusega. Küll on

neid (2007. aasta andmeid) kasutatud seal, kus see oli võimalik. Seejuures on arvestatud, et 2007. a. ei oleks antud lõigus oma struktuurilt oluliselt erinev 2006. aastast, s.t. rangelt on jälgitud võrreldavuse põhimõtet.

Teaduslikus kirjanduses (ka ajakirjanduses jm) meie käsutuses olevatel andmetel antud probleemi siiani vaadeldud pole.

Lühiülevaade kohalike omavalitsuste rahastamise süsteemist Eestis

Kohalike omavalitsuste ülesandeks on osutada oma pädevuse piires tema territooriumil asuvatele elanikele avalikke teenuseid. Teenuste osutamiseks vajalike vahendite olemasolu tagatakse kohalikele omavalitsustele elanike poolt makstud maksudega ja teenuste tarbimise eest tasu võtmisega. Seoses sellega, et Eestis on elatustase piirkonniti väga erinev, eraldatakse nõrgema tulubaasiga kohalikele omavalitsusüksustele riigieelarvest toetust, et kindlustada kõikidele elanikele ühtlase tasemega teenuse osutamine.Eesti Vabariigis on vastavalt Valla- ja linnaeelarve seadusele kohalike eelarvete tuluallikaks: 1) maksud; 2) kaupade ja teenuste müük, sealhulgas lõivud; 3) materiaalse ja immateriaalse vara müük; 4) tulud varadelt; 5) toetused, sealhulgas välisabi; 6) muud tulud, sealhulgas trahvid. (RT I 1993, 42, 615, RT I 2003, 88, 588) KOV eelarvete tulud on määratud Maksukorralduse seaduse, Kohalike maksude seaduse ning Valla- ja linnaeelarve seadusega. Eesti kohalike omavalitsuste tulubaas on mitmekesine ning aruannetes on erinevate tuluallikate positsioonide arv *ca* 100 ühikut. Üldistatud kujul jagunevad kohalike omavalitsuste eelarvete tulud nii, nagu on näidatud joonisel 1.



Joonis 1. Kohalike omavalitsuste tulude struktuur 2006. aasta eelarvete täitmise aruannete alusel (laenudeta). (Autori arvutused Rahandusministeeriumi koduleheküljе andmete alusel)

Nagu jooniselt 1 on näha, on kõige tähtsamaks kohalike omavalitsuste eelarvete tuluallikaks maksud (47%). Sellest enamiku moodustas üksikisiku tulumaks, mis oli 2006. a. keskeltläbi 43,3% omavalitsuste tuludest. Üksikisiku tulumaks on jagatud maks, see tähendab, et ta laekub osaliselt riigile ning osaliselt rahvastikuregistri andmebaasi alusel isiku (maksja) elukohajärgsele kohalikule omavalitsusele. Eesti kohalike omavalitsuste rahastamise praeguse süsteemi järgi jääb kõigepealt neile osa antud territooriumil elavate inimeste poolt makstavast tulumaksust mis võrdub alates 01.01.2007 11,9% isikute brutotulust. Isiku tulumaks (7,83 miljardit krooni) moodustas 2006. a. 92,4% kõigist kohalikele omavalitsustele laekunud maksudest. Kuid samal ajal oli isiku tulumaks vaid 43,9% kogu kohalike omavalitsuste eelarvete kaudu 2006. a. kulutatud rahast. (Kuuaruanne … 2006) Isiku tulumaksu osa kohalike omavalitsuste eelarvetes ei kahane, pigem suureneb (2004. a. oli see 42%; Raju 2007). Ülejäänud joonisel kajastatud maksud on maamaks ja ressursimaks, mis on riiklikud maksud ning kohalikud maksud. Kohalik omavalitsus võib kehtestada vastavalt Kohalike maksude seadusele (RT I 1994, 68, 1169, RT I 2005, 57, 451) 8 maksu, mis kokku aga moodustasid 2006. a vähem kui 1% omavalitsuste eelarvete tuludest. Seega on need maksud kohalike omavalitsuste eelarvete tulubaasi kujunemisel üsna ebaolulised. Peamiseks põhjuseks võib siin tuua maksude vähese kasutamise, mida iseloomustab selgelt alljärgnev tabel. Nagu näha, peale reklaami ja parkimistasude ei ole ülejäänu kohalikud maksud arvestatava tähtsusega. Mootorsõiduki- ja lõbustusmaks ei kehtinud 2006. a. üheski kohalikus omavalitsuses.

Tabelis 1 toodud arvud võimaldavad väita, et reklaamimaks on saavutamas oma praeguste tingimuste jaoks optimaalset suurust, teede ja tänavate sulgemise maks ning parkimistasu on kasvanud ja ilmselt kasvavad veel. Mootorsõidukimaks sellisel kujul, nagu ta oli aastal 2004, ei osutunud otstarbekaks ja sellest on loobutud. Kuna loobumise põhipõhjuseks oli mootorsõidukite massiline ragistreerimine väljaspoole seda omavalitsusüksust, kus nimetatud maks kehtis, siis on korduvalt kaalutud selle maksu kehtestamist üldriikliku maksuna.

Tabel 1. Kohalike maksude kasutamine Eestis 2006. aastal

Kohalikud maksud	2004		2006	
	kehtestanud omavalitsusi	laekumine kokku	kehtestanud omavalitsusi	laekumine kokku
Mootorsõidukimaks	2	433 432,46	0	0
Paadimaks	0	0	1	25,00
Loomapidamismaks	2	104 190,97	2	82 410,25
Müügimaks	9	2 960 620,06	11	3 272 288,07
Reklaamimaks	50	34 647 771,98	47	38 696 198,20
Teede ja tänavate sulgemise maks	14	6 716 837,27	17	14 741 019,93
Lõbustusmaks	0	0	0	0
Parkimistasu	7	49 614 686,84	8	75 172 858,21

Allikas: Autori arvutused Rahandusministeeriumi koduleheküljе andmete alusel.

Järgmine tululiik, kaupade ja teenuste müük, hõlmab endas nii laekumist kohalike omavalitsuste majandustegevusest kui ka üüri- ja renditulusid ning teistele oma-

valitsusüksustele müüdavaid teenuseid. Siia alla kuuluvad näiteks lapsevanema osalustasu lasteaia koha eest, toitlustamise eest, tasuliste ringide eest, muuseumi piletite ja bussipiletite müük, tasu tarbitud kütte ja vee eest ning muud sarnased tulud. Kaupade ja teenuste müük moodustas 2006. aastal kohalike omavalitsuste eelarvete tulupoolest keskmiselt 8,7%. Võrreldes 2004. a. (11%) on siinkohal toimunud selle tuluallika osakaalu teatud vähenemine. Enamik kohalikke omavalitsusi on seisukohal, et neile mittevajalikud varad on müüdud; elanikkonnalt võetavaid tasusid aga ei ole otstarbekas suurendada.

Tasandusfond jaguneb kaheks (tasandusfond 1 2006. a. – 1,168 miljonit ja tasandusfond 2 2006. a. – 3,068 miljonit krooni (Rahandusministeerium). Tasandusfond 1 on riigieelarves moodustatud üksus, mille abil toetatakse nõrgema ja väiksema tulubaasiga kohalike omavalitsuste eelarveid. Toetusi jagatakse vastavalt tasandusfondi valemile, mis on sätestatud iga-aastases riigieelarves. Arvutatakse välja arvestuslikud kulud ühe inimese kohta igas kohalikus omavalitsuses ning võrreldakse näitajaid riigi keskmise tulemusega. Riigi keskmisest kõrgema tulukusega ühe elaniku kohta omavalitsuses tulude tasandamissüsteemist vahendeid ei saada. 2006. aastal oli selliseid kohalikke omavalitsusi ainult 14 (Rahandusministeerium), mis näitab kuivõrd suur on Eestis varaline ebavõrdsus erinevate kohalike omavalitsuste vahel. Tasandusfondi 2 all on mõeldud vahendeid, mis jagatakse kohalikele omavalitsustele riigi eelarvest teatud sihtotstarbega. Sellisteks eraldisteks on näiteks pedagoogide palgad, toimetulekutoetused, väikesaarte toetused jne. Kuna kohalike omavalitsuste õlgadele on asetatud mitmeid riiklikke kohustusi, siis peab riik andma ka vahendid nende täitmiseks. Konkreetsete ülesannete täitmiseks eraldatavad vahendid kajastuvad blokis "ministeeriumide sihtotstarbelised eraldised". Neid vahendeid eraldatakse erinevate ministeeriumide kaudu vastavalt kohustuse iseloomule.

Riigieelarvest eraldatakse kohalikele omavalitsustele raha veel ka investeeringute toetamiseks. Peamiselt finantseeritakse investeeringuid, mis on ära märgitud ministeeriumide investeeringukavades. Nendest kahest blokist saadav tulu kohalike omavalitsuste eelarvetes on keskmiselt 6,4% (vt joonis 1) eelarve suurusest, kuid kuna raha eraldatakse sihtotstarbeliselt, siis ei ole kohalikel omavalitsustel mingit sõnaõigust selle kulutamisel. Kõnealused vahendid tuleb suunata just neile projektidele, millede tarbeks riik on need eraldanud.

Kool kui eelarve kulupõhine tuluallikas

Kohalike omavalitsuste rahastamisele on püütud läheneda nii kulupõhiselt kui tulupõhiselt. Mõlemal seisukohal on pooldajaid; arvestatavaid majandusteoreetilisi töid, mis analüüsiksid seda probleemi just Ida-Euroopa riikide vaatevinklist, meie andmetel aga pole.

Kuni 1995. aastani olid kohalike omavalitsuste eelarved Eestis üles ehitatud kulupõhiselt, s.t. lähtuti iga konkreetse omavalitsuse oodatavatest kuludest. Kuna nende välja toomine oli keerukas, siis praktikas tähendas see järgmise aasta kulude taseme

määramist põhimõttel – eelmise aasta faktiline kulude tase pluss teatud kasvuprotsent. Kui mõnel kohalikul omavalitsusel õnnestus ühel aastal kulude tase "üles" ajada, siis oli tagatud mugav elu aastateks.

Sellise sotsialistlikule plaanimajandusele iseloomuliku ebamajanduslikkust stimuleeriva situatsiooni likvideerimiseks otsustati üle minna kohalike omavalitsuste tulupõhisele rahastamisele, s.o. variandile, mis teatud modifikatsioonidega oli kasutusel aastani 2003 ja mille kriitika on toodud eespool. Aastail 1996–2003 püüti seda süsteemi korduvalt täiustada (asendati planeeritav omatulu elaniku kohta eelmise perioodi tegeliku omatuluga, täpsustati elanike arvu kindlaks määramise metoodikat jne.). Need täiustused on aga viinud paljuski selle tulupõhise süsteemi lammutamisele. Viimase näiteks on kohalikele omavalitsustele kulupõhiselt üle antavad toimetulekutoetused, munitsipaalkoolide rahad jmt eraldised, mis kokku on oma üldsummalt juba täiesti võrreldavad tulupõhiselt jaotatava rahaga (Kohaliku … 2006). Seega olime me juba mõned aastad tagasi *de facto* jõudnud olukorrani, kus kohalikke omavalitsusi rahastatakse nii kulupõhiselt kui tulupõhiselt.

Eeltoodust lähtudes on paaril viimasel aastal kerkinud uuesti teravalt päevakorda küsimus – kas kohalike omavalitsuste rahastamisel on Eestis tegu kulu- või tulupõhine finantseerimise süsteemiga. Ja kumba süsteemi siiski tuleks eelistada?

Nagu juba öeldud, on toimetulekutoetuste maksmisel jmt. juhtudel kohalikud omavalitsused nii-öelda kassapidaja rollis, s.t. nad saavad riigilt raha, mis tihti on leitud otsearvestuse meetodiga, ja maksavad selle seadustest lähtudes välja. Probleem kulu- või tulupõhjalisest eelarvestamisest seda osa kohalike omavalitsuste eelarvetest sisuliselt ei saa puudutada – see osa tuludest on ja saab olla vaid kulupõhine. Probleem kulu- või tulupõhisest kohalike omavalitsuste rahastamismudelist on kogu aeg olnud aktuaalne kohalike omavalitsuste nn. omatulude taseme kindlaks määramisel ja tagamisel; eriti just toetusfondi 1 suuruse leidmisel ja selle fondi jaotamise aluste kindlaks määramisel. Aastatel 1996–2002 oli selle fondi jaotamise põhimõte dominantselt tulupõhine. Mida väiksemad olid konkreetse kohaliku omavalitsuse nn. omatulud (isiku tulumaks, maamaks ja loodusvarade kasutustasu), seda rohkem raha toetusfondist 1 antud kohalikule omavalitsusele eraldati. Kui suurenesid maksutulud, vähenesid koheselt konkreetsele kohalikule omavalitsusele tasandusfondist eraldatavad summad. See vähendas oluliselt kohalike omavalitsuste motivatsiooni omatulude suurendamiseks. Teiseks oluliseks aastatel 1996–2002 kasutatud tasandusfondi (täpsemalt: toetusfondi 1, kuid see vahetegemine algas hiljem) jaotamise valem puuduseks oli tema täielik lahutamine kuludest. Konkreetsele kohalikule omavalitsuste lausa hädavajalik kulude tase ühe elaniku kohta võib olla ja ongi erinev, sõltudes elanikkonna vanuselisest ja soolisest struktuurist, asutuse hajuvusest (seega ka kommunikatsioonide – teed-tänavad, tehnovõrgud jne. – pikkusest) jmt teguritest. Neid faktoreid tasandusfondi 1 jaotamise valem aastani 2002 ignoreeris.

Alates 2003. a. toimub tasandusfondi jaotamine uue valemi alusel, mis püüab integreerida kulupõhist (oli kasutusel enne 1995. aastat) ja tulupõhist (domineeris aastatel 1996–2002) lähenemist. Vaatamata oma keerukusele (vt. allpool), mis pea-

legi raskendab tema rakendamist, ei lahenda valem kaugeltki kõiki paljude kohalike omavalitsuste tulubaasi nõrkusest tulenevaid probleeme. Tema kasutamine küll võimaldab 3–4 aasta võrra edasi lükata kardinaalseid reforme kohalike omavalitsuste tulubaasi kujundamisel, kuid mitte mingil juhul veel ei lahenda sisuliselt olemasolevaid probleeme. Seetõttu on kohalike omavalitsuste rahastamise uute aluste edasised otsingud ülimalt aktuaalsed. See teema ei kuulu otseselt käesoleva kirjutise raamesse, kuid kuna kool moodustab suure osa kohalike omavalitsuse kuludest; ja nagu allpool näitame, tagab ka mainimisväärse sissetuleku just nõrgema tulubaasiga kohalikele omavalitsustele, siis temast täiesti mööda minna ka ei saa. Seda enam, et seoses nn. tagasilaekumistega kohaliku omavalitsuse eelarvesse isiku tulumaksu näol põimuvad kulu- ja tulupõhine rahastamine kõige tugevamalt just siinkohal. Loobumisel isiku tulumaksust kui kohalike omavalitsuste rahastamise põhitulust tuleb seoses nende summade ära langemisega kohalike omavalitsuste eelarvetest see tulubaasi vähenemine neile mingil kujul kindlasti kompenseerida

Kooli nn. otsesest mõju omavalitsuste eelarvele

Kool on üks neid kohti, kus vaatamata korduvalt deklareeritud nn. tulupõhisele kohalike omavalitsuste rahastamise põhimõttele on kasutusel dominantselt kulupõhine rahastamine. Koolide majanduskulud ja pedagoogilise personali palgad kaetakse riigieelarvest lähtudes õpilaste arvust. Riigieelarvest finantseeritakse ka suuremaid investeeringuid – koolide renoveerimine või uue kooli ehitus. Kuna kohalik omavalitsus on siin nii-öelda kassapidaja rollis, siis kohalike omavalitsuste minimaalsed võimalikud nn. omakulud koolile on 0. Palkadest aga laekus 2004. aasta tingimustes tagasi 11,4% ja 2006 aasta omades 11,8% ning alates 2007. a. koguni 11,9% brutopalgast. 2004. aastal kulutasid Eesti kohalikud omavalitsused koolidele kokku 4148 miljonit krooni (sellest algkoolid 85 miljonit, põhikoolid 1085, gümnaasiumid 2893 ja täiskasvanute gümnaasiumid 85 miljonit krooni), mis moodustas kohalike omavalitsuste summaarsest eelarvest pea 30%. 2007. aastaks olid need summad kasvanud juba 8,657 miljardi kroonini (Kuuaruanne … 2007), mis moodustas nüüd juba veidi üle 30% kohalike omavalitsuste kogukulutustest.

Esimesel lähenemisel näib, et selle raha osas on kohalik omavalitsus vaid kassapidaja rollis – raha tuleb riigieelarvest ja läheb ka välja. Kuigi selle raha kulutamisel kohalikel omavalitsustel tõesti puudub mistahes otsustamisõigus, on siinkohal olemas kohaliku omavalitsuste otsene rahaline huvi – sellelt rahalt makstav isiku tulumaks laekub allpool toodud valemist lähtudes kohalikule omavalitsustele. Seega võib väita, et otseselt said kohalikud omavalitsused oma eelarvetesse tänu koolile juurde nendes kulutustes olevate palkade summa korrutatuna 11,8% (2007. a. alates 11,9%).

Palkade osakaalu koolidele kulutatud rahas ametlik statistika välja ei too (vähemalt meie käsutuses olevatel andmetel). Küll aga on võimalik seda leida üksikutes omavalitsustes nende algandmestiku baasil. Nii kulutas Tartu linn üldhariduskoolidele 2006. aastal 211 554 tuhat krooni, millest palkadeks läks 160 714 tuhat krooni ehk 79,7% (autori arvutused algdokumentatsiooni alusel). Sama metoodikaga

leitud palgakulude osakaal oli autori arvutuste alusel samal aastal Viljandi linnas 79,6 ja Ülenurme vallas 80,1%. Kuna hälbed olid väga väikesed, siis võttes siinkohal keskmiseks 80% ja arvestades võimalikku viga, võib väita, et koolide palgarahad lisasid kohalike omavalitsuste eelarvetesse 2004. aasta tingimustes ligikaudu $4148 \times 0{,}8 \times 0{,}114 = 385$ miljonit krooni ning 2007. aastal $5146 \times 0{,}8 \times 0{,}119 = 490$ miljonit krooni. (Autori arvutused algdokumentatsiooni alusel) Tegelikult on tagasilaekumine suurem – lähtudes ceteris paribus printsiibist ei ole siinkohal arvestatud kohalike omavalitsuste eelarvete täiendavat tulu koolisööklate, katlamajade jt koole teenindavate asutuste palkadelt. Antud probleemi vaatleme allpool.

Keerulisem on olukord koolieelsete lasteasutuste ja spordi- ning huvikoolidega. Nende rahad ei tule riigieelarvest sihtfinantseerimisena, küll aga laekub ka nii kulutatud rahalt isiku tulumaks kohalike omavalitsuste eelarvetesse. Spordikoolidele ja huvikoolidele kulutati kohalike omavalitsuste poolt 2006. aastal 760 miljonit ja koolieelsetele lasteasutustele 1,7 miljardit krooni. (Kuuaruanne … 2006) Arvutused teeb aga keeruliseks asjaolu, et nende asutuste osas erineb aruandlus veidi üldhariduskoolide osast, mistõttu palgakulude osakaalu on veelgi raskem välja tuua. Tartu linnas moodustas see 2006. aastal ligikaudu 71–72%; Viljandi ja Ülenurme aruandlusest ei osutunud selle väljatoomine piisava täpsusega võimalikuks (Tartu on teinud omal algatusel täiendavaid analüüse, mis olid siinkohal suureks abiks). Võttes aluseks Tartu linna andmed, võib väita, et tagasilaekumine neilt summadelt moodustas 2006. aastal vähemalt $(1{,}7 + 0{,}7) \times 0{,}7 \times 0{,}118 = 186$ miljonit krooni. Ka siin ei ole arvesse võetud täiendavaid laekumisi nende asutuste palkadelt, mis teenindavad neid haridusasutusi. Ja mis eriti oluline, ei ole arvestatud täiendavaid kaudseid laekumisi tulumaksust riigieelarvest tulevatest investeeringusummadelt. Kuid neis kohalikes omavalitsustes (eriti just väiksemates), kus on riigi rahade arvel ehitatud uusi koole, on need summad olnud mõnel aastal üliolulised. Seda vaatamata asjaolule, et just nendes väiksemates kohalikes omavalitsustes on tihti oldud sunnitud kasutama väljastpoolt tulevate ehitajate teeneid.

Järeldus saab olla ainult üks. Kuna mitmetel siin mitte vaadeldavatel põhjustel on lähiaastatel vaja kardinaalselt reformida isiku tulumaksul baseeruvat omavalitsuste rahastamise süsteemi (Raju 2007), siis tuleb leida selle reformi käigus kohalike omavalitsuste eelarvetele täiendavaid tuluallikaid vähemalt 0,6–0,8 miljardi krooni ulatuses nn. tagasilaekumiste ära langemise kompensatsiooniks.

Kooli mõju kohalike omavalitsuse eelarve tulude poolele ei ole siiski nii üks-üheselt positiivne. Nimelt sisaldab kohalike omavalitsuste eelarvetele tasandusfondist 1 raha jaotamise valem üht immanentset vastuolu tema mistahes koefitsientide suuruse ja mistahes nn. omatulude kasvu – seega ka kooliõpetajate palkadelt laekuva tulumaksu kasvu – korral. "2008. aasta riigieelarve seaduse" § 4 lõige 1 (RT I, 31.12.2007, 74, 451) kehtestab kohaliku omavalitsuse üksuste eelarvete tasandusfondi jaotamiseks alljärgneva valemi:

(1) $T_n = (AK - AT) \cdot k$

kus

$$AK = \left(\sum_{n=1}^{6} C_n \cdot P_n \right)$$

$$AT = \left\lfloor TM_{2006} \cdot 0{,}5 + TM_{2005} \cdot 0{,}3 + TM_{2004} \cdot 0{,}2 + \underset{ARVEST}{MM} + \underset{ARVEST}{RESM} \right\rfloor$$

T_n – tasandusfondi suurus konkreetses kohaliku omavalitsuse üksuses (kui $AT > AK$, siis $T_n = 0$);

AK – konkreetse kohaliku omavalitsuse üksuse arvestuslik keskmine tegevuskulu;

AT – konkreetse kohaliku omavalitsuse üksuse arvestuslikud tulud;

K – toetustaseme koefitsient;

Cn – konkreetse kohaliku omavalitsuse üksuse laste (0–6 eluaastat) arv, kooliealiste (7–18 eluaastat) arv, tööealiste (19–64 eluaastat) arv, vanurite (65+ eluaastat) arv rahvastikuregistri andmetel, kohalike maanteede ja linnatänavate arvestuslik pikkus (kõvakattega maanteed 0,26; linnatänavad 0,74; mittekõvakattega maanteed 0,047 osakaaluga) kilomeetrites ning hooldatavate ja hooldajateenust saavate puudega isikute arv hooldajatoetuse aruande järgi;

Pn – kohalike omavalitsuste arvestuslik keskmine tegevuskulu kroonides ühe lapse (0–6 eluaastat), kooliealise (7–18 eluaastat), tööealise (19–64 eluaastat), vanuri (65+ eluaastat), hooldatava ja hooldajateenust saava puudega isiku ning kohaliku maantee ja linnatänava arvestusliku pikkuse (kõvakattega maanteed 0,26; linnatänavad 0,74; mittekõvakattega maanteed 0,047 osakaaluga) ühe kilomeetri kohta kroonides;

$\sum C_n \cdot P_n$ – konkreetse kohaliku omavalitsuse üksuse laste arv, kooliealiste arv, tööealiste arv, vanurite arv, hooldatavate ja hooldajateenust saavate isikute arv ning kohalike maanteede ja linnatänavate arvestuslik koefitsientidega korrigeeritud pikkus kilomeetrites ja iga vastava näitaja osas ühe ühiku kohta arvutatud kohalike omavalitsuste arvestusliku keskmise tegevuskuluga kroonides korrutiste kogusumma;

TM – üksikisiku tulumaksu laekumine konkreetses kohaliku omavalitsuse üksuses vastavalt 2004., 2005. ning 2006. aastal viiduna võrreldavaks 2007. aastal kehtiva kohaliku omavalitsuse üksustele laekuva tulumaksu osaga;

$\underset{ARVEST}{MM}$ – arvestuslik maamaks (1,25% üldise maa ja 0,6% põllumajandusmaa maksustamise hinnast 2006. aastal) konkreetses kohaliku omavalitsuse üksuses;

$\underset{ARVEST}{RESM}$ – arvestuslik maavarade kaevandamisõiguse tasude ja vee-erikasutustasu planeeritav suurus 2007. aastal konkreetses kohaliku omavalitsuse üksuses.

Tasandusfondi (tegelikult toetusfondi 1) summade (2007. aastal 1,43 miljardit krooni) jaotamise valemi vaatlemisel selgub, et kooli mõju kohalike omavalitsuste eelarvete täiendavale tulule on mitmetahuline. Täiendav laekumine tasandusfondist sõltub kõigepealt nn. omatuludest. Mida suuremad need on, seda väiksem on tasandusfondist tulev summa. Järelikult õpetajate jt, eelloetletud koolist tulu saavate

isikute palgasumma vähendab tasandusfondist kohalikele omavalitsustele tulevaid laekumisi (vt. *AK* eeltoodud valemis). Kuid samal ajal on kõik see sees ka valemis olevas näitajas *AT*. Seega lõpptulemusena sõltub kõik sellest, kumb näitaja on T_n leidmisel suurema osakaaluga. Kuna näitaja *AT* juures võetakse viimase aasta tulumaks koefitsiendiga 0,5, varasemad koefitsientidega vastavalt 0,3 ja 0,2, ning palgatase on pidevalt tõusev, siis on selge, et vahe *AK*–*AT*, mis on olulisim tasandusfondi suuruse tegur mistahes kohalikus omavalitsuses, on tänu koolile (kooliga seotud inimeste palkadele) positiivne. Siit järeldus – kool toob kohalikule omavalitsusele tasandusfondist 1 rohkem tulu kui kulutab. Viimane kehtib loomulikult nende kohalike omavalitsuste suhtes, millised saavad täiendavat tulu tasandusfondist 1. Mis puutub neisse kohalikesse omavalitsustesse, kus toetusfondist 1 raha ei saada, siis neis on iga isiku tulumaksult laekunud kroon puhas eelarve täiendav tulu. (NB! Neis omavalitsustes elab *ca* 40% elanikkonnast!) Ülejäänutel tuleb arvestada, et isiku tulumaksu laekumiste suurenedes vähenevad toetusfondist 1 makstavad summad vastavalt eeltoodud valemi koefitsiendi k väärtusele, mis on siiani kogu aeg olnud 0,9. Selline koefitsiendi väärtus tähendab, et iga nii laekunud kroon täiendavat tulumaksu vähendab tasandusfondi summasid järgmisel aastal $0,9 \times 0,5 = 0,45$ kr võrra, ülejärgmisel $0,3 \times 0,9 = 0,27$ kr võrra ja kolmandal aastal $0,2 \times 0,9 = 0,18$ kr võrra. Seega ei ole õige laialt levinud väide, et kohalikel omavalitsustel ei tasu suurendada nn. omatulusid kuna see toob kaasakohalikele omavalitsustele toetusfondist eraldatavate summade automaatse vähenemise 90% võrra.

Lõpetuseks tahaks veelkord rõhutada, et kogu eeltoodud arvutus on tehtud ilma kaudsetelt kuludelt (tulumaks koole teenindavate asutuste palgalt) ja nn. ühekordsetelt suurematelt riigieelarvelistelt eraldistelt (eelkõige toetus koolide ehitamiseks ja renoveerimiseks) laekuva täiendava isiku tulumaksu arvesse võtmiseta. Alljärgnevalt vaatlemegi neid summasid.

Kool kui kohalike eelarvete laekumiste kaudne suurendaja

Kooliga seotud inimestest saab enamik töötasu riigilt ja väiksem osa kohaliku omavalitsuse eelarvest. Riigilt saavad töötasu õpetajad ja koolijuhid; kogu ülejäänud koolipersonal: majanduspersonal (koristajad, töömehed, kütjad jne), huvialaringide juhid, logopeed, psühholoog jne saavad töötasu kohalikult omavalitsuselt. Lisaks eelpool toodule kuulub kooli poolt maksmisele ka tasu lepinguliste tööde eest (sellest lõviosa moodustavad suvised remonttööd). Kool funktsioneerib vahendatud tööandjana kaubandusele (siin kulutatakse saadud palga enamik), koolisöökla personalile, kooli köetakse ja varustatakse veega; kool kasutab transporditeenust (eelkõige busse); kool on arvestatav arveldaja, mis pakub tööd pangale jne. Kõigi nende jmt siin nimetamata väljamaksete pealt laekub isiku tulumaks jällegi kohaliku omavalitsuse eelarvesse.

Sellist kohalikku omavalitsuse eelarvet kaudselt toetavate väljamaksete pealt laekuva tulumaksu suurust on väga keeruline. Teeme siiski katset seda summat kasvõi ligikaudugi välja tuua.

Kohalike omavalitsuste eelarvete tulude kasvu leidmiseks selliste kaudsete tulude baasil on otstarbekas jaotada need väljamaksed kaheks. Ühtesid neist võiks nimetada teise astme täiendavateks tuludeks. Siia kuulub vahetult koolile osutatud teenuste eest tehtud väljamaksetelt laekunud tulumaks, nagu näiteks tasu bussifirmale ekskursioonibussi kasutamise eest. Teised on ülimalt kaudsed mõjud, nagu näiteks õpetaja palkade eest kaubamajast tehtud ostude tõttu müüjale makstud palgalt tulumaksu laekumine kohaliku omavalitsuse eelarvesse. Esimesed neist on teatud, mitte küll eriti suure, täpsusklassiga leitavad, teised ilmselt mitte.

Kohalike omavalitsuste poolt 2007. aastal haridusele kulutatud summad moodustasid 8,656 miljardit krooni. Sellest kulutused alg- ja põhikoolidele 1,423 miljardit krooni ning gümnaasiumitele 3,702 miljardit krooni (Kuuaruanne … 2007) Sellest summast läks loomulikult lõviosa palkadeks. Koolide endi poolt mitmesuguste teenuste eest makstud summad moodustasid 0,297 miljardit krooni. Lisaks sellele maksid omavalitsused mitmesuguste abiteenuste eest 0,077 miljardit krooni, õpilasliinide eest 0,111 miljardit krooni ning muudeks kuludeks (mitte kooli enda personalile, NB!) 0,160 miljardit krooni, Seega maksid kohalikud omavalitsused selliste teenuste eest kokku 0,585 miljardit krooni (autori arvutused, Rahandusministeerium). Kui siia lisada veel eelhariduse arved 262 miljonit krooni ja huvikoolide ning spordikoolide arved 131 miljonit krooni, saame, et haridussüsteemi arvete eest maksid kohalikud omavalitsused kokku 978 miljonit krooni. Kui nüüd võtta aluseks keskmine palga osakaal SKP-s, mis 2007. a. oli palgakulu 116 miljardit jagatud SKP 243 miljardiga ehk 47,7%, siis sellest summast maksti palkadena välja 466,5 miljonit krooni, millelt kohalikele omavalitsustele laekunud tulumaks (11,9%) moodustas 55,5 miljonit krooni. Loomulikult on selline arvestus ligikaudne, kuid arvestades asjaolu, et koolide poolt makstud arved jagunevad väga erinevate valdkondade – transport, kütmine, koolitarbed, toitlustamine jne. – vahel, siis võib oletada, et palkade osakaal neis, ei erine väga oluliselt Eesti keskmisest.

Palju keerulisem on välja tuua, kuipalju seoses koolide olemasoluga suurenes pankade, jaekaubanduse jne käive. Igal juhul ei saanud tänu sellele kohalike omavalitsustele laekunud isiku tulumaksu summa olla väiksem nn. otseste arvete eest laekunust. Seega võib väita, et tegelik tagasilaekumine kohalike omavalitsuste eelarvetesse tänu kooli olemasolule on veel vähemalt 100 miljoni krooni võrra suurem. Üleminekul uuele kohalike omavalitsuste rahastamise süsteemile tuleb leida vahendeid ka selle summa kompenseerimiseks.

Koolid teenivad teatud osa rahast ka ise, nn. omalaekumistena. Tulud haridusasutuste majandustegevusest moodustasid 2007. aastal 698 miljonit krooni (Kuuaruanne … 2007). Ka selle summa (miinus nende teenimiseks tehtud kulud) võrra suurenesid tegelikult omavalitsuste tulud.

Laste mõju tasandusfondi 1 koefitsientidele

Nagu juba eespool toodud, saavad need kohalikud omavalitsused, kellede nn. omatulud on alla 90% vabariigi keskmisest, madala tulutaseme kompensatsiooniks täiendavaid summasid tasandusfondist 1. Tasandusfondi1 jaotamise eelpool toodud

valem sisaldab ka kooliealiste laste arvu. Seega mõjutavad koolilapsed tasandusfondi suurust, Muidugi ei ole valemis kirjas, kas need lapsed reaalselt ka käivad oma elukohajärgse kohaliku omavalitsuse territooriumil asuvas koolis või kas nad üldse käivad koolis, kuid tehes juba ka eespool kasutusel olnud lihtsustuse võime me suhteliselt väikese veaga lugeda neid koolilasteks (vähemalt Eesti keskmise arvutamisel, sest kui nad ei käi koolis "koduvallas", teevad nad seda – mõne väikese erandiga – mõne teise kohaliku omavalitsuse territooriumil).

Valem sisaldab korrutist $C_n \cdot P_n$, kus C_n on antud vanuserühma elanike (meie arvutustes koolieliste laste vanuses 7–18 aastat) arv antud kohaliku omavalitsuse territooriumil ja P_n kohalike omavalitsuste keskmine arvestuslik tegevuskulu antud vanuserühmas oleva inimese kohta. Kõikide vanuserühmade kohta leitud korrutiste summast lahutatakse kohaliku omavalitsuse nn. omatulud. Saadud vahe ongi aluseks kohalikule omavalitsusele eraldatava tasandusfondi summa leidmisel.

Kuna suhteliselt suur osa lastega seotud kulude üldsummast, mis sisaldab pea 100% ulatuses just kooliga seotud kulusid – muude kulutuste, nagu kulud mänguväljakutele jne osakaal on kohalike omavalitsuste eelarvetes kooli kulutuste kõrvale lausa marginaalne – kaetakse riigieelarvest, siis tekkib siinkohal topeltefekt. Tänu koefitsiendi P_n väärtus on koolieliste vanuserühmas suurem (0–6 13,133; 7–18 10,443; 19–64 4,325 ja 65+ 6,285) kui näiteks täiskasvanuil, siis suurendab iga laps toetusfondi ligikaudu 2,5 korda rohkem kui täiskasvanu. Konkreetne summa sõltub muidugi nii leitud arvestuslike tegevuskulude ja nn. omatulude vahest antud kohaliku omavalitsuse eelarves. Arvestades koefitsientide erinevusi vanuserühmades 0–6, 7–18, 19–64 ja 65+, selgub, et toetusfondi 1 summast jaotatakse tänu laste olemasolule pea 40% ehk üle 550 miljoni krooni.(Ei tohi unustada, et osa sellest fondist jaotatakse sõltuvalt teedevõrgust antud kohaliku omavalitsuse territooriumil). Loomulikult ei saa siinkohal mingeid täiendavaid rahasid need kohalikud omavalitsused, millistes nn. omatulud inimese kohta on üle vabariigi keskmise.

Kooli tulud on kuludest suuremad

Püüame siis nüüd kõrvutada tänu koolidele olemasolule kohalike omavalitsuste eelarvetest makstud ja sinna laekunud summasid. Jätame välja need rahad, kus kohalikud omavalitsused on vaid kassapidaja rollis, nagu näiteks riigieelarvest otsearvestuse alusel tulevad õpetajate palgad, mille kohalik omavalitsus lihtsalt maksab välja omamata mingeid õigusi initsiatiiviks selle raha kasutamisel.

Nagu juba toodud, moodustasid kohalike omavalitsuste kulud koolidel, mida ei kaetud riigieelarvest, 2007. aastal 585 miljonit krooni. Koolide olemasolu suurendas otseselt kohalike omavalitsuste eelarveid täiendavate tulumaksulaekumiste arvel 490 miljonit krooni. Sellele lisandub veel vähemalt 100 miljonit krooni tulumaksu mitmesuguste teenuste osutajate töötasudelt. Juba ainuüksi selle arvestusega on kohalikud omavalitsused koolide majandamisel nii-öelda plussis, s.t. koolidele tehtud kulutused on väiksemad tänu koolidele saadud (täiendavast) tulust.

Siinkohal ei ole arvestatud neid summasid, mis omavalitsustele laekuvad seoses riigieelarvest tehtavate ühekordsete suuremate rahaeraldistega koolide ehitamiseks ja renoveerimiseks (tulumaks ehitajate palkadelt laekub kohalike omavalitsuste eelarvetesse). Samuti on sisuliselt kohalike omavalitsuste täiendav tulu ka koolide endi poolt mitmesuguste teenuste eest saadud täiendav raha (2007. aastal 698 miljonit krooni; Rahandusministeerium). Selle summa puhul tuleks muidugi maha arvestada antud teenuste osutamise kulud, mida aga kehtiv aruandluse süsteem ei võimalda eristada.

Nende kohalike omavalitsuste korral millised ei saa raha tasandusfondist 1, võib analüüsi siinkohal lõpetada. Nende kohalike omavalitsuste, millised aga saavad raha tasandusfond 1st, täiendavad laekumised sellest fondist on aga seotud koolide kaudu välja makstavalt palgalt tuleva tulumaksu laekumistega ja kooliealiste laste arvuga. Palkadelt laekuv tulumaks vähendab laekumisi sellest fondist esimesel aastal 0,5k teisel aastal 0,3k ja kolmandal aastal 0,2k võrra, kus k on koefitsient väärtusega 0,9. Seega mitte 90% aga tihti arvatakse vaid märksa vähem, eriti kui arvestada kiiret palkade kasvu ja inflatsiooni.

Kokkuvõte

Eeltoodud analüüs võimaldab teha järgmised põhilised järeldused.
1. Praegu kasutusel oleva kohalike omavalitsuste rahastamise süsteemi võimalused on ammendumas. Temaga mööda pääsmatult kaasnevad suured erinevused kohalike omavalitsuste tulude tasemes aga ka tulumaksu määra ja tulumaksuvaba miinimumi mööda pääsmatu jätkuv kasv nõuavad praeguse süsteemi kiiret ja kardinaalset reformimist.

2. Tänu isiku tulumaksu nn tagasilaekumisele toimivad koolid jt lasteasutused omamoodi rahapumbana riigieelarvest kohalike omavalitsuste eelarvetesse. Kohalike omavalitsuste poolt tänu kõigis lasteasutustes tehtud väljamaksetele täiendavalt saadud isiku tulumaksu summa ületas 2007. aastal ka mittetäielike arvutuste alusel kindlasti miljardi krooni piiri.

3. Kohalikele omavalitsustele tänu koolide olemasolule täiendavalt laekunud isiku tulumaksu summa oli 2007. aastal vähemalt 600 miljonit krooni. Kohalike omavalitsuste kulud koolide ülalpidamiseks, mida ei kompenseerita riigieelarvest, olid 585 miljonit krooni. Seega ainuüksi täiendav tulumaksu laekumine kattis kohalikele omavalitsustele ära koolidele tehtavad riigieelarvest mittekompenseeritavad kulud.

4. Lisaks eeltoodule saavad täiendavat tulu tänu kooli olemasolule kõik kohalikud omavalitsused, millised ei saavad kompensatsiooni tasandusfondist1. Neis kohalikes omavalitsustes, millised saavad tulu tasandusfondist 1, moodustab see täiendav rahalaekumine tasandusfondi summade vähenemise arvestatava protsendi laekunud tulumaksu summast. Kool avaldab tasandusfondi 1 laekuvatele summadel kahepoolset mõju. Kuna tasandusfondi eraldamise valemis on sees koefitsiendid, mis viivad laekuvad summad sõltuvusse elanikkonna jaotusest vanusegruppidesse, siis tänu suurtele koefitsientidele vanuserühmas 0–6 13,13; 7–18 10,44; 19–64 4,33,

65+ 6,28) saavad siit suuremaid eraldisi just need kohalikud omavalitsused, kus on rohkem lapsi. Samal ajal koolides jt lasteasutustes makstav palk suurendab nn. omatulusid. Toetusfondist 1 (kokku 2007. aastal 1,4 miljardit krooni) saavad suuremaid täiendavaid eraldisi just need kohalikud omavalitsused, kus omatulu elaniku kohta on väiksem.

Seejuures ei vähene tänu omatuludele eraldised kohalikule omavalitsusele mitte koefitsiendiga 0,9 nagu üldiselt arvatakse, vaid oluliselt vähem.

5. Haridusasutuste poolt teenuste osutamise eest saadud tulud täiendasid 2007. aastal kohalike omavalitsuste eelarveid 698 miljoni krooni võrra. Välja tuua, milline on siin kooli ja milline teiste haridusasutuste osa, kehtiv aruandluse süsteem ei võimalda.

6. Koolieelsete lasteasutuste kulud kaetakse dominantselt kohalike omavalitsuste eelarvetest (neid ei kompenseerita otseselt riigieelarvest). Seetõttu on vaatamata lapsevanemate mitte just väikesele osalusmäärale koolieelsete lasteasutuste kulud kohalikele omavalitsustele suuremad kui nn. tagasilaekumised. Nende kulutuste täpsem väljatoomine ei ole praeguse omavalitsuste aruandluse süsteemi juures praktiliselt võimalik.

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ENTWICKLUNGEN IN DER ESTNISCHEN WIRTSCHAFT

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Einleitung

Entwicklungen und Veränderungen vollziehen sich in allen Ländern. Die Entwicklungen in Estland, so wie in vielen anderen Staaten des ursprünglichen Ostblocks, sind im letzten Jahrzehnt des vorigen und im gegenwärtigen Jahrzehnt des 21. Jahrhunderts recht beeindruckend. Dabei fallen besonders die Staaten auf, die ihre Eigenständigkeit hergestellt und die Unabhängigkeit wiedererlangt haben. Deswegen erscheint es angezeigt, eine aktuelle Bilanz zu ziehen: Wohin haben uns die Entwicklungen gebracht? Was für Probleme stehen auf der Tagesordnung? Welche Aufgaben müssen gelöst werden?

Ziel des vorliegenden Beitrages ist, einen Überblick über die jetzige Lage und die aktuelle Problematik der estnischen Wirtschaft zu vermitteln und Perspektiven für die weitere Entwicklung aufzuzeichnen.

In diesem Artikel sollen folgende Bereiche und Probleme der Republik Estland näher betrachtet werden:

- Allgemeine wirtschaftliche Lage.
- Veränderungen der Steuersätze, Tarife und Preise im Jahre 2008.
- Entwicklungen auf den Arbeitsmärkten und der Löhne und Gehälter.
- von der breiten Öffentlichkeit diskutierte Themen der estnischen Gesellschaft.

Die empirischen Angaben stützen sich auf Datenbanken verschiedener estnischen Institutionen.

Die Vertreter des öffentlichen Lebens in Estland, wie Parlaments- und Regierungsmitglieder, Landräte, Oberbürgermeister, Führungskräfte der kommunalen Selbstverwaltung sowie der Wirtschaft, die oft unterschiedliche Parteien vertreten oder diesen zumindest nahe stehen, betonen in ihren Auftritten in erster Linie positive Entwicklungen in der estnischen Wirtschaft und im gesellschaftlichen Umfeld. Ohne Zweifel sind diese Errungenschaften es wert, erwähnt zu werden. Aber Mängel, begangene Fehler, Unterlassungen und daraus resultierende Schwierigkeiten werden sehr oft verschwiegen oder nur kurz angesprochen. Im vorliegenden Artikel wird das Augenmerk vor allem auf diese Fehlentwicklungen, negativen Tendenzen, begangenen Fehler und die sich daraus ergebenden Gefahren und Probleme, die auch unsere Gesellschaft bedrohen, gerichtet. Sie bedürfen unbedingt einer Richtungsänderung und Lösung.

Allgemeine wirtschaftliche Lage

Heute kann festgestellt werden, dass sich die estnische Volkswirtschaft seit ihrem EU-Beitritt in ziemlich schnellem Tempo entwickelt hat. Dies ist nicht nur auf die

EU-Mitgliedschaft zurückzuführen. Bereits seit der Wiedererlangung der Unabhängigkeit in den Jahren 1991–1992 ist die estnische Wirtschaft schnell gewachten. Allerdings hat sich im Jahre 2007 dieses bisher erfreuliche Wirtschaftswachstum erstmalig wieder verlangsamt. Für 2008 rechnet die Estnische Zentralbank mit einem weiteren Rückgang des Wirtschaftwachstums. Die bisher positive Aufwärtsentwicklung in den Wachstumsraten ist offenbar etwas ins Stocken geraten. Ob sich diese Umkehr fortsetzen wird, bleibt abzuwarten. Bereits im Verlauf des Jahres 2007 zeichneten sich negative Einflussgrößen ab, wie Stagnieren und Sinken der Immobilienpreise, Rückgang der Baukapazitäten, Anstieg der Verbrauchsgüterpreise, insbesondere bei Lebensmitteln. Weitere Gefahren in der Zukunft sind zu erkennen, wie u. a. steigende Preise für Energieträger und einige Dienstleistungen, sich fortsetzender Anstieg der Lebensmittelpreise, Erhöhung einiger Verbrauchsteuern.

Obwohl Estland seit dem 1. Mai 2004 der Europäischen Union angehört, kann man heute noch keine endgültigen Schlussfolgerungen über den Einfluss dieses Beitritts ziehen, zumal bisher nur Daten über eine relativ kurze Zeitspanne vorliegen. Dabei muss auch berücksichtigt werden, dass jedes Land, auch wenn es Vollmitglied der Union geworden ist, vorerst seine wirtschaftspolitischen Entscheidungen zum überwiegenden Teil noch selbständig trifft.

Die folgende Tabelle 1 zeigt einige wesentliche Daten zur Entwicklung der estnischen Wirtschaft im Jahre 2007 und vorausblickend im Jahre 2008 (Veränderungsgrößen im jeweiligen Vorjahresvergleich).

Die Kennziffern zeigen, dass sich die estnische Wirtschaft voraussichtlich nicht mehr mit einem solch dynamischen Aufschwung wie bisher weiter entwickeln wird, sondern eher durch ein sich verlangsamendes Wirtschaftswachstum gekennzeichnet ist. Es ist zu befürchten, dass sich die Preissteigerungen für viele Waren und Dienstleistungen weiter fortsetzen, teilweise sich sogar noch verstärken werden. Für die Bevölkerung besonders schmerzlich sind die steigenden Lebensmittelpreise, in erster Linie die Preise für Grundnahrungsmittel wie Brot, Milch und Fleisch. Für Schweinefleisch wird im Frühjahr ein deutlicher Preisanstieg erwartet, weil dann das Fleisch auf den Markt kommt, für dessen Produktion das teuere Kraftfutter zum Einsatz gekommen ist. Der Grund für die meisten Preissteigerungen liegt in der Verteuerung der Energieträger, aber auch im Anstieg der Arbeitskosten, vor allem der Grundlöhne. Das Estnische Konjunkturinstitut hat für 2008 eine Inflationsrate von 10% prognostiziert. (Josing 2007) Viele kommunale Selbstverwaltungen und Betriebe haben für ihre Leistungen Preiserhöhungen angekündigt. Auch sind Steuererhöhungen geplant.[1]

[1] Siehe den folgenden Abschnitt 2.

Tabelle 1. Kennziffern zur Lage und Entwicklung der estnischen Wirtschaft[2]

Nr.	Kennziffer und Maßeinheit	2007	2008 (Prognose im Jahres-Durchschnitt)
1.	Wirtschaftswachstum, %	7.4	5.05
2.	Verbraucherindex, %	6.5	7.7
3.	Durchschnittslöhne und -gehälter, EEK	11 250	12 866
4.	Arbeitslosigkeit, %	4.75	5.5
5.	EEK / USD (Bemerkung: 1 EUR = 15.6466 EEK)	1 USD = 10.90 EEK	1 USD = 11.42 EEK
6.	Benzinpreis E95 pro 1 Liter, EEK	14.40	15.95
7.	Talibor (Tallinn Interbank Offered Rate) im 6-Monate Durchschnitt, %	7.55	6.73
8.	Börsenindex OMX Tallinn	739	769

Andererseits ist festzustellen, dass nach Einschätzung zahlreicher Institutionen Estland in der Welt gar nicht so schlecht dasteht (Tabelle 2).

Tabelle 2. Estlands Plazierung in der Länderrangliste auf Grund verschiedener Indikatoren in den Jahren 2005–2008

Indikator	Bewertende Institution	Jahr	Platzierung Estlands
Geschäftsfreiheit	Heritage Foundation	2006	4.
Wirtschaftsfreiheit	Heritage Foundation	2007	12.
Wirtschaftsfreiheit	Fraser-Institut	2007	12.
Gewerbefreiheit	Weltbank	2007	17.
Info-Technologie	Weltwirtschaftsforum	2006/2007	20.
Zugang zum Kapital	Milken-Institut	2005	21.
Konkurrenzfähigkeit	Management Development Institut	2007	22.
Konkurrenzfähigkeit	Weltwirtschaftsforum	2007/2008	27.
Umweltschonung (Umweltverträglichkeit)	Universitäten Yale und Columbia	2005	27.
Konkurrenzfähigkeit der Touristikbranche	Weltwirtschaftsforum	2006/2007	28.
Humane Entwicklung	UNO	2007	44.

Quelle: Arrak 2008: 19.

Diese positive Einschätzung des estnischen Umfeldes kann aber nicht darüber hinwegtäuschen, dass bestehende Missstände ein latentes Gefährdungspotenzial bedeuten.

[2] Bei der Errechnung der Durchschnittsprognose dienten als Grundlage die Prognosen folgender Institutionen: Eesti Pank [Estnische Bank], Hansabank Markets, SBM Bank, Rahandusministeerium [Finanzministerium], DnB Nord Grupp, Eesti Konjunktuuri Insituut [Estnisches Konjunkturinstitut], LHV [*Vermögensverwaltungsfirma*], Postimees [*führende estnische Tageszeitung*]; Quelle: Uusen 2008: 8–9.

Nach der entbehrungsreichen Zeit während der sowjetischen Okkupation entwickelten sich die estnische Wirtschaft in schnellem Tempo und damit auch die finanziellen Möglichkeiten der Bevölkerung. So wuchs die Nachfrage nach besseren Wohnverhältnissen (neue Eigenheime – Reihenhäuser, Appartementhäuser, neue Wohnungen mit moderner Raumaufteilung, Sanierung bestehender Häuser und Wohnungen); hinzu kam die rasant steigende Nachfrage nach Bürohäusern, Produktions- und Logistikbauten, Infrastrukturanlagen. Diese Situation schaffte ausgezeichnete Bedingungen auf dem Immobiliensektor zur Gründung neuer Unternehmungen, darunter auch solcher, die unprofessionell und unseriös agierten und zum Teil sogar kriminelle Methoden entwickelten, wobei ihnen Gesetzeslücken zustatten kamen und korrupte Beamten halfen.

Privatgrundstücke wurden aufgekauft und weiterverkauft. Es wuchs die Nachfrage nach langfristigen Wohnungsbaukrediten, wobei sich viele der Immobilienerwerber nicht über ihre privaten Risiken im Klaren waren, falls ihnen bei nicht auszuschließender Rezession durch Konkurse und Kündigungen Arbeitsplatzverluste oder durch Arbeitsunfähigkeit nachhaltige Einkommensausfälle drohen sollten und sie ihren Tilgungsverpflichtungen während der langen Kreditlaufzeit von 20 bis 30 Jahren nicht mehr nachkommen können.

Es gibt auch zahlreiche Haushaltungen, die kurzfristige Kredite zur Finanzierung alltäglicher Verbrauchsgüter bei Banken oder anderen – zum Teil dubiosen – Finanzdienstleistern aufgenommen haben. Bei letzteren sind die Rückzahlungskonditionen nicht selten extrem streng, was viele Kreditnehmer beim Abschluss des Vertrages oft nicht realistisch einschätzen. So können diese Bürger in eine gefährliche Finanzsituation geraten mit der Folge, dass sie ihr Wohnungseigentum wieder aufgeben müssen. Die sich daran anschließenden Probleme, auch familiärer Art, führen nicht selten zu Alkoholismus und Drogensucht. Auch darauf ist die zu beobachtende Steigerung der Kriminalität zurückzuführen.

Weil die Lage im Immobiliensektor risikoreicher geworden ist, haben die Banken generell ihre Kreditvergabebedingungen verschärft. Auch dadurch hat die Dynamik auf den Immobilienmärkten deutlich abgenommen. Nach Angaben des Landvermessungsamtes der Republik Estland wurden im Jahre 2007 Immobiliengeschäfte nur noch im Werte von 64.26 Milliarden estnischen Kronen abgeschlossen, das sind 9.55 Milliarden Kronen weniger oder bedeutet einen Rückgang von 15% gegenüber dem Jahr 2006. Das ist die Folge sowohl der rückläufigen Vertragsabschlüsse als auch der sinkenden Immobilienpreise. Für 2008 und auch für das darauf folgende Jahr werden weitere Rückgänge erwartet. So ist zu befürchten, dass die Marktteilnehmer im Immobiliensektor zunehmend in Schwierigkeiten geraten werden, insbesondere die kleineren Akteure. Auch wird sich die Zahl jener Schuldner erhöhen, die mit ihren Rückzahlungen in Verzug geraten. Als Folge sinken die Immobilienpreise, sowohl die Preise für Eigenheime und Eigentumswohnungen als auch für Grundstücke. So ist bereits von Januar bis Dezember 2007 der Quadratmeterpreis für unbebautes Bauland von durchschnittlich 185.8 Kronen auf 117.37 Kronen, also um 36.8% gesunken. (Datenbank des Landvermessungsamtes Estlands 2008)

Steuersätze, Tarife und Preise

Staatliche Institutionen und kommunale Selbstverwaltungen haben für 2008 Erhöhungen einiger Steuern sowie auch einiger Gebühren und Beiträge beschlossen. Diese Abgabenerhöhungen werden – was nicht ausbleiben wird – auch die Preise vieler Waren und Dienstleistungen der gewerblichen Wirtschaft beeinflussen. Folgende Änderungen ab 1. Januar 2008 sind von Bedeutung:

- Erhöhung der Verbrauchsteuersätze auf Motorkraftstoffe[3], Ga[4], Strom, Alkohol, Bier und Tabakwaren;
- Erhöhung des Grundsteuersatzes;
- Erhöhung der Fahrpreise für öffentliche Verkehrsmittel in Landkreisen und Städten sowie der Fährenverbindungen zu den Inseln;
- Erhöhung der Preise für kommunale Versorgungsleistungen wie Wasser, Abwässer und Müllabfuhr;
- Erhöhung der Parkgebühren.

Durch die Erhöhung der öffentlichen Abgaben sind die Endpreise für zum Beispiel folgende Produkte und Produktgruppen gestiegen:

- Kraftstoffe: 1 Liter bleifreies Benzin (E95) von 14.4 EEK auf 15.7 EEK (+9.2%); 1 Liter Dieselkraftstoff von 15.5 EEK auf 17,4 EEK (+12.3%).
- Erdgas: 1 m^3 von 540 estnische Cent auf 558.5 estnische Cent (+3.5%).
- Strom: 1 kWh von 126.72 estnische Cent auf 132.62 estnische Cent (+4.7%)
- Alkohol und Tabak[5]: 0.5 Liter Wodka von 60.00 EEK auf 71,7 EEK (+19.5%); 0.5 Liter Bier von 10.00 EEK auf 10.60 EEK (+6%); 1 Schachtel Zigaretten von 21.0 EEK auf 31.6 EEK (+50.5%).
- Fährpreiserhöhungen für Fahrten zu den zwei größten estnischen Inseln, und zwar:
  Saaremaa:
  - für PKW von 55 EEK auf 100 EEK (+81.8%; bei Ermäßigung 70 EEK, also immer noch +27.3%);
  - für Passagiere von 20 EEK auf 35 EEK (+75%; bei Ermäßigung unverändert).

  Hiiumaa:
  - für PKW von 75 EEK auf 120 EEK (+60%; bei Ermäßigung 72 EEK, also +4.2%);
  - für Passagiere von 25 EEK auf 45 EEK (+80%; bei Ermäßigung unverändert).

Mit dem Hinweis auf Preiserhöhungen für Kraftstoffe sind auch Preiserhöhungen für Flugtickets geplant.

[3] Steuererhöhungen für Motorkraftstoffe: 1 Liter bleifreies Benzin von 4.5 EEK auf 5.62 EEK (+25%); 1 Liter Dieselkraftstoff von 3.84 EEK auf 5.165 EEK (+35%).
[4] Steuererhöhungen für Gas: ein Kilo Flüssiggas von 1.57 EEK auf 1.96 EEK (+25%).
[5] Durchschnittspreise; hierbei handelt es sich um Verbrauchsgüter, bei denen die Einschränkungen des Konsums auf Grund der Preissteigerungen durchaus positive Wirkungen auf die Volksgesundheit haben.

Preissteigerungen werden im Laufe des Jahres 2008 in allen Wirtschaftsbereichen und Regionen Estlands eintreten, die allerdings zum gegenwärtigen Zeitpunkt noch nicht mit hinlänglicher Sicherheit absehbar sind. Beispielhaft werden im Folgenden die bereits jetzt bekannten Erhöhungen in der Hauptstadt Tallinn genannt, zumal diese auf Grund der Bedeutung dieses Wirtschaftraumes die größten Breitenwirkungen haben. (Datenbank der Stadtverwaltung Tallinn 2008) Hierzu muss allerdings angemerkt werden, dass in Tallinn und der näheren Umgebung die Zahl der von der Teuerung betroffenen Dienstleistungen erfahrungsgemäß höher ist als in anderen Städten und Gemeinden Estlands. Tariferhöhungen sind vorgenommen worden bei:

- Wasser und Abwasser um 11.7%;
- Fahrkarten für öffentliche Verkehrsmittel von 10 EEK auf 13 EEK (+30%);
- der Müllabfuhr um *ca* 10%;
- Parkgebühren um 30–50%;
- der Grundsteuer, und zwar von 0.6% auf 1.5% (bezogen auf die administrativ festgesetzte Bemessungsgrundlage).

Die Bevölkerung wird – worauf bereits hingewiesen worden ist – zusätzlich durch die steigenden Lebensmittelpreise belastet. Inwieweit durch Lohn- und Gehaltsanpassungen ein Belastungsausgleich eintreten wird, hängt von den zahlreichen Einzelvereinbarungen der Tarifpartner ab. Sollten die durch Tarifanpassungen zu erzielenden Steigerungen der Löhne und Gehälter die Produktivitätsfortschritte übersteigen, so gefährden die steigenden spezifischen Lohnkosten die Rentabilität der gewerblichen Wirtschaft. Hier droht Gefahr für das weitere Wirtschaftswachstum.

Zu bedenken ist auch, dass Erhöhungen der Verbrauchsteuern – wie die Bezeichnung dieses Begriffes deutlich macht – das Ziel haben, den Verbraucher (als Steuerdestinatar) zu belasten. Insofern ist kaum zu erwarten, dass durch staatliche Transferzahlungen ein Lastenausgleich zumindest bei den Beziehern geringer Einkommen eintreten wird. Die allgemeine Teuerungswelle bedeutet also nicht nur eine Gefahr für das Wirtschaftswachstum, sondern auch für den Lebensstandard und damit die Lebensqualität der Bevölkerung.

Arbeitsmärkte und Arbeitskosten

Obwohl die estnische Wirtschaft sich relativ schnell entwickelt hat, gibt es in der Gesellschaft zahlreiche Probleme, die im Interesse eines stetigen und umweltverträglichen Wirtschaftswachstums einer Lösung bedürfen. Zu nennen sind folgende Begleitumstände:

Auf Grund einer **unzureichenden Geburtenrate nimmt die Zahl der Bevölkerung ab**. Begleitet wird diese Entwicklung von einer Landflucht: Die arbeitsfähigen Menschen siedeln zunehmend aus ländlichen Gebieten (Dörfern und Ortschaften) in Städte, aus kleineren Ortschaften in größere Städte oder Gemeinden um, die unmittelbar an Großstädte grenzen. Die Folge ist eine Verkümmerung der personalen Infrastruktur der estnischen Dörfer und Gemeinden. Was wird so aus den traditionel-

len Streusiedlungen in Estland? Konstruktive Vorschläge, um dieser personalen Ausdünnung der ohnehin problembelasteten Gebiete Einhalt zu gebieten, fehlen.

Estlands Bevölkerung altert zunehmend. Das hat zu Folge, dass die arbeitende Bevölkerung durch Abgaben immer stärker belastet werden muss, damit im Staatshaushalt genügend Mittel für Rentenzahlungen und andere Sozialausgaben vorhanden sind. Sicherlich kann man für die Zukunft durch die so genannten "drei Säulen" des estnischen Rentensystems eine gewisse Milderung dieser Problematik erwarten, wenn die heute erwerbstätige Bevölkerung in Eigenverantwortung Beitragszahlungen in private Rentenkassen leistet. Aber das alleine wird nicht ausreichen.

Verstärkt wird die vorstehend geschilderte Problematik durch die **Freizügigkeit der Arbeitskräfte in der Europäischen Union**. Für den einzelnen Esten bietet diese grenzüberschreitende Freizügigkeit sicherlich Vorteile: Sie eröffnet ihm die Möglichkeit, auswärts einen Arbeitsplatz zu finden, auf dem seine Leistung höher entlohnt wird. Auch kann er Erfahrungen sammeln, seinen Sprachschatz erweitern und andere Länder und Kulturen kennen lernen. Erfahrungsgemäß sind es aber gerade die jüngeren, bereits relativ gut ausgebildeten und qualifizierten Arbeitskräfte, die in das Ausland gehen. Wenn diese Leistungsträger Estland verlassen, dann fehlen sie im Inland für die weitere wirtschaftliche Entwicklung, Das hat zur Folge, dass im Land viele Arbeiten unerledigt bleiben oder schlecht erbracht werden, und für diese minderwertigen Leistungen wird ein – unbegründet – relativ hohes Entgelt gefordert. Dennoch ist in Estland die Kluft zwischen den sehr hohen und den sehr niedrigen Einkommen groß geblieben. Dieses Gefälle ist eines der größten in der EU.

Die grenzüberschreitenden Wanderungsbewegungen der Arbeitskräfte beeinflussen das inländische Lohnniveau, ungeachtet der im Einzelfall erbrachten Leistungen. In Estland steigt das Niveau der Löhne und Gehälter vor Steuern stärker als die Arbeitsproduktivitäten. Dabei muss man sich aber darüber im Klaren sein, dass durch bloße Nominallohnsteigerungen ohne entsprechende Produktivitätssteigerungen das Wohlstandsniveau in Estland nicht dem anderer, weiter entwickelter europäischer Industriestaaten angenähert werden kann. Wird das dennoch versucht, so artet das durch die steigenden spezifischen Lohnkosten zwangsläufig in Kosten-Inflation aus.

Noch ein weiterer Aspekt der Lohnentwicklung ist zu erwähnen. Nicht selten kommt es vor, dass Unternehmungen ihre Mitarbeiter teilweise oder ganz – in Deutschland sagt man – 'schwarz'[6] entlohnen. Nach Schätzungen des estnischen Finanz- und Zollamtes bekamen im Jahre 2007 etwa 11.6% der Arbeiter und Angestellten ein Entgelt, von dem nur teilweise oder gar keine Steuern und Sozialabgaben abgezogen wurden. Diese Zahl erscheint im Vergleich zu früheren Jahren oder anderen Ländern verhältnismäßig niedrig. Diese 'Schwarzgelder' bedeuteten aber für den estnischen Staatshaushalt Steuermindereinnahmen, die im Jahre 2007 über 2.7 Milliarden

[6] in Estland bezeichnet man diese in der 'Schattenwirtschaft' gezahlten Löhne als 'Kuvertlöhne', weil sie dem Mitarbeiter gewissermaßen 'unter dem Tisch' in einem Kuvert zugeschoben werden.

estnischen Kronen ausmachten.[7] Das ist mehr, als für die Tätigkeit des Polizei- und Rettungamtes zusammen ausgegeben wird. Die Unternehmungen, die 'Schwarzgelder' zahlen, verstoßen nicht nur gegen die Interessen der Volksgemeinschaft, sondern auch gegen die ihrer Mitarbeiter, denen insoweit keine Anwartschaften auf Sozialversicherungsleistungen erwachsen. (Aav 2008: 16)

Der Lohndruck in der gewerblichen Wirtschaft überträt sich auch auf die übrige Wirtschaft Estlands, von dem vor allem der öffentliche Sektor betroffen ist. Für folgende Berufsgruppen stehen 2008 Gehaltserhöhungen zur Diskussion (Datenbanken des estnischen Finanz- und des Sozialministeriums):

- Lehrer: +20%
- Polizeibeamte: +25%
- Rettungsbeamte: über +30%
- Grenzbeamte: +25%
- Zollbeamte: +17%
- Vollzugsbeamte: +40%
- Angehörige der estnischen Armee: fast +20%
- Ärzte: +20%
- Arbeiter im Kulturbereich mit Hochschulausbildung: *ca* +13%
- Ministeriumsbeamte: *ca* +13%
- Hochschullehrer und Wissenschafter im Hoschulbereich: +30%

Inwieweit diese Gehaltserhöhungen realisiert werden, bleibt abzuwarten. Den zu Jahresbeginn geführten Diskussionen ist zu entnehmen, dass über diese Steigerungsraten noch heftig gerungen wird.

Auch bei den Sozialausgaben sind Anpassungen vorgesehen. So sind Rentenerhöhungen ab 1. April 2008 von durchschnittlich 22% vorgesehen. Die Behindertenbeihilfe soll durchschnittlich um 30% steigen.

In Estland ist die Qualität der Arbeitsleistungen gesunken. In den letzten Jahren ist dies – worauf bereits hingewiesen worden ist – vor allem auf die grenzüberschreitende Freizügigkeit der Arbeitskräfte zurückzuführen, wodurch auf den Arbeitsmärkten immer weniger qualifizierte Facharbeiter ihre Leistungen anbieten. Folglich müssen Arbeitsplätze sehr oft mit Mitarbeitern besetzt werden, die eine niedrige oder so gut wie gar keine Qualifikation besitzen. Von diesem Problem ist besonders das Bauwesen betroffen, weil viele Facharbeiter nach Finnland, aber auch in andere Länder abgewandert sind. Diese Situation hat sich in den letzten Monaten zwar etwas entspannt, weil die Aktivitäten auf dem Immobilienmarkt zurückgegangen sind und einige Bauarbeiter nach Estland wieder zurückgekehrt sind. Dennoch bleibt das grundsätzliche Problem bestehen, dass eine Diskrepanz zwischen dem Angebot von und der Nachfrage nach qualifizierten Leistungen besteht. Leidtragende sind letztendlich die Bauherren.

[7] Zum Vergleich: 2008 werden Steuereinnahmen in Höhe von 96.275 Milliarden estnische Kronen erwartet.

Nach Angaben des estnischen Amtes für Statistik verteuerten sich die Bauprojekte im Jahre 2007 im Vergleich zum Vorjahr um 12.7%. Der Hauptgrund der Preissteigerungen war die Verteuerung der Arbeitskräfte um 22.1%. Zusätzlich stiegen die Preise für Baumaschinen um 8.6% und für Baumaterialien um 8.3%. Der Durchschnittsindex für Bausanierungspreise stieg im Laufe des Jahres 2007 um 12.8%. (Estnisches Statistikamt 2008) Die Lohnerhöhungen beruhten nicht auf Produktivitätssteigerungen einschließlich Qualitätsverbesserungen, sondern erklären sich durch die geschilderten Diskrepanzen auf den Arbeitsmärkten für Bauleistungen. Unterstützt wurde das noch durch die profitgetriebenen Aktivitäten der Immobilienmakler und die günstigen Kreditkonditionen der Kommerzbanken, die ebenfalls um profitable Kreditexpansion bestrebt waren.

Die Lohnpolitik in Estland ist stabilitätswidrig. Die Nominallöhne steigen stärker als die Arbeitsproduktivitäten. Die Tarifpartner sind sich entweder nicht der Zusammenhänge zwischen Nominallohn- und Produktivitätsentwicklung bewusst[8], oder sie verhalten sich verantwortungslos. Die Tarifpartner können allerdings exkulpierend darauf hinweisen, dass das Estnische Statistikamt keine Kennziffern über die Arbeitsproduktivitäten berechnet.[9]

Von einer die Produktivitäten fördernden Wirtschaftspolitik ist in Estland nichts zu erkennen. Es fehlt an Konzepten zur Förderung des technischen Fortschritts und der Investitionen, wobei investitionsfördernde Maßnahmen deshalb so wichtig sind, weil der technische Fortschritt heute überwiegend kapitalgebunden ist. Auch gilt es, die materielle Infrastruktur stärker auszubauen, als das bisher der Fall gewesen ist. Sie ist es, die neben der Steuergesetzgebung und einer unbürokratischen Verwaltung (institutionelle Infrastruktur) eine wesentliche Komponente für die Attraktivität des Industriestandortes Estland darstellt, weil letztendlich sie neben dem technologischen Standard maßgebend für die im Inland zu erreichende Kapitalproduktivität ist.

Von Seiten der Unternehmungen wird in den letzten Jahren immer wieder Klage über den Arbeitskräftemangel, speziell über den Mangel an qualifizierten Arbeitskräften geführt. Falls den Wünschen der Unternehmungen nach Erleichterungen für die Zuwanderung ausländischer Arbeitskräfte nachgegeben wird und dadurch der Ausländeranteil an der arbeitenden Bevölkerung steigt, ist zu befürchten, dass – wie Erfahrungen anderer Länder und auch die Erfahrungen in Estland mit Bürgern russischer Herkunft zeigen – früher oder später die sozialen Konflikte das gesell-

[8] Die spezifischen Arbeitskosten (Arbeitskosten pro Produktionseinheit) sind:

$$\frac{L}{x} = \frac{l \cdot h}{x} = \frac{l}{x / h} = \frac{l}{\pi_A}$$

Ist $(\Delta l/l) > (\Delta \pi_A/\pi_A)$, dann steigen zwangsläufig die spezifischen Arbeitskosten: $\Delta(L/x) > 0$. Dabei bedeuten: L – Lohn- und Gehaltskosten einschließlich aller Arbeitsnebenkosten; x – Produktionsmenge; l – nominale Arbeitskosten pro Arbeitstunde (h); π_A – Arbeitsproduktivität; vorangestelltes Δ – Veränderung der jeweiligen Variablen.

[9] Zumindest findet man in der amtlichen Statistik darüber keine Angaben.

schaftliche Umfeld zunehmend belasten. Das kann nicht im Interesse Estlands und auch der Europäischen Union sein.

Zu Beginn des Jahres 2006 lebten in Estland 1 344 684 Menschen. Die Zahl der Erwerbstätigen und Erwerbslosen, also jener Personen, die ihre Arbeitskraft auf den Arbeitsmärkten anboten, betrug insgesamt 659 600 Personen, von denen 52 108 (7.9%) keinen Arbeitsplatz gefunden hatten. (Maakonnad 2006: 197 ff) Man muss sich darüber im Klaren sein, dass dieses ungenutzte Human-Kapital ein für alle Mal verlorenes Wachstumspotenzial darstellt. Es muss nach Möglichkeiten gesucht werden, diese brach liegenden menschlichen Ressourcen produktiv einzusetzen. Dazu ist es notwendig, die personelle Infrastruktur durch effizientere Aus-, Weiter- und Fortbildungsmaßnahmen zu verbessern. Konkret heißt das, dass die Leistungsprofile jener inländischen Arbeitskräfte, die noch keinen Arbeitsplatz gefunden haben, den Anforderungsprofilen moderner Arbeitsplätze angepasst werden müssen. Die Propagierung von Bildung muss – stärker als bisher – eine staatliche Priorität sein. Dabei ist wichtig, dass staatliche Institutionen langfristige Bedarfspläne über den zukünftigen – sowohl quantitativen als auch qualitativen – Arbeitskräftebedarf in den einzelnen Berufsfeldern aufstellen, diese fortschreiben und auf der Grundlage dieser ständig aktualisierten Pläne bereits frühzeitig an den Schulen die zukünftigen Absolventen beraten. Auch muss die Notwendigkeit des 'lebenslangen Lernens' in das Bewusstsein der Bevölkerung tief verankert werden. Fortbildung darf aber nicht allein eine staatliche Aufgabe sein. Auch die Unternehmungen müssen in diese Verantwortung durch den Zwang zu betrieblichen Fortbildungsmaßnahmen mit eingebunden werden.

Diskussionsschwerpunkte
Kontroverse Diskussionen

Obwohl in öffentlichen Verlautbarungen oft betont wird, Estland repräsentiere eine Bürgergesellschaft, zeigt die Realität, dass sowohl im Gesellschaftsleben als auch in der Wirtschaftspraxis bürokratisches Denken vorherrscht und die Parteien wie ihre Vertreter im Parlament und in Gemeinderäten die Interessen ihrer Wähler kaum oder überhaupt nicht berücksichtigen.

Laut Grundgesetz muss 2008 wieder **ein neuer Rechtskanzler** (Ombudsmann) gewählt werden, dessen Kandidatur vom estnischen Präsidenten vorzuschlagen ist. Im Spätherbst 2007 schlug der Präsident als Kandidaten den amtierenden Rechtskanzler vor. Bevor die Parlamentsdebatten über den Kandidaten überhaupt begannen, übten die zwei größeren Parteien heftige Kritik an ihm und teilten mit, dass sie eigene Kandidaten hätten. Eine solche Vorgehensweise entspricht nicht den parlamentarischen Geflogenheiten. Obwohl der bisherige Rechtskanzler von mehreren Parteien, vielen gesellschaftlichen Organisationen und großen Teilen der Bevölkerung unterstützt wurde, bekam seine Kandidatur nicht die notwendige Mehrheit im Parlament. Diese verübelte ihm offenbar, dass er während seiner Amtszeit zahlreiche Parlamentsbeschlüsse, welche dem Gerechtigkeitssinn der Bürger widersprachen, und generell die Parlamentstätigkeit kritisiert hatte. In den Medien war bereits zuvor von seinen Gegnern eine neue Persönlichkeit gefordert worden, die –

so argumentierten sie – noch unverbraucht sei. Im Übrigen sei eine Amtszeit genug gewesen, obwohl die Verfassung hier keine Grenzen setzt. Die breite Öffentlichkeit vertritt aber eine ganz andere Meinung. Andere Abgeordnete, die bereits drei oder vier Wahlperioden im Parlament sind, zeigen demgegenüber deutliche Abnutzungserscheinungen, indem sie die Bürgernähe verloren haben und durch ihre demagogische und irrationale Tätigkeit wenig dem Staatswohl dienen.

Gemäß Verfassung muss 2008 auch über den **Aufsichtsratvorsitzender der Estnischen Zentralbank** neu entschieden werden. Bisher hat das Gesetz bestimmt, dass der Vorsitzende eine wirtschaftswissenschaftliche Hochschulausbildung haben muss. Das war auch bisher immer der Fall. Nunmehr plant man eine Gesetzesänderung, wonach jeder beliebige Hochschulabschluss ausreichen soll. Dadurch würde die Möglichkeit geschaffen, dass die eine oder andere Machtpartei ihren Parteigenossen oder einen gehorsamen Parteigänger in dieses wichtige Amt heben könnte.

Anfang 2008 wurde der Entwurf über ein neues **Arbeitsvertragsgesetz** vorgelegt. Dieser Entwurf stammt von der Regierungspartei, die unverhohlen Großunternehmer und Bevölkerungsschichten mit höheren Einkommen unterstützt. Der vom Sozialministerium[10] ausgearbeitete Gesetzesentwurf wurde den anderen Ministerien zur Abstimmung zugeschickt. Auch dem Arbeitgeberverband wurde der Entwurf zugeleitet, der umgehend dem Entwurf zustimmte; offenbar hatte er bei der Federführung mitgewirkt. Andere Parteien, Gewerkschaften und sonstige Arbeitnehmervertreter erfuhren von dem Inhalt dieses Gesetzentwurfes erst aus der Presse. Die Änderungen in dem Entwurf hätten, wenn sie Gesetzeskraft erlangten, zur Folge, dass die Unternehmer zukünftig wesentlich mehr Rechte und weniger für die Geschäftsrisiken und Folgen von Managementfehlern einzustehen hätten. Andererseits sollen nach dem Entwurf die Kündigungsbedingungen gelockert und die Abfindungen bei außergewöhnlichen Entlassungen auf die Höhe eines Monatslohnes beschränkt werden. Demgegenüber bleiben die Abfindungen für Arbeitgeber, Parlamentsmitglieder und andere Akteure des öffentlichen Lebens unverändert und betragen mindestens sechs Monatseinkommen zuzüglich bisher gezahlter Zusatzleistungen. Der Gesetzentwurf begünstigt eindeutig die Unternehmerseite und verstößt insoweit gegen das soziale Gleichgewicht.

Die **Erhöhung der Mehrwertsteuer für Kulturbetriebe** von bisher 5% auf den üblichen Satz von 18% ist heiß umstritten. Sollte diese von der gegenwärtigen Regierungspartei[11] geplante Steuererhöhung verabschiedet werden, dann hätte das zur Folge, dass sich die Preise für Theater- und Konzertkarten drastisch verteuerten und Bevölkerungsschichten mit geringem Einkommen, Rentner und Familien mit Kindern aus finanziellen Gründen solche Kulturveranstaltungen weniger oft oder überhaupt nicht mehr besuchen könnten. Um das zu vermeiden, ist Betrieben, die "Veranstaltungen von hohem kulturellen Wert" anbieten, versprochen worden, dass sie kompensierende Zahlungen aus dem Staatshaushalt (Subventionen) erhalten werden. Ein solches Vorhaben ist aber unklar, weil nicht deutlich bestimmt wird,

[10] die Ministerin gehört dieser unternehmerfreundlichen Partei an.
[11] die auch den Entwurf zum Arbeitsvertragsgesetz zu vertreten hat.

welche Veranstaltungen einen hohen kulturellen Wert haben und welche Betriebe sie durchführen. Außerdem ist das Versprechen zu Kompensationszahlungen durch nichts garantiert, vor allem dann nicht, wenn der Kulturminister in seinem Amt ausgetauscht werden sollte oder nach Neuwahlen andere Parteien die Regierungsverantwortung übernehmen sollten.

Eine deutlich auf die **Einschränkung des Alkoholkonsums** gerichtete Gesundheitspolitik ist nicht zu erkennen. Der Alkoholkonsum ist in Estland relativ hoch. Seit Jahren ist die Regierung nicht imstande, einschränkende Maßnahmen zu ergreifen. Es gibt in Estland viele Unternehmer, die Spirituosen der verschiedensten Art produzieren. Und diese wehren sich verständlicherweise gegen restriktive Maßnahmen, gegebenenfalls auch durch direkte Einflussnahmen auf einzelne Politiker. Maßnahmen, die man bisher vorgenommen hat, sind halbherzig und im Grunde unbedeutend. Grundsätzliche Entscheidungen zur Regulierung des Alkoholkonsums sind bisher auf die lange Bank geschoben worden. Als Begründung wird zuweilen behauptet, die Beschränkung des Alkoholkonsums verstoße sowohl gegen die Konsumentensouveränität als auch die Gewerbefreiheit.

Spielbanken sind in Estland zu Betrieben erklärt worden, welche dem Vergnügen und der gesellschaftlichen Unterhaltung dienen. Die Casino-Betreiber weisen darauf hin, dass die Erträge aus der eingeführten Glückspielsteuer zur Förderung von Kultur, Sport, Bildung und Sozialwesen eingesetzt werden. Dieser Hinweis entspricht zwar den Tatschen; dennoch ist der psychologische und gesellschaftspolitische Schaden, den die Casinos durch entstehende Spielsucht und finanzielle Schwierigkeiten in Teilen der Bevölkerung anrichten, größer als diese an den Fiskus abgeführten Steuerbeträge. Schon jetzt gibt es in den Hauptstraßen größerer estnischer Städte zahlreiche Casinos, und ihre Zahl nimmt ständig zu, auch in den Kleinstädten. Die Casinos belegen oft günstige Geschäftslagen, dort, wo früher Gaststätten waren. Die kommunalen Selbstverwaltungen sind in den meisten Fällen dagegen machtlos. Das Gesetz schützt nicht die Interessen der örtlichen Bevölkerung. Auch in diesem Zusammenhang wird immer wieder das Argument der Gewerbefreiheit angeführt.

Alkoholismus und Spielsucht gefährden in besonderem Maße die kulturellen Grundfesten des Estnischen Volkes. Um eine Abkehr von diesen Lastern einzuleiten, bedarf es einer von Ethik und Moral getragenen Gesellschaftspolitik. Der Gesetzgeber verhält sich hier bisher passiv; es fehlen einfach der politische Wille und die politische Durchsetzungskraft.

Notwendigkeiten regionaler und lokaler Entwicklungen

In der Europäischen Union gehört die regionale Entwicklung mit zu den wesentlichen Aufgaben der Wirtschaftspolitik. In Estland spricht man zwar von Zeit zu Zeit darüber, wie notwendig es sei, die regionale Entwicklung zu gestalten und die Ebene der kommunalen Selbstverwaltungen (lokale Entwicklung) zu stärken; in der praktischen Wirtschaftspolitik ist aber in diesen Richtungen bisher wenig – wenn

überhaupt – geschehen; man kommt einfach nicht voran. Bis jetzt ist die Regional- und Kommunalpolitik in Estland diffus.

Seit der zweiten Hälfte der neunziger Jahre spricht man über die Verwaltungs- und Gebietsreform, aber verwirklicht wurde bisher wenig. Folgende Aufgaben sind zu erfüllen:

- Zusammenschluss kommunaler Selbstverwaltungen (Zusammenschluss von Gemeinden) zur Gewährleistung größerer Nachhaltigkeit;
- Zusammenschluss kommunaler Selbstverwaltungen zur Stärkung der Städte (Zusammenschluss der Städte mit ihren angrenzenden Gemeinden);
- Städtepolitik.

Die Stärkung der Städte ist in vielen Ländern der Europäischen Union aktuell und wird umgesetzt. (Collomb 2005; Jakoby, Schmolinsky 2006) Das müsste auch in Estland zur wichtigen Aufgabe gemacht werden, und zwar in erster Linie in den Landkreiszentren und auch anderen Städten, um die herum neue Wohngebiete entstanden sind.

Die Stärkung der Städte ist in Estland weder ein Prozess noch ein Ziel für sich. Parallel dazu und zum regionalen Ausgleich ist in Estland eine breit angelegte und damit effiziente 'Förderung des Landlebens' besonders wichtig. Gegenwärtig ist man jedoch von diesem Ziel noch weit entfernt, wodurch es zu der bereits geschilderten Landflucht und personellen Ausdünnung der ländlichen Gebiete kommt. Manchmal entsteht der Eindruck, dass die Landbevölkerung als zweitrangig eingestuft werde. Diesem Eindruck muss mit allen Mittel entgegengetreten werden. Der landwirtschaftliche Bereich ist in Estland auf Grund der regionalen Struktur für eine ausgewogene Wirtschaftsentwicklung genau so wichtig wie der industrielle Bereich. Er bietet zudem nicht nur für industrielle Neuansiedlungen volkswirtschaftliche Entwicklungsperspektiven, sondern kann auch durch positive Geburtenraten in einigen Landkreisen die personelle Infrastruktur des Landes auffrischen. Um dieser Bedeutung Rechnung zu tragen, muss die Infrastruktur in den ländlichen Gebieten – wie Krankenhäuser, Schulen, Straßen, öffentliche Verkehrsmittel – modernisiert und weiter ausgebaut werden. Nur so kann man dem sich sonst weiter verstärkenden Wunsch der dort lebenden Menschen, aus ländlichen Gegenden in die Städte zu ziehen, begegnen und durch Industrieansiedlungen für neue Arbeitsplätze sorgen.

In Estland sind die meisten kommunalen Selbstverwaltungen finanziell zu schwach, um aus eigenen Kräften ihre Entwicklung voranzutreiben. Der Anteil der Eigenmittel in ihren Budgets ist zu gering, die lokalen Steuer machen nicht selten weniger als 1 bis 2% des Budgetvolumens aus. Folglich sind sie auf die Umlagen aus dem Staatshaushalt angewiesen.

Der estnische Regionalminister sowie der Bevölkerungsminister haben nur begrenzte Vollmachten. Im Vergleich zu anderen Ministern, die einen umfangreichen Staatsapparat leiten, hat der Regionalminister nur ein bescheidenes Büro mit *ca* 10 Mitarbeitern. Anfang 2008 wurde das Auswechseln des Regionalministers erwogen

mit der unterschwelligen Begründung, er habe zu viel Aufmerksamkeit der Verwaltungsreform gewidmet. Daraus ist zu erkennen, dass man keine starken Städte und Gemeinden haben will, weil dann vermutlich weniger Parteimitglieder in den Gemeinderäten oder Stadtverwaltungen vertreten sein werden. Denn dann würden sich vor den nächsten Kommunal- (2009) und Parlamentswahlen die Wahlzuschüsse verringern. Wichtig sind offensichtlich nicht die regionalen und lokalen Entwicklungen, sondern die Machtpositionen auf den örtlichen und staatlichen Ebenen, die dann durch so genannte "treue Soldaten der Partei" ausgeübt werden.

Internationale Aspekte

Seit Mai 2004 gehört Estland der Europäischen Union an. Zuvor wurden lange und eingehende Beitrittsgespräche geführt. Jeder Beitritt ist freiwillig und hat für das betreffende Land sowohl positive als auch negative Aspekte, denn in der Europäischen Union können die einzelnen Mitgliedstaaten nicht nur nach eigenen Wünschen und Bedürfnissen handeln, sondern müssen auch die Interessen anderer Staaten, also die so genannten gemeinsamen Interessen berücksichtigen. Dazu ist es notwendig, dass man bereit ist, des Öfteren Kompromisse zu schließen. Selbstverständlich behält jedes Land auch in Zukunft bis zu einem gewissen Grad seine politische Eigenständigkeit, sowohl in der Gesellschafts- als auch Wirtschaftspolitik.[12] Andererseits muss auch die Europäische Union über ihre leitenden Organe die Interessenlagen der einzelnen Mitgliedsstaaten, die durch die Eigenart eines jeden Landes geprägt sind, berücksichtigen.

Zuweilen wird gesagt, der Beitritt Estlands zur Europäischen Union sei vergleichbar mit dem Anschluss an die frühere Sowjetunion, nach dem Motto: Aus einer Union in die andere. Eine solche Betrachtensweise verkennt völlig die politischen Tatsachen, weil Estland, Lettland und Litauen nicht freiwillig zur Sowjetunion beigetreten sind, sondern das war eine von Moskau geplante gewaltsame Besatzungsaktion. Sie bremste die normale und natürliche Entwicklung der Baltischen Länder und geschah gegen den Willen der Völker dieser Staaten. Diese Okkupation bremste in der Folgezeit nachhaltig die gesellschaftlichen und wirtschaftlichen Entwicklungen in Estland.

Auch zum heutigen Russland sind die Beziehungen kompliziert und schwierig. Dabei ist Folgendes zu berücksichtigen:

- Russland ist ein instabiler und aggressiver geographischer Nachbar, dem als Partner zuweilen Betrug, Ungerechtigkeit und Lügen nachgesagt werden.
- Für Estland sind zuverlässigere und potente Partnerländer wichtig, um die verbleibende wirtschaftliche Abhängigkeit von Russland zu reduzieren.
- Die Mitgliedschaften in NATO und EU stärken die politische und wirtschaftliche Unabhängigkeit Estlands.

[12] das gilt auch dann, wenn sich die Europäische Union einmal zu einem föderativen Staatenbund weiterentwickeln sollte.

Russland ist für Estland nach wie vor ein wichtiges Nachbarland. Gute Beziehungen zu Russland sind wichtig, aber nicht nur für Estland, sondern auch für die gesamte Europäische Union. Dies gilt genauso in umgekehrter Richtung.

Zusammenfassung

Durch den Beitritt zur Europäischen Union sind die früheren Probleme Estlands bei Weitem noch nicht gelöst. Inwieweit die Mitgliedschaft bereits zur Lösung bis dato bestehender Schwierigkeiten beigetragen hat, kann noch nicht abschließend beurteilt werden. Eine umfassende und gründliche Analyse mit fundierten Aussagen kann erst nach einiger Zeit vorgenommen werden, weil vier Jahre EU-Mitgliedschaft eine noch viel zu kurze Zeitspanne darstellt.

Bis heute haben sich in der estnischen Wirtschaft deutliche Veränderungen zum Positiven vollzogen. Es sind aber auch gravierende Fehler begangen worden. Notwendige Aufgaben hat man entweder nicht angepackt oder noch nicht zu einem befriedigenden Ergebnis geführt. Kritisch ist vor allem darauf hinzuweisen, dass die Tätigkeiten des estnischen Parlaments, anderer staatlichen Institutionen und der Verwaltungen in größeren Städten durch Machtstreben und Demagogie gekennzeichnet sind und letztendlich nicht dem Interesse der Gesellschaft dienen. Hinzu kommt, dass das zum Teil maßlose Gewinnstreben bei einigen Geschäftsleuten in Groß- und mittleren Unternehmen dem Wirtschaftssystem als Ganzes schaden.

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DIE PROBLEME DER SZENARIOERSTELLUNG FÜR DIE WIRTSCHAFTSENTWICKLUNG ESTLANDS[1]

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Einführung

Im vorliegenden Artikel werden Probleme der Ausarbeitung von Szenarios für die mittelfristige Entwicklung der estnischen Wirtschaft erörtert. Als mittelfristig wird meist eine Periode von 5 bis 10 Jahren definiert. Als geeigneter Zeithorizont hat sich Ende 2007 für Estland das Jahr 2013 erwiesen, da dieses Jahr den Endtermin der heutigen Haushaltsperiode der EU beinhaltet. Die Strukturfonds der EU und andere Hilfsmaßnahmen spielen eine wesentliche Rolle in der Entwicklung der estnischen Gesellschaft, um ihre Gebundenheit und Ausgeglichenheit zu vergrößern. Da der etatmäßige Einfluss der EU mit einem Zeit-lag von einigen Jahren wirkt, verlängert sich der Zeithorizont.

Die Wahl dieses Zeithorizontes bedeutet, dass kein Grund besteht, Vorhersagen über andere wesentliche Aspekte und Änderungen der wirtschaftlichen Umwelt Estlands einzuarbeiten. Die Beziehungen mit Russland sind für die nächsten Jahre klar – inhaltlich können sie nicht mehr schlechter werden und für die Besserung fehlt beiderseits das politische Kapital. Die "Staatliche Haushaltsstrategie 2008–2011" (Rahandusministeerium 2007) bildet die finanzielle Basis der Zukunftspläne führender estnischer politischer Kräfte. Sie verdeutlicht, dass eine größere und inhaltliche Veränderung vor 2012 kaum wahrscheinlich ist. Selbst wenn 2011 nach den Parlamentswahlen sich die politischen Kräfteverhältnisse Estlands wesentlich verändern, wären reale Verschiebungen in der estnischen Wirtschaft erst in einigen Jahren bemerkbar.

Die Ziele der Unternehmen sind mittelfristig ebenso erkennbar. Sie betreffen:

- die Anpassung an die wirtschaftliche Umwelt, die während des Beitrittsprozesses in der EU entstanden ist,
- die Ausnutzung neuer Möglichkeiten, die durch die europäische Markterschließung und Unterstützungsmaßnahmen der EU geschaffen wurden,
- die Nutzung neuer Möglichkeiten für die Entwicklung der wirtschaftlichen Beziehungen mit den Staaten außerhalb der EU, welche aufgrund der Mitgliedschaft der EU bestehen.

Obwohl der aus hoher Inflationsrate und schneller Lohnerhöhung folgende Druck auf die Konkurrenzfähigkeit der Exportunternehmen immer spürbarer wird, ist eine radikale Veränderung auf dem Gebiet der unternehmerischen Verhaltensweise ohne

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starke und zielstrebige Eingriffe seitens des öffentlichen Sektors nicht realistisch. Eine tiefe und allgemeine Wirtschaftskrise, die das Verhalten wesentlich beeinflussen könnte, ist nach der Wirtschaftslage Ende 2007 wohl eine mögliche Perspektive, deren konkrete Entstehungsmechanismen und mögliche weiteren Verläufe aber noch nicht prognostizierbar sind.

Das Ziel des vorliegenden Artikels ist, die Kernprobleme, die mit der Ausarbeitung von mittelfristigen Entwicklungsszenarios für die estnische Wirtschaft verbunden sind, festzustellen und kritisch zu analysieren. Dafür sind folgende Erörterungen erforderlich:

- Analyse des Wesens der benutzten Szenariomethode;
- Einbeziehung der Pfadabhängigkeit und der bisherigen Erfahrungen bei der Zusammenstellung der Entwicklungsszenarios der estnischen Wirtschaft;
- Analyse der Möglichkeiten der Veränderung des Basisszenarios für die Entwicklung der estnischen Wirtschaft;
- Spekulative Bestimmung von Politikalternativen des öffentlichen Sektors für die Veränderung der Entwicklungslinie der estnischen Wirtschaft.

Im ersten Teil werden der Inhalt, die Möglichkeiten und die Grenzen der Anwendung der Szenario-Methode erörtert. Im zweiten Teil werden die Erfahrungen mit der Anfertigung der estnischen Entwicklungszenarios analysiert. Im dritten Teil werden die Hauptmerkmale des Basisszenarios der estnischen Wirtschaft dargestellt. Der letzte Teil ist den neuen Dimensionen der Wirtschaftsentwicklung Estlands gewidmet.

Das Wesen der Entwicklungsszenarios

Um die Entwicklungsszenarios zusammenzustellen, müssen zuerst ihr Wesen und ihre Aufgaben geklärt werden. In diesem Punkt herrscht seit einigen Jahrzehnten keine Auffassungsänderung. Auch im neuen Jahrtausend stützen sich Gill und Ringland in ihrer Szenariobehandlung (2002a: 2; 2002b: 2) auf die Begriffsbestimmung von Michael Porter aus dem Jahr 1985. Dementsprechend sei das Szenario eine konsistente Zukunftsauffassung, wie es einmal sein könnte. Unterscheidend vom modellgestützt quantitativ bestimmten Entwicklungsplänen wird das Szenario gemäß dieser Begriffsbestimmung als eine "weiche" (nicht quantifizierte) Beschreibung der Zukunftsentwicklung verstanden. Das Szenario ist dementsprechend auch keine höchstwahrscheinlichste wissenschaftliche Prognose, sondern einer der mehr oder weniger möglichen zukünftigen Verläufe der Entwicklung.

Die Szenario-Methode (d.h. die Zusammenstellung der Szenarios) hat gemäß dieser Interpretation das Ziel, die unterschiedlichen Zukunftszustände und die Wege dazu parallel zu analysieren ohne die Notwendigkeit, deren Wahrscheinlichkeit zu beachten und zu prognostizieren. Bei der Zusammenstellung der Szenarios hat man das Ziel, den Aufbau und das Funktionieren der Entscheidungsprozesse zu verbessern, nicht die (quantitative) Zukunftsanalysen und -prognosen zu präzisieren. (Ringland 2006: XII) Die Szenario-Methode muss den Führungskräften helfen, den

Einfluss der Umweltbedingungen auf die Durchsetzung ihrer Entscheidungen besser zu erkennen. (Ringland 2002b: 3)

Die Grenze der weichen und quantitativ gestützten Szenario-Methode lassen sich nicht eindeutig feststellen. Die Zusammenstellung der Szenarios kann nach van der Heijden rational, evolutionistisch und prozessualistisch erfolgen. (van der Heijden 2005: IX, XVI) Der rationale Aspekt der Szenario-Methode ist auf die Ausarbeitung der besten (optimalsten) Entwicklungsstrategie gerichtet, d.h. der Umfang und die Gründlichkeit der Analyse sind Schritt für Schritt zu erhöhen, um einen erwünschten Genauigkeitsgrad der Aussagen zu erreichen. Das evolutionistische Paradigma der Szenario-Methode hebt die Unbestimmtheit der Zukunftszustände hervor, weshalb "die Rationalität" der Szenarios nur kurzfristig sein kann. Dementsprechend ist das Ziel der Szenarioentwicklung, (retrospektiv) Klarheit über die durch Unbestimmtheit verursachten Entwicklungsmöglichkeiten und -gefahren zu gewinnen. In prozessualer Betrachtungsweise ist aber am wichtigsten, neben dem langfristigen rationalen (optimalen) Entwicklungsplan über einen effektiv wirkenden Steuerungsprozess zu verfügen, d.h. die Fähigkeit der Entscheidungsträger flexibel und schnell auf die Umweltveränderungen zu reagieren, zu erhöhen. In der Realität ist die Unterscheidung der oben erwähnten Paradigmen einigermaßen willkürlich – die Voraussetzung für den Steuerungserfolg besteht darin, diese Betrachtungsweisen durch Synthese sachkundig zusammenzuführen.

In Estland fehlen die Voraussetzungen, um alternative quantitative (rationale) mittelfristige Entwicklungsvarianten der Wirtschaft auszuarbeiten. Deshalb muss man sich auf die weichen (evolutionistischen und prozessualen) Aspekte der Anwendung der Szenario-Methode konzentrieren.

Die Nutzung der Szenario-Methode zur Lösung wirtschaftlicher Probleme weist folgende Vorteile (Ringland 2002: 3–4, 75–76) auf:

- die Szenarios ermöglichen mit Hilfe der Zukunftsvorstellung besser die Gegenwart zu verstehen, sie erweitern den Umfang der Entwicklungsvisionen und verdeutlichen frühzeitig Veränderungen;
- eine wirksame Zukunftsanalyse vermindert den Bedarf an "Krisenmanagement" und vergrößert die Anpassungsfähigkeit der Führungskräfte mit den Veränderungen zurecht zu kommen;
- die Szenarios erweisen sich als wirksames Mittel sowohl bei der Einschätzung der bestehenden Strategien und Pläne als auch neuer Wahlmöglichkeiten;
- die Teilnahme an der Ausarbeitung von Szenarios vergrößert die Solidarität und die Fähigkeit der Führungskräfte mit Unbestimmtheiten und Risiken zu Recht zu kommen, indem das Fällen riskanter Entscheidungen mittels der Identifizierung verschiedener Gefahren und Möglichkeiten verbessert wird.

In den letzten Jahrzehnten gehörte die Anfertigung von Szenarios nicht zum Bestandteil der (strategischen) Planung, obwohl eigentlich eine enge Beziehung zwischen der Ausarbeitung der Szenarios und der Planung von Strategien besteht. (s. z.B. van der Heijden 2005: 7) Die Szenarioaktivitäten beeinflussen grundlegend

sowohl das strategische Management als auch die langfristige Planung im öffentlichen Sektor. (Ringland 2002b: 6, 203–222) Durch Szenarios kann sich eine Geschäftsführung ein "allgemeines Bild" verschaffen, Szenarios dienen als Mittel der Koordination.

Die Bedeutung der Szenarios wird vor allem unter den Bedingungen der großen Veränderungen, die sich in der Umwelt vollziehen, steigen. Man benötigt sie, um im Falle mehrerer Entscheidungsträger gemeinsam den richtigen Weg zu finden. (Ringland 2002: 5–6, 71–82)

Gemäß den obigen Ausführungen unterscheiden wir zwei Typen von Szenarios:

1. Typ. Die Entwicklungsszenarios dienen als Grundlage bei der Ausarbeitung einer langfristigen Handlungsanweisung (Strategie) für den Entscheidungsträger, der die Szenarios zusammenstellt oder an deren Entwurf teilnimmt, d.h. für ein Unternehmen oder für einen Entscheidungsträger im öffentlichen Sektor. Um unterschiedliche Veränderungsrichtungen der eigenen Tätigkeit des Entscheidungsträgers oder der Umwelt vorauszusehen, wird eine möglichst genaue Vorstellung über die zu erwartenden Resultate der verschiedenen Wahlmöglichkeiten und der Umweltbedingungen geschaffen. Danach werden die notwendigen Maßnahmen, die auf die Realisierung der Handlungsziele gerichtet sind (zur Verfügung stehende Ressourcenbasis) und die Wahrscheinlichkeit der eintretenden Umweltbedingungen analysiert. Auf Grund des Vergleichs von verschiedenen Szenarios wählt der Entscheidungsträger eines aus, das seinen eigenen Möglichkeiten und dem Niveau der aus der Umwelt folgenden Risiken entspricht. Dieses Szenario wird als Grundlage für die Darstellung der Entwicklungsstrategie bestimmt. Weiter richtet der Entscheidungsträger seine Handlung auf die Durchsetzung seiner Strategie aus und ermittelt (professionelle Analyse wird vorausgesetzt) das Resultat, das dem realen Zustand der Umwelt entspricht.

Bei der Zusammenstellung dieses Typs von Szenarios bezieht oft die modellgestützte quantitativen Analysen und Prognosen ein, weil sowohl die Daten als auch andere notwendige Mittel für die umfangreiche Modellexperimente dem Entscheidungsträger zur Verfügung stehen.

2. Typ. Die Entwicklungsszenarios werden von ihrem Verfasser als Analyse der eventuellen Entwicklungen des anderen Entscheidungsträgers dargestellt. Es werden dimensional unterschiedliche (mögliche) Entwicklungsziele vorausgesetzt – die Vermutungen über eventuelle Handlungen des Szenarioobjektes werden angenommen. Danach wird der Einfluss der möglichen Umweltzustände auf die Resultate der unterschiedlichen Zielsetzungen gezeigt. Die Szenarios beinhalten keine Handlungsanweisung für die Entscheidungsträger, sondern sie bieten nur den Stoff für Überlegungen an.

Zur Anfertigung dieses Szenariotyps stehen "den Szenaristen" meistens nicht genügende Daten und andere Mittel zur Verfügung, um umfangreiche modellge-

stützte quantitative Analysen und Prognosen auszuarbeiten. Man muss oft die weiche Richtung der Szenario-Methode heranziehen.

Bislang zeigen die estnischen Regierungsinstitutionen wenig Interesse daran, dass die Alternativen der politisch festgesetzten Entwicklungslinie der Wirtschaft und der Gesellschaft im Allgemeinen aufgezeigt und geforscht werden. So sind die Möglichkeiten begrenzt, quantifizierte Entwicklungsalternativen zusammenzustellen und zu analysieren. Doch ist es auch unter solchen Bedingungen notwendig sich über die Zukunft Gedanken zu machen. Die weiche Richtung der Szenario-Methode eröffnet die Möglichkeit, die weichen Zukunftsvorstellungen in ein geordnetes Gesamtbild einzuordnen.

Bei der Entwicklungsanalyse des öffentlichen Sektors spielen die Szenarios des zweiten Typs eine größere Rolle als im Privatsektor, denn im öffentlichen Sektor einer demokratischen Gesellschaft fehlt einerseits der eigentümerisch verantwortliche Entscheidungsträger und andererseits ist es notwendig, die pluralistische Steuerung der gesellschaftlichen Entwicklung zu fördern. Im öffentlichen Sektor wird die Szenario-Methode als Mittel benutzt, um das Mitdenken und Mitmachen der äußeren (gesellschaftlichen, regionalen usw.) Interessengruppen an der Analyse der Probleme und Ausarbeitung der Lösungen zu aktivieren (Ringland 2002b: 1–3, 203–222), im öffentlichen Sektor dient die Szenarioausarbeitung dem Ziel, den Meinungsaustausch und die Konsensfindung zu fördern. (Ringland 2006: 111–152)

Die Erfahrungen mit Entwicklungsszenarios in Estland

Im Jahre 1997 wurden "weiche" (verbal beschriebene) Entwicklungsszenarios "Estland 2010" als Szenarios des 2. Typs formuliert. Eine Gruppe von Wissenschaftlern stellten gemäß ihren Vorstellungen über die eventuellen Entwicklungsperspektiven der estnischen Wirtschaft diese Szenarios zusammen. Es gab keinen öffentlichen Entscheidungsträger, der unter den Szenarios angemessen auswählen und sie gezielt anwenden wollte. Doch ist das eine wertvolle Erfahrung, die man bei der Erstellung der neuen mittelfristigen Entwicklungsszenarios für Estland berücksichtigen sollte.

Einer der Verfasser der Entwicklungsszenarios "Estland 2010" E. Terk (2007) meint, dass die estnische Entwicklung bisher ungefähr gemäß dem Szenario, genannt "Südfinnland", verlaufen ist, obwohl das als "Großer Sieg" bezeichnete Szenario eine erwünschtere Entwicklung verdeutlicht. Diese Einschätzung entspricht den Entwicklungsvarianten offensichtlich hinsichtlich der ausgewählten Entwicklungsdimensionen. Unklar bleibt jedoch die Empfehlung von E. Terk, ein neues Szenario "Großer Sieg II" zu formulieren. Estland gleicht "Südfinnland" (nur im Sinne der zusammengestellten Szenarios und nicht wegen einer Ähnlichkeit der wirtschaftlichen und gesellschaftlichen Bedingungen mit der südlichen Region Finnlands). Für die neuen Entwicklungsszenarios wäre es fehlerhaft erneut anzunehmen, dass Estland als "Brücke" in den Beziehungen zwischen der EU und Russland oder als ein fortgeschrittener Entwickler und eine führende Rolle als Anwender der Informations- und Kommunikationstechnologie (IKT) spielen würde. Die Pfadab-

hängigkeit zwingt, von den tatsächlichen Möglichkeiten bei der Gestaltung der Entwicklungsdimensionen für die estnische Wirtschaft auszugehen.

Für den Entwurf der neuen Entwicklungsszenarios gewinnen wir wertvolle Informationen aus der Analyse, warum die estnische Entwicklung keiner der gewählten Entwicklungsdimensionen gefolgt ist. Zuerst muss man feststellen, ob "Südfinnland" als Basisszenario den 1997 den Entwicklungstendenzen estnischer Unternehmen und des öffentlichen Sektors entsprochen hat. War das als "Großer Sieg" genannte Entwicklungsszenario überhaupt realistisch? War die Hypothese, Estland könnte als Vermittler in den Beziehungen zwischen der EU und Russland und ein innovativer Anwender der IKT sein, überhaupt glaubhaft.

Die entscheidenden estnischen Wirtschaftsvertreter, die Regierungsorgane und damit der ganze öffentliche Sektor, haben die estnische Entwicklung mittels ihrer Aktivitäten oder ihrer Unterlassungen auf den heutigen Stand gebracht. Die anderen Entscheidungsträgern – der unternehmerische Sektor und die Haushalte, befanden sich in den Jahren 1997–2007 in einer Situation, wo sie lernen mussten, wie man in der marktwirtschaftlichen Umwelt überlebt. Schon aus diesem Grund konnten sie ihre Aufmerksamkeit nicht genügend den langfristigen Entwicklungsproblemen schenken. Darum erlaubten die Handlungen der privaten Entscheidungsträger nur eine Entwicklung, die dem Basisszenario entsprach.

Waren die Einschätzungen bezüglich der Rolle Estlands, die als Grundlage zum Entwurf des Entwicklungsszenarios "Estland 2010" dienten, überhaupt realistisch? Für eine wesentliche Verbesserung der estnischen wirtschaftlichen Position wurde in den Entwicklungsszenarios "Estland 2010" die Entwicklung der Beziehungen mit Russland so gewählt, dass Estland, da es die russischen Verhältnisse gut kennt, eine führende wirtschaftliche Vermittlungsrolle zwischen der EU und Russland übernimmt. Einerseits betrifft dies die Transitkorridorfunktion Estlands, andererseits vermutete man, dass Estland als Brückenkopf westlicher Firmen bei der Erschließung des russischen Markts dient. Die Brückenposition zwischen der EU und Russland hing jedoch nicht nur von Estland ab. Hatte Estland in seinen Beziehungen mit Russland überhaupt Möglichkeiten, eine ähnliche Position wie Finnland einzunehmen? Wäre das für Russland notwendig gewesen? Hat Russland überhaupt in Zukunft die Absicht, den Verlust der im Nordischen Krieg eroberten Gebiete anzuerkennen? Im Jahre 1997 hat Russland auf diese Fragen keine eindeutigen Antworten gegeben. Man rechnete mit einer positiven Antwort.

Heute sind die Antworten Russlands auf diese Fragen bekannt, sie sind negativ. Auf die Zukunft Estlands als Transitbrücke hat Russland schon vor einigen Jahren mit dem beabsichtigten Ausbau seiner Häfen reagiert. Der Tallinner Hafen war als Transittor für Russland so lange vorteilhaft, als er in seinem Besitz war. Keine Großmacht wird ihre Außenwirtschaftsbeziehungen abhängig von Vermitteln machen. Peter I. und Stalin haben das Problem durch Eroberung und Annektieren (in ganz Osteuropa, nicht nur in Estland) gelöst. Heute betreibt Russland eine Politik des Suchens nach "neuen Fenstern". Als wiederholte Bestätigung seiner Politik ist außer dem Ausbau seiner Häfen auch auf die Errichtung der Nord Stream Gasleitung

durch die Ostsee zu verweisen. Für Russland besteht kein objektiver Zwang, mit der EU durch oder über seine verlorenen Grenzgebiete zu kommunizieren.

In den Jahren 1996–1997 konnte man kaum voraussehen, dass das immer schwächer werdende Russland mit Hilfe von Energieexporten sich erholt, von neuem stärker wird und offen die Außenpolitik einer Großmacht betreibt. Sicher ist aber auch die Tatsache, dass die estnischen Regierungen innenpolitisch wegen der immer auf dem Spielbrett liegenden "Russische Karte" nichts Entscheidendes unternommen haben, um freundschaftliche Beziehungen mit Russland anzuknüpfen. Vor ein paar Jahren hat das innenpolitische Spiel mit der "Russischen Karte" sogar den Grenzvertrag zwischen Estland und Russland vom Spieltisch verschwinden lassen. Schließlich beschloss man im April dieses Jahres, den "Bronzesoldaten" auf den (zeitweiligen) Transitsteg EU-Russland zu werfen, infolgedessen erlitt dieser Transitsteg große und offensichtlich unregenerierbare Schäden.

Natürlich war und ist auch in Zukunft unter solchen Bedingungen nicht daran zu denken, dass die EU und mächtige internationale Firmen Estland als Brückenkopf benutzen, um den russischen Markt zu bedienen oder dort zu investieren. Außerdem demonstrieren die estnischen Vertreter in den EU-Institutionen ihr "Russlandkennen" in negativer Hinsicht. Ein Verurteilungsvorschlag nach dem anderen wird unterbreitet. Der Streit um die Nord Stream Gasleitung ist jetzt noch hinzugekommen. Vom Standpunkt der historischen Gerechtigkeit können diese Konflikte ihre Berechtigung haben, aber für die EU oder auch für die großen Firmen hat dies keine große Bedeutung. Es ist aber glaubhaft, dass 1997 die Bereitschaft Estlands und der EU bei der Gestaltung der Beziehungen zu Russland größer war als heute. Somit war damals die Hoffnung, einen Entwicklungsanstoß für Estland zu finden, begründet.

Aufschlussreich ist ebenso die Betrachtung der zweiten Dimension (innovative Entwicklung und Anwendung der IKT) in den Entwicklungsszenarios "Estland 2010". Hier konnte und musste der estnische Staat (als Komplex aller Entscheidungsträger sowohl im öffentlichen als auch im privaten Sektor) eine aktive Rolle spielen. Die 1990er Jahre haben in Estland wirklich große Hoffnungen erweckt, sogar Euphorie ausgelöst und auch zu Illusionen auf dem Gebiet der IKT geführt. Nach der Erlangung seiner Selbständigkeit begann Estland seinen Rückstand auf diesem Gebiet zu beseitigen, dabei wurden die neuesten Technologien benutzt. Bestimmte Interessengruppen erregten den Eindruck, als ob Estland weltweit an der Spitze dieser Technologieentwicklung stehe. Der Glaube an diese "Entwicklungstendenz" war sehr attraktiv.

Die Realität erwies sich für Estland auf dem Gebiet der IKT doch anders. Zunächst muss Estland unvermeidlich als Kopierer fungieren, da die Bildungs- und Wissenschaftsbasis Estlands für IKT-Anwendungen zu klein und nicht genug nachhaltig ist. Diese Technologien werden vor allem von größeren und mit einem stärkeren Bildungs- und Wissenschaftspotenzial versehenen Staaten ausgearbeitet und angewendet. Solange, bis die Erstanwender die benutzte IKT amortisierten, galten die Neuankömmlinge wirklich als "Aktivisten". Leider war die Extrapolation einer führenden Position in der Welt willkürlich. Der übermäßige Optimismus ergab sich

hauptsächlich aus der Überschätzung des estnischen Potenzials. Leider entsprachen die Aktivitäten der estnischen Entscheidungsträger nicht den Erwartungen, die im Erfolgsszenario zu Grunde gelegt waren.

Die estnische Regierung hat seit 1999 nur ein klares wirtschaftliches Ziel verfolgt: die Staatsquote am BIP zu vermindern, wozu die Senkung der Steuerbelastung und der ausgeglichene Haushalt beigetragen haben. Darauf haben liberale politische Kräfte viel Energie verwendet und auch Erfolge erzielt: die Staatsquote am BIP ist in sieben Jahren von *ca* 40% (das große Wachstum im Wahljahr 1999 wird bei der Betrachtung ausgelassen) auf *ca* 33% gesunken (s. Tabelle 1). In der gleichen Periode erreichte die Staatsquote in den 25 EU-Ländern im Durchschnitt das Niveau von 47% und in den Staaten der Eurozone 48% vom BIP.

Tabelle 1. Das Niveau der Staatsquote im Vergleich zum EU-Durchschnittsniveau in den Jahren 1997–2006, in %

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Estland	39.2	39.5	42.8	36.5	35.1	35.6	35.3	34.2	33.2	33.2
25 EU-Länder	–	47.6	47.1	45.5	46.4	46.9	47.6	47.0	47.1	46.9
Eurozone	49.4	48.6	48.2	46.2	47.4	47.7	48.2	47.7	47.7	47.8

Quelle: EUROSTAT online Datenbank.

Laut der in Estland herrschenden Ideologie sollte die wirtschaftliche Entwicklung aufgrund der Effizienzsteigerung des öffentlichen Sektors und der Erhöhung der Aktivität des unternehmerischen Sektors erfolgen. In Wirklichkeit fand in Estland keine Effizienzsteigerung im öffentlichen Sektor, sondern nur sein Zusammenschrumpfen (z.B. im wissenschaftlichen Bereich wurden viele Forschungsinstitute geschlossen) statt. Ebenso wurden die von öffentlichen Budgets abhängigen Bereiche ungenügend finanziert. Der Unternehmungssektor konnte ohne Unterstützung und organisatorischer Hilfe des öffentlichen Sektors die auf die IKT bezogenen Erwartungen nicht erfüllen.

Die Verminderung des Anteils der Sozialleistungen vom BIP (z.B. die Verschlechterung des Verhältnisses zwischen der Durchschnittsrente und dem Durchschnittslohn) verursachte in der Gesellschaft einen wachsenden politischen Widerstand. Der Wunsch, durch Kürzung der Steuereinnahmen und den Verzicht auf die Kredite, einen Teil der Haushaltseinnahmen den Reserven zuzuführen, entzog dem öffentlichen Sektor die Möglichkeit, in genügendem Maße in die Bildung und die Wissenschaft zu investieren. Das Verhältnis der Bildungsausgaben zum BIP ist in zehn Jahren um *ca* 15% (von *ca* 6% auf 5% vom BIP) gesunken (s. Tabelle 2). Nach dieser Kennziffer erreicht Estland unter 25 EU-Ländern wohl das Durchschnittsniveau, aber man muss dabei die geringe Besiedelungsdichte und einen umfangreichen Modernisierungsbedarf des Unterrichtswesens in Estland berücksichtigen (damit werden die bildungsbezogenen Kosten höher). Wenn man zum Vergleich die innovativen Kleinstaaten der EU (laut EUROSTAT online Daten 2004 Dänemark 8.47; Island 7.59; Norwegen 7.58; Schweden 7.35; Finnland 6.43) betrachtet, so

bleibt Estland nach dem Anteil der Bildungsausgaben vom BIP (d.h. im Bereich der gesellschaftlichen Bildungsbewertung) weit zurück. Für die 25 EU-Länder ist eine Wachstumstendenz bei dem Verhältnis zwischen den Bildungsausgaben und dem BIP charakteristisch, Estland hat leider das Verhältnis zwischen Bildungsausgaben und BIP konsequent verringert. Das bedeutet, dass ein Grundpfeiler der wirtschaftlichen Konkurrenzfähigkeit Estlands in der EU schwächer wird. Die estnische Bildungsbasis wurde nicht modernisiert, sondern sie wurde auf Kosten des früher aufgebrachten Kapitals amortisiert. Die Erreichung einer Spitzenposition auf dem Gebiet der IKT anzunehmen, scheint bei einer solchen Basis unbegründet.

Tabelle 2. Die Relation der Bildungsausgaben des öffentlichen Sektors zum BIP im Vergleich zum EU-Durchschnitt in der Jahren 1995–2004, in %

	1996	1997	1998	1999	2000	2001	2002	2003	2004
Estland	6.05	5.92	5.71	6.11	5.57	5.28	5.48	5.43	5.09
25 EU-Länder	–	4.79	–	4.77	4.71	4.99	5.10	5.20	5.12

Quelle: EUROSTAT online Datenbank.

Die Tabelle 3 zeigt, dass die Relation der Ausgaben für Wissenschaft und Entwicklung zum BIP in Estland in den Jahren 1988–2006 um das Doppelte gestiegen ist (von 0.58% auf 1.14%). Gleichzeitig ist das Durchschnittsniveau der EU-Staaten stabil gewesen, *ca* 1.85–1.89% vom BIP. Obwohl in der Wissenschafts- und Entwicklungstätigkeit der EU eine gewisse Stagnation herrscht und auf das sogenannte Lissabonner Ziel (3% vom BIP im Jahre 2010) verzichtet wurde, konnte Estland erst im Jahre 2006 über 50% des Durchschnittsniveaus der EU erreichen. Dabei vergrößerte sich der Beitrag des estnischen Regierungssektors zur Wissenschafts- und Entwicklungstätigkeit 2006 im Vergleich zu 1998 nur um ein Drittel (von 0.46% auf 0.61% vom BIP), während der Privatsektor seinen Beitrag ungefähr 4,5 Mal (von 0.12% auf 0.53 vom BIP) vergrößert hat. Es ist sicher, dass eine führende Rolle in der Entwicklung und der Anwendung innovativer Lösungen auf einer solchen Basis nicht erreichbar ist.

Tabelle 3. Die estnische Relation der Wissenschafts- und Entwicklungskosten zum BIP im Vergleich zum Durchschnittsniveau der EU-Staaten in den Jahren 1998–2006, in %

	1998	1999	2000	2001	2002	2003	2004	2005	2006
Estland	0.58	0.70	0.61	0.71	0.72	0.79	0.88	0.94	1.14
25 EU-Staaten	1.80	1.86	1.87	1.88	1.89	1.88	1.85	1.85	–
Eurozone	1.79	1.83	1.85	1.87	1.88	1.87	1.86	1.86	–

Quelle: Online Datenbanken von EUROSTAT und vom Estnischen Statistischen Amt.

Es gibt noch einen anderen Grund für die Passivität der Regierung – es fehlen prinzipielle Ideen für die Unterstützung der wirtschaftlichen Entwicklung. Nicht nur die Politiker, sondern auch Beamte benötigen eine intensive Fortbildung in der Staats- und Verwaltungsführung, denn an den Universitäten wird die Ökonomik des

öffentlichen Sektors, ebenso die Lehre von Finanzen und Management in diesem Sektor, erst eingeführt. Die Angestellten mit BWL- oder Juraausbildung (schon gar nicht die Angestellten mit anderer Ausbildung) sind unvorbereitet, die Prozesse des öffentlichen Sektors zielgemäß und vollständig zugunsten der staatlichen Wirtschaftsentwicklung zu steuern. Die "Nicht-Einmischungspolitik" in die Markt- und Wirtschaftsprozesse, die von der Regierung betrieben wird, und die Minderung des Anteils des öffentlichen Sektors am BIP sind zurzeit die Selbstverteidigungsstrategie der heutigen politischen und administrativen Elite.

Obwohl verschiedene Behörden und Arbeitsgruppen zahlreiche Entwicklungspläne für wesentliche Bereiche zusammengestellt haben, hat die Regierung auf ihre Finanzierung verzichtet und damit diese Planungen negativ eingeschätzt. Aufgrund einer sehr konservativen Haushaltspolitik (eigentlich ergibt sich der Haushaltsüberschuss aus den überwiesenen Mitteln, die nicht verwendet wurden) und der verbesserten Effizienz der Steuerbehörde konnten die Haushaltseinnahmen die Haushaltsausgaben übersteigen, der Rest wurde in die Reserven überführt und nicht für die Erfüllung der unter Geldknappheit leidenden Entwicklungsvorhaben verwendet. Der große Teil des Haushaltsüberschusses wurde dabei in die Reserve der Rentenkasse überführt, um das Haushaltdefizit in diesem Bereich zu decken. Natürlich hätte die estnische Regierung nichts dagegen, wenn der Unternehmungssektor die führende Rolle in der Anwendung der IKT weltweit einnehmen würde. Nach der Wirtschaftslogik ist das nicht zu erwarten:

Erstens. Die Unternehmer setzen ihr Kapital nicht in die riskanten innovativen Investitionen ein, solange sie die Möglichkeit haben, weniger riskant für die extensive Entwicklung zu investieren. Deswegen unterstützt der Regierungssektor in den entwickelten Staaten die unternehmerische Innovation (keine Extensivinvestitionen) mit genügend großen Mitteln, damit die Unternehmer ihre Risikobarriere überwinden könnten. Im estnischen Haushalt sind bis heute keine Mittel für die wirksame Unterstützung der Innovationstätigkeit der Unternehmen ausgewiesen worden.

Zweitens. Der Ertrag, der im Transitsektor oder im Bankwesen erwirtschaftet wurde, wird bestimmt nicht in die innovativen Projekte anderer Bereiche investiert. Ein Unternehmer will sein Kapital in Bereichen anlegen, wo er sich gut auskennt. Wenn in Estland irgendein Bereich bezogen auf die Investitionen schon erschlossen ist, versucht man, den in Estland erwirtschafteten Gewinn im Ausland professionell anzulegen. Die Steuerbefreiung des unternehmerischen unverteilten Gewinnes hat Estland für einige ausländische Unternehmen als Aufmarschgebiet zur ausländischen Markterschließung (sogar auf den russischen Markt) attraktiv gemacht. Dieser Trend besteht im estnischen Bankwesen, in der Telekommunikation, im Immobiliengeschäft und im Transit.

Die Entwicklung, die nach diesem passiven Szenario resultiert, ist in Estland nicht paradox. Paradox wäre irgendein anderes Resultat. In seiner nachträglichen Betrachtung der Entwicklungsszenarios hebt E. Terk (2007) noch einen wichtigen Aspekt hervor. – Es gab keine Übertragung der Unternehmensmentalität Südfinnlands (oder der entwickelten Nachbarstaaten) zusammen mit der Verlagerung ihrer Betriebe

nach Estland. Die Hoffnung, dass die schwedischen und finnischen Betriebe ihre auf Menschen orientierte Unternehmungskultur in Estland betreiben, wurde enttäuscht. Entsprechende Erwartungen konnten auch nicht in Erfüllung gehen. Die Auslandsunternehmen siedeln sich in Estland an, um die hier herrschende rücksichtslose Unternehmungskultur den Menschen gegenüber für ihre wirtschaftlichen Interessen auszunutzen. Dieses in der weltweiten Praxis allgemein geltende Resultat muss bei der Zusammenstellung neuer Entwicklungsszenarios in Estland berücksichtigt werden.

Die Hauptmerkmale des Basisszenarios der estnischen wirtschaftlichen Entwicklung

Die Zahl der betrachtenden Entwicklungsszenarios ist theoretisch gleich dem Produkt der Zahl der unterschiedlichen Zustände der Dimensionen.[2] Zugleich darf man die Zukunftsvision nicht zu detailliert betrachten, sonst würde sie die Gesamtentwicklung nicht mehr erkennen lassen. Deshalb sind die Wahl der Zahl der Grunddimensionen der zukünftigen Veränderungen und ihrer Zustände von entscheidender Bedeutung. (Ringland 2002: 161–164) Gewöhnlich werden nicht mehr als vier Szenarios gebildet, weil die Differenzierungsmöglichkeiten in größerer Zahl abnehmen.

Dabei werden die eventuellen Umweltveränderungen zu einem Ganzen und die eventuellen internen Veränderungstendenzen der Organisation zu einer anderen Gesamtdimension zusammengeschlossen. Beide Dimensionen werden durch zwei Zustände charakterisiert – traditionell (alt) und voraussagend (neu). Man unterscheidet:

- Basisszenario ("business as usual", "surprise-free"), das bekannte Zustände und Tendenzen sowohl in der steuerbaren Organisation als auch in ihrer Umwelt zum Ausdruck bringt;
- Radikale Veränderungen im Verhalten der Steuerungspolitik in einer ökonomischen Umwelt ohne Überraschungen (d.h. mit zu erwartenden Entwicklungstendenzen);
- Die Fortsetzung des bisherigen Steuerungsverhaltens in einer Umwelt mit überraschenden (ungünstigen) Veränderungen;
- Radikal veränderte Steuerung bei überraschenden Umweltveränderungen soll Visionen anregen, damit bei ungünstigen Veränderungen gesteuert werden kann.

[2] Wir sehen von der Vorgehensweise der Vertreter der mathematischen Modellierung (s. z.B. den Überblick von Hlavacek u.a. ... 2004) ab, die verlangt, dass bei Unbestimmtheit der Wahrscheinlichkeiten der Inputkombinationen alle aus den verschiedenen Inputkombinationen ausgehenden Szenarios der Outputentwicklungen zu bestimmen sind. Solche Analysen sind in den Naturwissenschaften und in der Technik angebracht. Dort kann man eindeutig die Parameter der Zusammenhänge von In- und Output modellieren und die Unbestimmtheit äußert sich im Informationsmangel über die Wahrscheinlichkeit der Streuung der Inputs. In den Sozialwissenschaften sind jedoch schon die Produktionsfunktionen an sich unbekannt. Mit Hilfe von Szenarios versucht man den Charakter einer bestimmten Handlungsvariante und den unter Mitwirkung der Umweltzustände resultierenden Outputs zu ergründen.

Unabhängig von der Zahl der zusammengestellten Szenarios ist es wichtig, die Parameter der Basisszenarios klarzustellen. Die Grundlage des Basisszenarios bildet die Voraussetzung, dass ein Entscheidungsträger im Allgemeinen auf gleiche Weise wie bis jetzt handelt und in ihrem Handeln nur die mit Ressourcen gedeckten Veränderungen einführt. Bei der Zusammenstellung des Basisszenarios wird vorausgesetzt, dass es keine unerwartete Verschiebung in Richtung auf eine Verschlechterung in der Umwelt gibt (es werden keine Szenarios für das "Zurechtkommen" mit einer unerwarteten Besserung der Umwelt zusammengestellt).

Die Autoren der Entwicklungsszenarios "Estland 2010" glaubten, dass der estnische Staat sich in Richtung (Süd-)Finnland entwickelt, indem er die Handlungsweise des öffentlichen Sektors, des Unternehmungssektors und der Privathaushalte fortsetzt (Basisszenario wurde dementsprechend genannt "Süd-Finnland"). Der Vergleich des Entwicklungsziels mit dem Zustand eines Staates bedeutet für die Verfasser des Szenarios, dass sie sich weniger mit lästigen Einzelfragen (z.B. mit der Prognose der Staatstätigkeitsänderung) beschäftigen müssen, denn die Zukunftsvision ist für sie schon vorhanden. Man braucht den Zielzustand nur zu beschreiben.

Ist es angebracht, sich auf dieses Basisszenario der Wirtschaftsentwicklung Estlands auch heute noch zu stützen oder zwingen uns die herausgestellten Entwicklungstendenzen das Basisszenario zu korrigieren? Im Politjargon wird Estland in seiner sozialen Entwicklung als Bananenrepublik bezeichnet, die Sozialwissenschaftler haben von der Gespaltenheit der estnischen Gesellschaft in "zwei Estland" gesprochen. Das alles spricht nicht für die finnischbezogene Entwicklungsrichtung. Vom wirtschaftlichen Standpunkt sind estnische Betriebe eigentlich die Zulieferer der finnischen Unternehmen und Estland gilt für Finnland als Reservoir der anspruchslosen und billigen Arbeitskraft. Diese Umstände deuten darauf, dass in der estnischen Entwicklung wesentliche Veränderungen im Vergleich zum Basisszenario "Süd-Finnland" der Entwicklungsszenarios "Estland 2010" stattgefunden haben. Deshalb müssen die Hauptmerkmale des neuen Basisszenario herausgestellt werden.

Die Ausgangsangaben des mittelfristigen Basisszenarios für die estnische wirtschaftliche Entwicklung sind in dem von der Regierung bestätigten Dokument ("Staatliche Haushaltsstrategie 2008–2011" (Riigi ... 2007) verankert, das die Verwendung der im Rahmen "Strategie der estnischen staatlichen Strukturmittel 2007–2013" geplanten EU-Mittel umfasst. "Es ist bemerkenswert, dass die vier Jahre der diesmaligen Haushaltsstrategie sich mit der Legislaturperiode des Regierungsbündnisses decken. Bei der Strategieplanung hat man deshalb wesentliche staatlich geplante Handlungen berücksichtigt. Somit gibt die Haushaltsstrategie einerseits einen realistischen Überblick, was die Zentralregierung in den nächsten vier Jahren plant. Andererseits hat man die Sicherheit, dass die Pläne eine Finanzierungsbasis haben und dass es möglich ist, diese Pläne während der Legislaturperiode einer Regierung zu verwirklichen." (s. Riigi ... 2007: 6–7) Im Rahmen anderer Entwicklungspläne (Entwicklungsplan des estnischen Landlebens 2007–2013, Unternehmungspolitik 2007–2013, auf Kenntnisse bezogenes Estland II, die Strategie der estnischen Hochschulbildung in den Jahren 2007–2015 u.a.) hängen die Aktivitäten in erster Linie davon ab, in welchem Umfang sie durch Haushaltsmittel finanziert werden.

Die Grenzen der extensiven Entwicklung der estnischen Wirtschaft werden vor allem von der wichtigsten Ressource – Arbeitskraft (-markt) – festgelegt. Die durchschnittliche Beschäftigungsquote der 15–64 jährigen Arbeitnehmer betrug in den 25 EU-Ländern 2005 63.8%. Die entsprechende estnische Quote war um 0.6% höher, die lettische und litauische Beschäftigungsquote fiel um 1–2% niedriger aus als in Estland. In Finnland und Schweden war sie entsprechend um 4 und 8 Prozentpunkte höher. Im Jahre 2006 erreichte die estnische Beschäftigungsquote sogar bis zu 67.7%, d.h. sie war fast so hoch wie in Finnland. Die Arbeitslosenquote der 15–64 jährigen Arbeitnehmer war in Estland niedriger wie im EU-Durchschnitt und auch im Vergleich zu den Nachbarstaaten.

Im Jahre 2006 wurde die Zahl der nichtberufstätigen Menschen im Vergleich zum Vorjahr um 6.9% oder um 27 000 Menschen geringer. In einigen Sektoren herrscht in Estland statt der Arbeitslosigkeit durchaus Arbeitskräftemangel. Gleichzeitig wäre es jedoch möglich, in Estland unter der arbeitsaltrigen Bevölkerung 50 000–80 000 Menschen als zusätzliche Arbeitskräfte zu gewinnen. Laut vorhandener Schätzungen arbeiten wenigstens 20 000 Esten im Ausland, die bereit wären, nach Estland zurückzukommen, wenn sich die Lohnniveaus angleichen und die Arbeitsbedingungen verbessern. (s. Riigi … 2007: 14–15) In Wirklichkeit ist bis zum Jahr 2011 eine erhöhte Beschäftigung um etwa 14 000 Arbeitnehmer, im Vergleich zu 2006 zu erwarten. (Riigi … 2007: 67) Im Arbeitskräftebereich hat Estland schon die Grenze der extensiven Entwicklung erreicht. Die Anwerbung ausländischer Arbeitskräfte, um die extensive Entwicklungsstrategie zu unterstützen, würde schon wegen des ohnehin großen Anteils an Immigranten und ihres Nachwuchses die Existenz der estnischen Nation bedrohen.

Die meisten estnischen Entwicklungsprobleme betreffen die effektive Ressourcennutzung. In zehn Jahren ist das Produktivitätsniveau der estnischen Arbeitskraft in Relation zum Niveau der 25 EU-Länder durchschnittlich 6.2% jährlich gestiegen, zugleich wurde *ca* 60% des Durchschnitts der 25 EU-Länder erreicht. Estland ist hinsichtlich der Produktivität im EU-Vergleich ziemlich niedrig einzustufen. In der heutigen Phase der Wirtschaftsentwicklung haben die Unternehmen ihre Gewinne erwirtschaftet, ohne besonders in Wissen und Können zu investieren. Der Grund für die niedrige Produktivität liegt in den veralteten Anlagen, in der geringen Innovations- und Entwicklungstätigkeit, im schwachen Management usw. (Riigi … 2007: 21)

Das wesentliche Hindernis, das die Unternehmer bei der Vergrößerung der Wertschöpfung überwinden müssen, ist der Mangel an benötigtem Kapital. Die Finanzmittelknappheit wird vor allem bei Existenzgründern und kleinen Unternehmen deutlich. Sie stoßen wegen der ungenügenden zu bietenden Sicherheiten, einer niedrigen Eigenfinanzierungswürdigkeit und anderer Faktoren, auf Schwierigkeiten, das benötigte Kapital aus dem Privatsektor zu erlangen. Auf dem Finanzmarkt sind notwendige Finanzmittel für die Verwirklichung der neuen (insbesondere riskanten) Ideen und für ein schnelles Finanzierungswachstum nicht zugänglich. (Riigi … 2007: 21)

Die estnische Regierung hebt bei den Entwicklungsperspektiven des öffentlichen Sektors in erster Linie den Aspekt des Haushaltsausgleichs hervor: Der Haushaltsüberschuss des Zentralstates erreichte 2006 7.7 Milliarden Kronen, vom BIP beträgt das 3.8%. Im Vergleich zu vorigen Jahren ist der Haushaltsüberschuss des öffentlichen Sektors wesentlich gestiegen, sowohl dem absoluten Volumen nach als auch prozentual vom BIP – 2004 und 2005 konnte ein Überschuss von 2.3% vom BIP verzeichnet werden. (Riigi … 2007: 22)

"Der Überschuss der Zentralregierung ergab sich teilweise aus den Einnahmen, die infolge des wirtschaftlichen Wachstums eingegangen waren, aber hauptsächlich aus dem niedrigeren Niveau der Ausgaben im Vergleich zu dem Budgetplan – die Einnahmen des Haushalts bildeten 2006 101.4% vom Haushaltsplan, die Ausgaben betrugen nur 93.6% des Geplanten." (Riigi … 2007: 23) Ein wesentlicher Teil des Geplanten wurde einfach nicht realisiert, daher kommt der Eindruck des großen Haushaltsüberschusses.

"Dank dem bemerkenswerten Haushaltsüberschuss des öffentlichen Sektors, vor allem im Sektor der Zentralregierung und der Sozialversicherungsfonds, sind die Reserven ständig gewachsen. Nach dem Stand Ende 2006 überstiegen die Finanzreserven der Zentralregierung die Schulden der Zentralregierung fünffach und erreichten den Stand von 19.3 Milliarden Kronen oder 9.4% im Verhältnis zum BIP." (Riigi … 2007: 26)

Zusammenfassend ist die staatliche Einschätzung folgende: "Die bisherige estnische Wirtschaftsentwicklung ist erfolgreich gewesen und die Zukunftsaussichten sind günstig. In den letzten Jahren sind jedoch eine gewisse Unausgeglichenheit in der Wirtschaft und die Gefahr der sprunghaften Verlangsamung des Wirtschaftswachstums zu verzeichnen". (Riigi … 2007: 69) Es sind keine Veränderungen in der Politik der estnischen Zentralregierung vorauszusehen: "Gewöhnlich wird bei der Zusammenstellung des Zentralhaushaltes in Estland vom Standpunkt ausgegangen, dass der Haushalt des Regierungssektors in einer mittelfristigen Periode im Gleichgewicht ist. Die Regierung setzt das im Haushalt 2007 vorgesehene Vorhaben fort: der Haushalt wird schon während der Planungszeit für eine mittelfristige Periode so zusammengestellt, dass der Haushalt des Regierungssektors einen Überschuss enthält, d.h. alle Einnahmen werden nicht in laufende Ausgaben aufgeteilt. Zusätzlich kann man besser die eingehenden Einnahmen sparen" … "Auf diese Weise ermöglicht eine solche Haushaltspolitik, die Schuldenlast niedrig zu halten und die Reserven zu vergrößern, dies ist seinerseits die Voraussetzung für die langfristige Nachhaltigkeit des staatlichen Finanzwesens." … "Die Regierung vermindert durch die Zusammenstellung der Haushalte mit eingeplantem Überschuss während der ganzen mittelfristigen Periode konsequent die Schuldenlast der Zentralregierung." (Riigi … 2007: 70)

Das Ganze ist eindeutig – die estnische Regierung wird die bisherige Haushaltspolitik in einer noch radikalen Form fortsetzen. Die Daten im Haushaltsverzeichnis (Riigi … 2007: 79) zeigen, dass man die Absicht hat, das Verhältnis zwischen den Haushaltseinnahmen und dem BIP 2008 von 33.9% auf 31.1% 2011 zu senken. Der

Einfluss des öffentlichen Sektors auf die Gestaltung der gesellschaftlichen Prozesse wird in den nächsten Jahren um *ca* ein Zehntel abnehmen. 2011 werden die Haushaltseinnahmen im Vergleich zum relativen Stand 2008 über zehn Milliarden Kronen geringer ausfallen. Dieser Niveausturz der Haushaltseinnahmen wird ungeachtet der Steigerungen der europäischen Unterstützungen, über 15 Milliarden Kronen im Staatshaushalt 2011, stattfinden. Es sei erwähnt, dass in den Jahren 2000–2006 das Einnahmenniveau des ganzen Regierungssektors verhältnismäßig stabil war, *ca* 36% zum BIP. (Estnisches Statistisches Amt …)

Für wesentliche Verschiebungen in der wirtschaftlichen Konkurrenzfähigkeit, im Zuge der Schaffung der wissenschaftlichen Basis für Innovationen und der Unterstützung des Unternehmungssektors bei technologischen und produktbezogenen Innovation, werden mittelfristig im Haushalt des estnischen öffentlichen Sektors keine genügenden Mittel bereitgestellt. Die Zahlen in der Haushaltsstrategie (Riigi … 2007: 105) zeigen, dass die für die Bildungs- und Wissenschaftspolitik überwiesenen Haushaltsmittel im Verhältnis zum BIP auf dem bisherigen Niveau bleiben. Die für die Informationsgesellschaft bereitgestellten Summen liegen bei etwa 500 Millionen Kronen pro Jahr und die Absolutgröße dieser Summen vermindert sich in den Jahren 2008–2011 ein wenig, damit sinkt wesentlich ihre Relation zum BIP.

Zusammenfassend wird aufgrund des aus der Haushaltspolitik der estnischen Regierung resultierenden Basisszenarios der öffentliche Sektor weiterhin zusammenschrumpfen und seine Wirkung vermindert sich. Für die Gesellschaft bedeutet es, dass sich die Probleme, die vom Beitrag des öffentlichen Sektors abhängig sind, verschärfen. Im Wirtschaftsbereich setzt sich hauptsächlich die passive Politik des öffentlichen Sektors fort. Nur die Bereiche, die von der EU in der Höhe von mindestens einer Milliarde Kronen pro Jahr finanziert werden (Umweltschutz, Landleben und Regionalpolitik, Infrastruktur des Transportwesens) können mit einer zügigen Entwicklung rechnen. Die EU stellt insgesamt 1.6 Milliarden Kronen in den Jahren 2007–2013 für die menschliche Umweltentwicklung, für die Entwicklung der wirtschaftlichen Umwelt 1.4 Milliarden und etwa 400 Millionen Kronen für die Entwicklung der Humanressourcen bereit. Diese Mittel sind zu gering, um radikale Veränderungen mit sich zu bringen. Hinzu kommt noch die für die estnischen Haushaltsstrategie charakteristische Tatsache, dass Estland oft seine Finanzierung einschränkt, wenn die EU Geldmittel bereitstellt.

Zusammenfassend könnte man aus obengenannten Hauptzügen resultierendes Basisszenario der estnischen Entwicklung als “Beobachtungsszenario” nennen. Gemäß diesem Szenario wird die estnische Wirtschaft das finnische Entwicklungsniveau nicht erreichen. Vielmehr ist ein fortdauernder Verlust an Konkurrenzfähigkeit der estnischen Wirtschaft samt den daraus resultierenden Konsequenzen der gesamten Gesellschaft zu prognostizieren.

Spekulative Entwicklungsdimensionen der estnischen Wirtschaft

Wie könnten die eventuellen Entwicklungsdimensionen aufgrund der oben dargestellten Basisstrategie „die beobachtende Regierung" aussehen? Die Verfasser der Entwicklungsszenarios "Estland 2010" haben zwei Dimensionen hervorgehoben, die weltweit (oder regional) Estland eine führende Rolle auf dem Gebiet der Anwendung von IKT und eine Vermittlerrolle in den Wirtschaftsbeziehungen zwischen Russland und der EU beinhaltet haben. Die erwarteten oder die erwünschten Veränderungen in den ausgewählten Entwicklungsdimensionen blieben aus und so hat sich das Basisszenario realisiert.

Sind wesentliche (d.h. die Entwicklungsziele verändernden) Verschiebungen in den Entwicklungen des heutigen öffentlichen Sektors, der unternehmerischen Tätigkeit und der Privathaushalte zu erwarten oder kann man diese Veränderungen hervorrufen? Muss man zu wirtschaftspolitischen Veränderungen, die die wirtschaftliche Lage in Estland strategisch wesentlich verändern (im Vergleich zu anderen Staaten), bereit sein? Hlavacek u.a. (2004) verweisen auf "die Methode des schlechtesten Szenarios" für technische Prozesse, bei ihnen soll die Sicherheit der technischen Einrichtungen garantiert werden. Hinsichtlich der gesellschaftlichen Prozesse entsprechen der "Methode des schlechtesten Szenarios" die "Krisenszenarios". Aufgrund dieser Vorgehensweise wird als eine Entwicklungsvariante die Veränderungsmöglichkeit bei schlechtester Umwelt angesehen. Diese Steuerungsweise kann nur in einigen Bereichen angewendet werden (Regierungsbehörden zusammen mit der Armee müssen bei feindlichen Eingriff, zusammen mit dem medizinischen System bei Ausbruch einer Epidemie, zusammen mit dem Katastrophenschutz zum entsprechenden Handeln bereit sein). Sie lässt sich aber nicht für die ganze Gesellschaft zutreffend formulieren.

Außenwirtschaftlich sind für Estland in Bezug auf andere Staaten keine wesentlichen Veränderungen vorauszusehen. Die Steigerung der Erdölpreise und die wirtschaftliche Offensive der asiatischen Staaten beeinflussen alle unsere Wirtschaftspartner. Die estnische Regierung hat keine Möglichkeit, wesentliche positive Veränderungen durch ihre Tätigkeit zu bewirken – als EU-Mitglied wird unsere wirtschaftliche Umwelt hauptsächlich von den EU-Institutionen gestaltet.

Man kann natürlich die Auswirkungen der hypothetischen Veränderung der Entwicklungen, die im estnischen öffentlichen Sektor, in der unternehmerischen Tätigkeit und in den Privathaushalten stattfinden könnten, analysieren. Dabei müsste man folgende Umstände berücksichtigen:

a) An und für sich sind keine sprunghaften Änderungen der Unternehmens- und Haushaltsaktivitäten (d.h. die das Basisszenario ändernde Verschiebungen) zu erwarten: dazu braucht man entweder eine tiefe Krise oder einen einflussreichen Eingriff des öffentlichen Sektors. Es wäre zweifellos der richtige Zeitpunkt, schon heute die mögliche Entstehung einer solchen Krise und die entsprechenden Reaktionsvarianten, d.h. Krisenszenarios, zu analysieren.
b) Die im Basisszenario vorausgesetzten Aktivitäten könnte man wesentlich mittels einer radikalen Änderung der Politik im Staatssektor beeinflussen. Dafür

fehlen heute politische Voraussetzungen – die politischen Kräfte, die die "Beobachtungspolitik" betreiben, sind stärker als je. Andererseits sind heute wirtschaftliche Voraussetzungen – staatliche Reserven und eine sehr gute Kreditwürdigkeit – vorhanden, die die notwendigen Veränderungen erleichtern könnten.

Deshalb bietet sich an, folgendes hypothetisches Entwicklungsszenario zu analysieren: Welche positive Veränderungen und welche Gefahren sind in und für die estnischen Wirtschaft zu erwarten, wenn die estnische Zentralregierung und die führenden Unternehmungskreise radikal ihre Einstellung zu der Rolle des öffentlichen Sektors im Bereich der Unterstützung der Wirtschaftsentwicklung ändern. So ließe sich der Anteil der Bildungs-, Wissenschafts- und Entwicklungsausgaben des öffentlichen Sektors am BIP (für die Durchführung von komplexen Reformpaketen) in fünf Jahren anderthalbfach erhöhen und die Mittel in Höhe von 2% vom BIP in zehn Jahren jährlich für die zielgemäße Förderung unternehmerischer Innovationsprozesse einsetzen. Nicht nur die zu erwartende Veränderung der Konkurrenzfähigkeit der estnischen Wirtschaft müssen analysiert werden, ebenso wichtig ist, festzustellen, ob im öffentlichen Sektor komplexe, reale, wirksame und innovationspolitische Bildungs- und Wissenschaftsprogramme, die für die Steigerung der Konkurrenzfähigkeit notwendige Anregung geben, ausgearbeitet worden sind. Der erhoffte Effekt bleibt aus, wenn zusätzliche Geldmittel einfach in die veralteten Strukturen und Tätigkeitsbereiche überführt werden. Gleichzeitig haben auch die Entwicklungspläne keinen Erfolg, die sich anstatt auf Finanzierungsmöglichkeiten zu stützen, mit Aufrufen und Losungen begnügen.

Bei der Zusammenstellung der neuen Szenarios sollten die tatsächlichen Umstände, Zusammenhänge und Trends als Voraussetzungen berücksichtigt werden. Unter anderem ist die Aufmerksamkeit nicht nur auf die Handlungsgesetzmäßigkeiten der Unternehmen und der Privathaushalte zu lenken, sondern auch die mangelhafte Professionalität der Politiker und der Beamten in den Fragen der Staats- und Verwaltungsführung und der Mangel an Motivationen zur Erlangung erhöhter Professionalität öffentlicher Führungskräfte einzubeziehen.

Zusammenfassung

Die Szenario-Methode wird, abhängig von den Voraussetzungen, in unterschiedlicher Form angewendet. In Estland gibt es keine Möglichkeiten, quantitative Szenarios der Wirtschaftsentwicklung zusammenzustellen, weil dafür die notwendigen Ressourcen fehlen. So muss man in den Zukunftsvisionen mit der Fassung der "weichen" (evolutionistischen und prozessualen) Szenarios zu begnügen.

Die Szenarios könnten dem Entscheidungsträger dienen, Entwicklungsstrategien auszuarbeiten. In Estland haben aber die öffentlichen Entscheidungsträger kein Interesse, eine aktive Position einzunehmen und die Wirtschaftsentwicklung wirksam zu steuern. So wird die Szenario-Methode von den Beobachtern der Wirtschaftsentwicklung Estlands verwendet, um die Entwicklung bei Passivität der

öffentlichen Entscheidungsträger aufzuzeigen und auf die Anwendungsmöglichkeiten der Szenarios hinzuweisen.

Seit 1999 haben sowohl die Unternehmen als auch die Regierung das Hauptziel verfolgt, die Staatsquote zu vermindern. Daraus folgt, dass der öffentliche Sektor keine aktive Rolle bei der Steigerung der wirtschaftlichen Konkurrenzfähigkeit spielen konnte. Die ausgearbeiteten Entwicklungspläne sind ohne finanzielle Deckung nicht zu realisieren. Die bisherige und mittelfristige Perspektive geplante Entwicklungspolitik der Zentralregierung kann in ihren Entwicklungswirkungen als "Beobachtungsszenario" charakterisiert werden. Die Faktoren, die die extensive Entwicklung des heutigen Wirtschaftswachstums gesichert haben, sind erschöpft, die billige Arbeitskraft als ein bedeutender Bestandteil der Konkurrenzfähigkeit ist im Schwinden. Die Wirtschaft muss sich an die neuen Verhältnisse anpassen. Sowohl die Krisenszenarios der estnischen Wirtschaftsentwicklung als auch die Szenarios, die positive Veränderungen der wirtschaftlichen Konkurrenzfähigkeit berücksichtigen, könnten die Vertreter des estnischen Staats- und Unternehmungssektors davon überzeugen, dass die Rolle des öffentlichen Sektors radikal zu ändern ist.

Selbstverständlich ist die reale Entwicklung von ausschlaggebender Bedeutung und nicht irgendein Szenario. Leider entstehen nur Krisen von alleine, daraus zu lernen, ist sowohl wirtschaftlich als auch sozial kostspielig. Um die positiven Entwicklungsresultate zu erreichen, muss zielstrebige Arbeit geleistet und mit notwendigen Ressourcen gesichert werden.

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REGIONAL FISCAL SUSTAINABILITY OF ESTONIAS'S MUNICIPALITIES[1]

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Introduction

Sustainability characterizes a situation, where a long-term lasting stability, an internal strengthening and an improvement of development in relation to competitors (sustainable development) is achieved. The new paradigm involves a wish to balance stability (continuance that implants confidence) and development (change striving for new). Such widely and generalisedly used term as sustainability, but also the paradigms connected to that term, have different specific content in different fields. As there are many possible "positive developments" Taylor (2002) notes in his overview that different authors have presented more than 70 definitions of sustainability and Moffatt *et al.* (2001: 4) comes up with 100 definitions. Therefore, one has to create a specific approach to sustainable development in every different field. (The World Comission … 1987; Moffatt *et al*. 2001: 1–15; Barrachlough 2001: IV; Pezzey *et al.* 2002; Nõmmann *et al.* 2002; Sustainability Indicators 1997: 59–62; Taylor 2002; Wiman 2000: 30–32; Tafel 2003; Soubbotina 2004: 32)

Economic sustainability may refer to the development of a continental economy – European Union (ECE Strategy for ... 2001), to the national economy of a country or to the regional economy. It may refer to all economic units or to several economic units or a sector of economic units. More reduced it may also refer to some economic activities or spheres of activities, e.g. it may consider fiscal sustainability.

As Estonian municipalities are responsible for many infrastructure services that are basic for private and public economic activities we concentrate on them. Their possibilities to provide these services depend largely on their fiscal situation. The development of countries in transition such as Estonia (Eesti regionaalarengu … 2004, point 3.1) is due to enforced private activities, but in the long run also on the provision of adequate infrastructure. If Estonian regional and municipal policy does not provide an appropriate fiscal municipal basis regional unbalance will unavoidably grow in the next years. The fiscal sustainability of Estonian border areas and regions far from pull-centres is under considerable pressure. Therefore we concentrate on fiscal sustainability of municipalities in the regions of Estonia. To refer to fiscal sustainability of municipalities we look at groups of municipalities in counties of Estonia. Therefore, we tackle the following questions.

- How to define fiscal sustainability of municipalities?

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- How is the general situation with respect to fiscal sustainability of Estonian municipalities?
- How can we gain insights into fiscal sustainability by component analysis?
- How the fiscal sustainability components are influencing the provision of public services (expenditures) in Estonian municipalities?

The definition question is considered in the first section. We introduce the reader to the Estonian case in the second section whereas the component analysis is presented in the third section. By regression analysis some insights are gained in the course of the fourth section. Some concluding remarks point to future attempts of analysis.

Fiscal Sustainability

The adequate definition of fiscal sustainability hass to consider the countries territorial structures and special features of the jurisdictions involved. The regional structure of Estonia is hierarchical. Apart from central government exist administratively specified interaction areas. In Estonia are 227 municipalities (parishes and towns, from October 2005) on first level, 15 counties on second level and 4 regions in highest level.

Regions possesing some autonomy in decision making are only the municipalities. Municipalities have an executive body assigned by municipal council, which is elected by people inhabiting that municipality, and which acts in the frames of its budget and directs the territorial development. Counties do not have their own budget or management institutions. County top managers mainly fulfil state's representation and control functions. The development of a county as a whole is to some extent directed by analysis and coordination activities of county governments and unions of municipalities, but they do not have sufficient resources to have remarkable effect.

Regions differ in Estonia only because in their centres there are some important state institutions serving the whole region (for instance police, registers). But there is no administrative subject influencing the development of region in the socio-economic sense. The biggest Estonian towns as centres of the region are important socio-economical pull-centres, but their back-influence on the development of the corresponding county is irrelevant. However, regions serve as statistical reference district. There are aggregated municipal and regional data available. Therefore, we are dealing with the municipalities belonging to a region as reference of analysis of fiscal sustainability.

The following possibilities to define fiscal sustainability exist:

1) One can refer to a minimum amount of fiscal revenue that a municipality needs to execute its functions stipulated through constitution and laws (Arnold, Geseke 1988). Such a normative need indicator is used – also in Estonia – when allocating block grants to municipalities by central government in the framework of intergovernmental fiscal relations.

2) It can be directed to a minimum "cash flow" which shows whether a municipality is able to finance additional expense through municipal public debt.
3) A juridical framework exists to prevent municipalities to loose fiscal sustainability by wrong fiscal decisions. These requirements may refer to an accumulation of equity capital available before investing, a requirement to invest only in projects that produce a flow back of fiscal means to pay the interests, annuities, etc., the requirements of investments serving the public interest. There might exist municipal debts limits related to the magnitude of investment or rules to consider special relations between total expenses to public debts (Lenk 1993; Zimmermann 1999).
4) There are normative indicators and special fiscal requirements formulated with respect to special grants (Zimmermann 1999).
5) A motion of parallel development of fiscal resources of central government and municipalities (Friedrich, Gwiazda, Nam 2004) may be applied.
6) The amount of revenues necessary to stand and to survive regional competition.
7) Fiscal sustainability of town or parish shows the ability to cover expenses by revenues for a long time and in a stable way.

The **definition (1)** leads to quantitative figures available in Estonia.The need indicators refer to the population of a municipality. By defining a normative inhabitant the special situation of a municipality with respect to number of pupils, the centrality rank of the municipality expressing the need to provide types of infrastructure, special functions of a municiplity for a region such as serving as a holiday ressort, providing protected areas to sustain water ressources etc. The need indicator can be adopted. However in countries of transition it seems questionablel whether such need indicators really reflect the fiscal sustainability. They may be fixed formulated by central government.more short timed reacting to urgent needs Moreover block grants are only directed to some basic needs of the administration of a municipality for sustainability. Special grants for special taskls are also important.

If municipalities posses a high degree of fiscal autonomy the definition (2) seems appropriate. Municipalities are able to finance through own taxes, fees, tolls, profits from municipal enterprises, revenues from concessions, grants, and sale of property The municipality chooses his optimal financing strategy with respect to its tasks and fiscal possibilities. The cash flow criteria is used of the monitoring administrative level to check whether the fiscal behaviour allows to meet future fiscal challenges. In so far **definition (2)** provides an adequate measure for fiscal sustainability. However in Estonia the public sector is still in transition, the size of many municipalities is much to small to show an efficient municpal management and the municipal tasks are under development. Therefore, sustainability is difficult to meaqsure solely by the cash flow indicator.

The whole Estonian municipal and intergovernmental development of laws, requirements, etc. have not come to a final stage. There are some requirements like debt to budget relations, however the normative adequate size of the budgets are not determined yet. The whole arrangement of fiscal requirements addressed by **definition (3)** are more oriented to transitition and less to long term fiscal sustainability.

The indicators for **special grants (4)** point to future necessities to provide infrastructure necessary to meet EU requirements. However, public managers cannot refer to one kind of special grant alone. They might escape to a utility analysis using the single indicators weighted by social weights, that represent investment and finance necessities to guarantee a positve future fiscal municipal development. Again a prospect about the desired development of a municipality is needed that is not available at present.

A framework for fiscal sustainable **development (5)** might be fixed by formulating a requirement of parallel fiscal development of fiscal potential of central state and municipalities. Such requirement is in use in the Free State of Saxony in Germany. However, to apply this rule the relation of parallelism has to be determined. Both parties, the municipality and the central state, must agree what they need for their own sustainability and what should characterize fiscal sustainalbility of the other party. In the stage of transition it is not applicable in Estonia.

The motion of survival in regional competition would be a sound basis for defining sustainability, concerning the competitive situation in vertical competition (EUu, Estonian central government, municipality) and horizontal competion (against municipalities in Estonia and abroad) of each municipality individually. Its competitive strength in the planning competion concerning territorial planning, zoning, etc. or with respect to competition in individual settlement projects of firms, inhabitants, public offices etc. is very different.[2] Although there has been recent progress in description and explanation of such processes (Lindemann 1999; Battey, Friedrich 2000; Friedrich, Sakari 2001; Roy, Schulz 2001; Blume 2003) it is difficult to find a single **measure of fiscal sustainability (6)** related to the competition processes.

Therefore, we apply **definition (7)**. We will identify which fiscal revenues and expenditures have to be considered in Estonia to exxpress more detailed this notion of fiscal sustainability. Municipality's fiscal sustainability is therefore described by different variables and can be influenced by many factors.

Fiscal Sustainability Elements and Factors in Estonian Municipalities

In the development of fiscal sustainability of municipality the central element is autonomous tax income set by law, which in ideal circumstances would cover

[2] Sustainability means the possibility of municipality to exist beside competing other municipalities. Such (co)existence can have several stages, which should be presented in order to value sustainability of association: a) existence ability of municipality – the lowest level of sustainability, which marks the ability to conform to competitive environment and competitors' actions passively, without (remarkably) changing and developing itself; b) development ability of municipality – medium level of sustainability, which marks the ability to react actively to competitive environment nature and its changes, but also to competitors' actions, intensifying activities and own properties; c) success of municipality (advantage) – highest level of sustainability, which expresses in the ability to shape (influence) the competitive environment towards better properties, with efficient action and/or with quicker reaction.

expenses required to fulfil the tasks of municipal governments. Autonomous revenues according to constitutional and fiscal laws guarantee normally greater stability that helps to plan development of public sector longer ahead. Annual additional grants from central state budget to municipality budgets fixed in state budget law dependent on the will of the political forces forming government. That is why they are hard to forecast in long-term perspective.

In Estonia autonomous revenues of municipalities mainly stem from the individual income tax (land tax is only small part). Therefore, the necessary level and dynamics of own-revenues (*per capita*) required to finance public services mainly depends on the the number and share of tax payers and their income size in a region (municipality).

The share of tax payers in a region mainly shows the presence of people who have found a job locally or in some other regions. In addition to them unemployed or people outside labour force can live in that town, not working due to the lack of suitable jobs for them.

The share of tax payers in South-Estonia (in Võrumaa, Valgamaa and Jõgevamaa[3]) municipality units – is normally below 50% of population. Barely over 50% share is achieved only in Jõgevamaa and Ida-Virumaa. Highest shares show Hiiumaa, Harjumaa (including Tallinn) and Saaremaa, where the share can reach 60% or more. Therefore, from the difference in the share of tax payers can result more than 20% difference in county-average individual income tax receipts..

As indicated by the share of tax payers, Estonian fiscal sustainability has risen by 3.7% in the viewed period. At the same time the feeling of regional unbalance deepened. In Harjumaa with clearly large share of tax payers, the share of tax payers rose by 6.6% in population in three years. The 5.2% rise in the share of people earning taxable income described the changes that had occurred in the structure of Tartumaa and Järvamaa population. In Ida-Virumaa and Valgamaa, where the share of tax payers in population was low in 2004 as well, the number of tax payers reduced in 2000–2004. In Jõgevamaa and Võrumaa the share rose remarkably slower compared to the average growth rate in Estonia.

In addition to the share of tax payers the level of tax revenues of municipalities depends on the level of income earned by tax payers, the size of legal tax exemption and the proportion of tax allocated to municipalities. Table 1 depicts that the average tax payers income of Ida-Virumaa, Jõgevamaa, Põlvamaa and Valgamaa is only 60% of the average income of tax payers living in Harjumaa. Also it appears that gross and net income is higher than the Estonian average only in Harjumaa (*ca* by 20%), in Tartumaa it equals state's average income and in all other counties it is below average. Estonian regional development is not balanced, in terms of tax payer income.

[3] *Maa* means county. Municipality in common understanding is town or parish, of which counties consist of.

Table 1. Income, amount of tax exemption and tax income of municipalities in counties in 2004

	Gross income of tax payer, 1000 kr	Net income of tax payer, 1000 kr	Share of income exempt from tax in gross income, %	Tax income share in gross income, %	Share of income tax received by municipality in gross income, %	Municipality tax income *per capita*, 1000 kr
Estonia total	67,9	55,2	28.1	18.7	10.8	4,1
Tallinn	81,8	65,9	25.1	19.5	10.9	5,3
Harju	82,1	66,1	25.0	19.5	10.9	5,3
Hiiu	63,2	51,6	29.4	18.4	10.9	4,3
Ida-Viru	50,6	41,9	33.9	17.2	10.8	2,8
Jõgeva	50,9	42,1	33.5	17.3	10.6	2,7
Järva	58,6	48,0	30.1	18.2	10.6	3,6
Lääne	61,1	50,1	30.5	18.1	10.7	3,8
Lääne-Viru	57,6	47,3	31.3	17.9	10.9	3,3
Põlva	51,8	42,8	33.2	17.4	10.5	2,7
Pärnu	60,4	49,6	30.8	18.0	10.6	3,6
Rapla	63,5	51,8	29.1	18.4	10.8	3,8
Saare	61,7	50,5	30.1	18.2	10.4	3,8
Tartu	68,0	55,3	28.4	18.6	10.7	3,9
Valga	52,3	43,3	33.6	17.3	10.8	2,7
Viljandi	57,0	46,9	31.3	17.9	10.7	3,2
Võru	54,5	45,0	32.9	17.4	10.7	2,8

Different income tax exemptions (annual total of tax exempt income, tax exemption of settlement loan and pension fund payments) account in counties with lower income for approximately a third and in Harjumaa a quarter of gross income. That is is the reason why tax share of gross income is 17.2–17.3% in Ida-Virumaa, Jõgevamaa and Valgamaa, but up to 19.5% in Harjumaa. Those differences do not influence the size of revenues to the municipality budget, averaging 10.8% of gross **revenues**. Due to the direct allocation of income tax on individual property sales (so called extraordinary income) to state budget, tax receipts of Saaremaa and Põlvamaa municipalities suffer slightly more than average. In poorer counties it is 2,7–2,8 thousand kroons. Harjumaa municipalities normally receive two times more individual income tax per inhabitant (5,3 thousand kroons).

The differences in share of tax payers and income level have strong common influence for misbalancing the fiscal situation of Estonian counties. In those counties, where the share of tax payers is low, the gross and net income of tax payers is low too. Obviously people step by step go to regions offering jobs to them.
Figures given in table 2 describe fiscal sustainability development tendencies in 2000–2004 in terms of income level of tax payers, extent of tax exemptions and level of tax revenue of municipalities. Gross income of tax payer has grown in Estonia on an average of 57% in four years, net income by 59.8%. In those years developing income differences among counties have had positive effect on regional

convergence of income levels. Growth rate of the income level in Harjumaa (and Tallinn) was app. 10% lower than on the state average, where as at the same time in Saaremaa, Põlvamaa, Jõgevamaa, Viljandimaa and Võrumaa the income of tax payers rose 10% faster than the average growth rate. In case of a similar growth rate poorer counties can reach the richer after some time. Unfortunately the increase of income was beneath the average in problematic Ida-Virumaa, but also in Hiiumaa.

Table 2. Index of tax payer income, tax exemption span and tax income into budget (*per capita*) in municipalities in 2004 (2000 = 100)

	Gross income of tax payer	Net income of tax payer	Share of income exempt from tax in gross income	Tax income share in gross income	Share of income tax received by municipality in gross income	Municipality tax income *per capita*
Estonia total	157,0	159,8	124,2	92,9	94,1	153,2
Tallinn	146,8	149,7	130,4	92,8	90,4	138,0
Harju	149,2	152,0	129,2	93,0	90,5	143,9
Hiiu	147,1	150,7	134,6	90,3	104,3	160,9
Ida-Viru	148,6	151,9	125,6	90,5	99,7	146,0
Jõgeva	172,4	174,7	114,5	94,0	100,7	175,5
Järva	166,5	168,9	117,1	94,1	97,8	171,2
Lääne	162,8	165,6	121,4	92,8	98,9	168,2
Lääne-Viru	157,7	160,8	123,8	91,9	99,9	163,9
Põlva	173,0	175,7	117,2	93,2	100,9	180,0
Pärnu	164,7	167,4	120,4	93,0	94,7	159,6
Rapla	168,5	171,1	119,4	93,8	93,8	166,0
Saare	174,0	176,5	117,7	93,9	96,9	175,1
Tartu	167,2	169,5	118,0	94,3	94,2	165,6
Valga	169,7	172,5	118,2	92,8	100,8	170,9
Viljandi	171,6	174,0	116,1	94,0	98,6	174,7
Võru	170,8	173,0	116,9	93,4	97,2	169,8

Income exempt from tax grew in that period at an average of 24.2%. Comparing different regions demonstrates that in Harjumaa (especially in Tallinn) and in Hiiumaa the income exempt from tax grew faster and in Jõgevamaa, Viljandimaa, Võrumaa and Põlvamaa slower than on state average The tax income share of gross income has fallen **in Harjumaa** by 7.1%, remarkably more than in Hiiumaa and Ida-Virumaa and a bit less in Tartumaa, Viljandimaa, Järvamaa and Jõgevamaa. The share of individual income tax received by municipality reduced in 2000–2004 at an average of 5.9%. In Harjumaa (and in Tallinn) the municipal share of individual income tax reduced by about 10%. At the same time it grew in Hiiumaa by 4.3%, Põlvamaa 0.9%, Valgamaa 0.8% and Jõgevamaa 0.7%. In total the revenues of municipalities from individual income tax increased slightly slower than the taxpayers' income.

To the convergence of counties point the data in last column. Tax revenues per inhabitant increased the most in Põlvamaa (80%). Over 70% growth was also in Jõgevamaa, Järvamaa, Saaremaa, Valgamaa and Viljandimaa. At the same time

growth in Harjumaa and Tallinn was only 43% and 38%. Unfortunately low growth rate exists also in Ida-Virumaa, where backwardness is large.

In addition to revenues from tax payers, municipalities can use credits especially form loans to solve development problems. In contrast to central government, municipalities have used that option, but among counties the differences are remarkable. The largest amount of loans show Harjumaa municipalities (mainly in Tallinn) and Saaremaa municipalities. According to the old definitions of credit limits the average results of all counties were far below the allowed loan volume. Applying the new methodology of debt limits the average results of Harjumaa and Saaremaa are close to the critical level and the level of Tallinn is higher than the limit allow. The most modest borrowers (below 20% of annual budget) are Võrumaa, Järvamaa, and Valgamaa and Põlvamaa municipalities. Considering development needs loan finance should be above average just in those municipalities. Loans would help to compensate remarkable lag in tax revenue per inhabitant. Fiscal resources from debts should not be used to cover daily expenditures, but they must be used to invest into infrastructure. Such investments would help to improve living and economical environment of municipalities and make a base for growth in tax payers' income in the future.

The debt amount of municipalities comes from the deficit, which level and dynamics in 2000–2005 are described in table 3. The average budget deficit in 2000–2004 accounted for –4.87%, which mainly stems from the budget deficit in Tallinn –13.51%. Int the same period municipalities of seven counties exhibit lower or higher surplus, in Läänemaa even +3.53%. The budget policy of municipalities is changing. In 2004 were four counties had budget deficits. However, in 2005 municipalities of all counties planned deficits (see table 3 last column). The average budget deficit in 2001–2005 grew to –6.22%. With the small surplus of total budget of municipalities only Hiiumaa can be brought out, where the surplus is 0.31%.

Figures in table 4 describe the relationship between municipality liabilitie. The level of municipal fixed assets of municipalities varies considerably: small values exhibit Ida-Virumaa with 7352 kroons *per capita*, Võrumaa 9079, Viljandimaa 9236 and Järvamaa 9789 and higher vaules realize Harjumaa with 17384 (including Tallinn 19482) and Saaremaa 15693. On the average there are 3656 kroons liabilities *per capita*, whereas average municipalities seem to take into account their economic power. So the liabilities and fixed assets ratio is from 18.3% in Valgamaa to 35.2% in Ida-Virumaa. This means that **municipal debt finance** cannot compensate modest tax revenues.

Table 3. Average budget deficit level of municipalities (MP) in Estonian counts, %

	MP 5 year deficit (00–04)	MP 2004 deficit	MP 2005 planned deficit	MP 5 year deficit (01–05)
Estonia total	–4.87	–2.58	–10.54	–6.22
Tallinn	–13.51	–6.33	–11.74	–13.37
Harju	–10.69	–4.25	–11.20	–10.76
Hiiu	0.99	4.37	–8.04	0.31
Ida-Viru	–0.46	–1.65	–8.75	v2.58
Jõgeva	0.09	–2.00	–21.35	–5.37
Järva	1.17	2.48	–13.43	–2.00
Lääne	3.53	–0.38	–8.69	–0.91
Lääne-Viru	–0.24	–2.37	–8.17	–1.87
Põlva	3.00	–0.93	–11.93	–0.90
Pärnu	2.03	1.02	–6.92	–0.02
Rapla	–2.32	–5.39	–6.35	–3.77
Saare	–0.28	–4.25	–6.70	–2.00
Tartu	–4.64	–2.77	–11.26	–5.75
Valga	–0.04	1.96	–9.16	–2.04
Viljandi	1.05	–0.04	–13.16	–1.84
Võru	–0.24	–1.11	–9.93	–2.69

Table 4. Liabilities level of municipalities per inhabitant in relation to fixed assets in 2005

	MP liabilities in relation to fixed assets value, %	MP fixed assets per inhabitant, kroons	MP liabilities per inhabitant, kroons
Estonia total	27.8	13144	3656
Tallinn	27.7	19482	5394
Harju	28.9	17384	5019
Hiiu	23.3	11571	2696
Ida-Viru	35.2	7352	2591
Jõgeva	29.8	10350	3080
Järva	21.8	9789	2132
Lääne	25.8	12301	3179
Lääne-Viru	23.7	10074	2390
Põlva	20.3	10456	2121
Pärnu	22.7	13370	3030
Rapla	29.7	10496	3113
Saare	21.2	15693	3324
Tartu	28.6	12141	3469
Valga	18.3	9851	1802
Viljandi	29.6	9236	2730
Võru	26.0	9079	2359

Investments are needed to guarantee posive fiscal development. From table 5 we see that the average self-financing[4] of municipalities is different by different counties: above average are values of Pärnumaa, Harjumaa, Tartumaa and Raplamaa municipalities, below average are those of Hiiumaa, Põlvamaa, Valgamaa and Saaremaa municipalities. At the same time the self-finance indicator of all municipalities is over 1,0, which shows that the level of self finance ability is equally good.

Table 5. Self-finance possibilities of municipalities, share of investments in total expenditures and its ratio to fixed assets in an average in 2003–2004

	MP self-finance ability, coefficient	MP investments in relation to fixed asset price 2003, %	MP investments share in total expenditures, %	MP interest payments in total expenditures, %
Estonia total	1,11	11.1	15.8	1.14
Tallinn	1,11	8.1	16.6	1.27
Harju	1,13	9.1	16.2	1.32
Hiiu	1,03	11.4	14.4	0.89
Ida-Viru	1,09	13.5	12.0	1.05
Jõgeva	1,09	16.4	19.2	0.76
Järva	1,11	16.2	18.1	0.82
Lääne	1,08	17.0	15.5	1.14
Lääne-Viru	1,11	14.6	18.3	0.81
Põlva	1,06	18.8	18.0	0.72
Pärnu	1,14	7.8	12.9	1.42
Rapla	1,12	22.5	21.6	0.65
Saare	1,08	9.0	16.4	1.15
Tartu	1,13	11.2	15.5	1.22
Valga	1,08	12.4	15.5	0.74
Viljandi	1,10	14.5	14.0	1.10
Võru	1,09	17.2	17.2	0.56

2003 the investment and fixed assets ratio of municipalities was 11.1% in total Estonia. That implies a renewal of fixed assets every nine years. Slow renewing reneweals occur in Pärnumaa, Saaremaa and Harjumaa municipalities, a higher renewal seed is found for Raplamaa, Põlvamaa, Võrumaa and Läänemaa municipalities Municipalities not so well equipped with fixed assets must eliminate the gap between them and their better equipped competitors where the ratio of investments to fixed assets is higher. The average investment share in total municipal expenditures 15.8% in Estonia. This level is remarkably exceeded by Raplamaa, Jõgevamaa and Lääne-Virumaa municipalities, remarkably below that are those of Ida-Virumaa, Pärnumaa and Viljandimaa municipalities.

We describe the expenses for debt finance by the interest payment share in total municipal expenditures. The Estonian average is 1.14%. Remarkably above are

[4] Self-financing indicator shows the ratio of cleaned budget income to budget expenditures, from which interest payments, investments and special-purpose provisions for operative expenditures have been deducted: value below 1,0 – not satisfactory, over 1,0 – good.

those shares in Pärnumaa, Harjumaa and Tartumaa municipalities and remarkably lower in Võrumaa, Raplamaa, Põlvamaa and Jõgevamaa municipalities. The lowest interest payment share demonstrates Võrumaa, where we find a low debt amount and a high current ratio.

From the table 6 we see that although the municipal average of debt finance increases by 75.7% during 2000–2003, the budget debt ration of municipalities in has dropped by 6.1% due to enforced growth of municipal budgets. By counties the differences are very big: municipalities of four counties (Pärnumaa, Põlvamaa, Läänemaa and Hiiumaa) have decreased debtsn and their loan ratio to budget sunk by about half. Tartumaa, Harjumaa, Lääne-Virumaa and Valgamaa municipalities increased main loans faster than the budget. Their debt to budget ratio has increased.

Table 6. Average change in fiscal liabilities of municipalities by counties in 2000–2003, %

	Change in MP debt ratio to budget	Change in MP main loan	Change in MP interest payments	Ratio of changes in interest payments and main loan
Estonia total	93.9	175.7	69.9	39.8
Tallinn	108.6	215.1	26.3	12.2
Harju	111.1	219.5	57.8	26.3
Hiiu	51.7	98.5	44.2	44.9
Ida-Viru	84.3	155.8	84.6	54.3
Jõgeva	84.7	155.8	125.0	80.2
Järva	64.6	123.9	67.0	54.1
Lääne	44.8	86.4	42.6	49.3
Lääne-Viru	104.2	181.0	138.3	76.4
Põlva	42.8	86.1	38.0	44.1
Pärnu	50.3	84.1	60.2	71.7
Rapla	90.8	163.6	75.2	46.0
Saare	74.3	138.3	88.6	64.0
Tartu	186.3	272.4	122.0	44.8
Valga	103.9	169.9	115.0	67.7
Viljandi	51.5	100.8	55.2	54.7
Võru	95.4	175.3	148.3	84.6

In spite of the harsh incease of 75% increase in municipal debts, interest paymentst decrease by about one third reflecting improved loan conditions of Estonian municipalities during 2000–2003. Tallinn experienced a more than double growth in loans, however interest payments were reduced by about 33%. Credit conditions for municipalities of other counties are not so favourable as that for Tallinn. There interest payments correlate more clearly with changes in debts. The most unfavourable ratio of interest and debts change occurred in Võrumaa, Jõgevamaa, Lääne-Virumaa and Pärnumaa municipalities. In those counties (except Pärnumaa with decreased debts) the increase in interest payments was the highest. The level of state investment **grants** differs remarkably between the counties. Tallinn and many other Harjumaa municipalities got few state budget investment grants per inhabitant, as

their income level is much higher than the Estonian average. Investments grants to Tartu are below Estonian average for the same reason. Increasing problems in Ida-Virumaa are indicated by the lowest income level and, Ida-Virumaa municipalities have been left without central government investment grants. State investment grants per inhabitant are higher than average mainly in Hiiumaa, but also in Jõgevamaa, Järvamaa and Valgamaa.

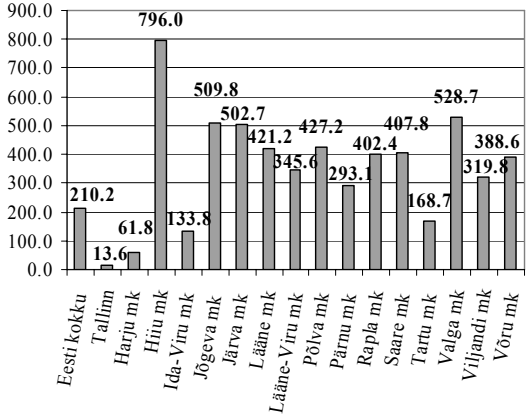

Figure 1. State budget investment provisions per inhabitant in municipalities in 1996–2003, annual average in kroons.

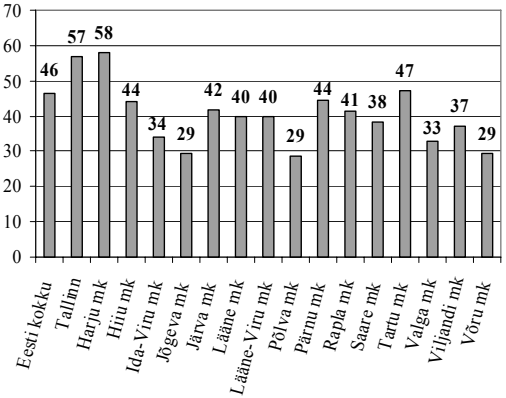

Figure 2. Share of tax income in municipality income in 2003.

From the figure 2 we see that the municipal tax revenue varies among counties: in Harjumaa municipalities' receipts on an average of 58% stem from taxes, in Jõgevamaa, Põlvamaa and Võrumaa it was two times less (29%). Generally the share of

taxes in municipality revenues is small in counties with low gross income of tax payers.

Component Analysis of Fiscal Sustaiability of Estonian Municipalities

Complex assessments of fiscal sustainability and the span and intensity of the concrete influence of variables will be revealed only with empirical approaches. Empiricaslly it is not possible to measure the influence of the majority of variables on fiscal sustainability in the framework of deterministic models. Mainly indirect methods of measurement based on stochastic models must be used. Classical tools are multidimensional statistical analysis methods – correlation-, regression-, component- and cluster analysis methods, which measure the strength of relationships between variables covariance. The usage of mathematical-statistical methods for modelling and analysis of socio-economic processes has been viewed by one of the authors in previous theoretical studies. (Экономико-математические … 1982: 112–178; Karu, Reiljan 1983; Рейльян 1989)

At first a set of all fiscal sustainability element set and a set of factors influencing it must be assessed. Due to the large number of variables the analyst looses a systematic overview concerning their level difference and their relative position in single regions. In order to identify the nature and size of sustainability variables and factors, component analysis can be used. In component analysis synthetic components describing dimensions of space determined by analysed variables are brought out, which describe the variation of initial figures in compressed and systematised (ortogonolised) way. This means several-fold reduction of variables without remarkable loss of information. The good statistical property of synthetic components is the fact that they are statistically independent (orthogonal) from each other (their mutual correlation coefficients equal zero). This means that there is no repeating calculation of the same aspect in synthetic components.

In case of sustainability variables it is easier to construct complex assessments by switching to synthetic components, because synthetic components have similar measurement scale and they are easier to weigh. In the space of factor-variables a switch to component models eliminates the main problem of composing multiple regression models – multicollinearity of factors.

Statistical components describing the structure of initial variables are synthetic complex variables and in order to find out their nature, correlation between them and initial variables must be analysed, but also the distribution of the values of components among viewed objects (regions).[5]

Components as synthetic complex variables have no natural unit of measure. Values of components are given as standardised (in centred and normalised) form. That means that the arithmetical average of component values is equal to zero and

[5] For basics of component interpretation see: Рейльян 1981: 64–77; Karu, Reiljan 1983.

measurement unit is standard deviation of variation. Correct value of component as characteriser of some region that is why shows the deviation of that region from the average level of all regions in standard deviations. Plus-minus one that is why means average size deviation up or down from the average level of viewed set. Derived from that the deviation of component K_i in region r could be classified as follows:
$k_{ir} < |0.5|$ – small deviation,
$|0.5| < k_{ir} < |1.0|$ – medium deviation,
$|1.0| < k_{ir} < |2.0|$ – large deviation,
$|2.0| < k_{ir}$ – very large deviation.

The base of interpreting synthetic components is mainly partial correlation coefficients between them and initial variables, but also variation of component values for analysed regions.

Component analysis was carried out with 32 variables describing the structure and dynamics of income of municipalities.[6] The size of the set of statistical views analysed was 257, of which 241 were municipalities, 15 counties and Estonia as a whole.[7] As the result of component analysis 10 synthetic non-correlating component variables were separated, which reflected 82% of information (from variation among objects in set) in initial variables. Derived from that, the number of variables decreased as a result of complex analysis for about 70% (from 32 component variables to 10 component variables), whereas 18% of information about objects' income, their level, structure and dynamics comprised in the variation of initial variables was lost.

Components as synthetic variables were named according to their nature using interpretation scheme developed by one of the authors. (Karu, Reiljan 1983: 58–67) The nature of components are reflected in so-called component loads – paired correlation coefficients of synthetic components and initial variables. Larger component loads of synthetic components K_i ($0{,}3 \leq r$) with initial variables describing income of towns get identified, their structure and dynamics are presented and named.

[6] SPSS software licensed to Tartu University Faculty of Economics was used. Components were distinguished by using main component method, which is based on correlation coefficient matrix. Turning components into suitable position for their interpretation was achieved with VARIMAX method. Component values were saved as standardised variables (average is zero and standard deviation one).

[7] As variables analysed are level, structure and dynamics ratios eliminating size and amount differences, then counties and whole Estonia can in statistical sense be considered as equal study objects beside municipalities. Common processing makes it easier to bring forward component values by counties afterwards, because no separate calculations are needed to find values of components with the help of used regression models and initial indicator values by counties. Such widening of set will not result in parameter distortion, as in case of whole Estonia and counties the values of indicators are nearer to mean when compared with the indicators describing municipalities.

*K*1 – Income level of tax payer

r – Name of initial variable.
0,96 – Share of income tax in tax payers' gross income in 2004.
–0,96 – Share of income exempt from tax in tax payers' gross income in 2004.
0,93 – Average net income of tax payer in 2004.
0,63 – Income tax receipts per inhabitant of municipality in 2004.
–0,52 – Change in the share of income received by municipality in comparison of years 2004 and 2000.
0,36 – Additional appointment of income tax per inhabitant in 2000.

When interpreting first component, in the central place there is connection with tax payer's net income, from which average income of inhabitant in municipality is dependent (beside share of tax payers). The higher the net income, the higher is income tax share and the smaller is share of income exempt from tax in gross income. That means in counties with higher income level people do not use services with income tax exemption (third pension column, residential and educational loans etc.) in an amount that would be greater than tax exemption in the gross income of people living in municipalities with lower income level. In municipalities with higher income level there is relatively more such people, who are appointed income tax because of extraordinary income. The more favourable situation of municipalities with higher income level is decreasing, because share of the individual income tax (received to their budgets) in gross income of tax payer has decreased more than average in 2000–2004.

*K*2 – Debt burden of municipality

r – Name of initial indicator.
0,96 – Debt ratio to budget of municipality in year 2004 according to current methodology.
0,92 – Municipality liabilities per inhabitant in 2005.
0,82 – Debt ratio to budget of municipality in year 2004 according to old methodology.
0,73 – Ratio of municipality liabilities to fixed assets in 2005.
0,71 – Municipality loan ratio to budget in year 2003.

Component *K*2 summarises information, which shows municipality debt ratio to budget in different years and according to different methodologies. The greater the share of municipality debt ratio to budget, the greater are the liabilities per inhabitant and ratio between liabilities and value of fixed assets. *K*2 is the complex indicator of town or parish debt burden.

*K*3 – Share of tax payers in population

r – Name of initial indicator.
0,98 – Change in the share of tax payers in population in years 2000–2004.
0,94 – Share of tax payers in population in 2004.
0,91 – Change in income per municipality inhabitant in years 2000–2004.
0,74 – Income tax receipts per municipality inhabitant in 2004.

Component *K*3 shows mainly the share of tax payers and its dynamics in town or parish population. The strong positive correlation of component with level and

dynamics variables clearly brings out the deepening of regional unbalance tendency from the viewpoint of tax payers in municipality population. From one hand share of tax payers and its dynamics influences the level and dynamics of income tax receipts (per inhabitant) of municipality, but from the other hand different influence mechanism has obviously been started – towns or parishes with quicker development or higher income level flatter new tax payers to transfer there, which in turn rises the share of tax payers in population.

*K*4 – Use of tax advantages

r – Name of initial indicator.
0,90 – Change in income tax payback sum comparing years 2002 and 1999.
0,89 – Change in number of income tax payback in years 1999–2002.
0,80 – Change in income tax receipts per inhabitant in years 1995–2004.
0,70 – Number of tax paybacks per inhabitant in 2000.
0,52 – Change in the number of income tax additional assessments comparing years 2002 and 1999.
0,36 – Number of income tax additional assessments per inhabitant.

Component *K*4 correlates most strongly with the number of income tax paybacks and indicators describing its dynamics. From smaller component loads it is clear that in municipalities more active in using tax advantages the level and growth rate of income tax additional assessments is higher than general average, because they describe also the usage of the possibility of postponing tax paying. In conclusion the greater activeness in using tax advantages had to some extent surprisingly positive effect on income tax receipts growth rate in municipalities. From one side income in towns and parishes actively using tax advantages grew quicker than average, but in the other hand there are more possibilities in quicker income growth conditions to use tax advantages (for instance using residential loans, pension).

*K*5 – Growth rate of tax payer's income

r – Name of initial indicator.
–0,94 – Change in the share of income exempt from taxes in gross income comparing years 2004 and 2000.
0,88 – Change in the share of income tax receipts in gross income comparing years 2004 and 2000.
0,84 – Change in net income of tax payers comparing years 2004 and 2000.
–0,51 – Change in the share of individual income received by municipality comparing the years 2004 and 2000.
–0,43 – Share of individual income received by municipality in gross income in 2004.

When interpreting component *K*5 the growth rate of tax payers' net income is in central position, from which the decrease in the share of income exempt from tax and increase in the share of income tax receipts in gross income are derived. Growth rate of net income of tax payer is higher in parishes and towns, where previous share and dynamics of individual income tax receipts to municipality budget have been low. That is why this component reveals positive development towards regional development balancing.

*K*6 – Activity of tax payers in search of new income sources

r – Name of initial indicator.

0,94 – Change in the income tax additional assessments comparing the years 2002 and 1999.

0,89 – Municipality liquidity in 2003.

–0,47 – Municipality debt ratio to budget in 2004 according to new methodology.

0,37 – Self-financing power of municipality in 2003–2004.

0,36 – Average share of municipality income surplus in budget 1997–2002.

Component *K*6 shows mainly the activity of tax payers when finding extraordinary income sources, which results in the growth of income tax additional assessments. Income tax from extraordinary income so far improved the liquidity (in the future no more) and self-financing power of municipalities, at the same time growing budget surplus and helping to decrease debt burden.

*K*7 – Level of loan money usage

r – Name of initial indicator.

0,94 – Average ratio of loans to budget in 1997–2002.

0,92 – Loans per inhabitant (average) 1997–2002.

–0,31 – Average share of income surplus in budget 1997–2002.

Component *K*7 unambiguously shows borrowing in municipalities – both in ratio to budget and number of inhabitants. That is why in municipalities, where share of loans in budget is higher, the figure of loans per inhabitant is also higher. Also municipalities using loan money planned budget income more precisely and that is why the share of budget surplus was below average in them.

*K*8 – Growth rate omunicipal debts

r – Name of initial indicator.

0,98 – Change in municipality loan ratio to budget in years 2000–2003.

0,98 – Change in municipality main loan amount in years 2000–2003.

Component *K*8 clearly shows loan money usage growth rate in municipalities.

*K*9 – Municipality provision with fixed assets

r – Name of initial indicator.

0,90 – Municipality fixed assets per inhabitant in 2005.

0,62 – Municipality self-financing power 2003–2004.

0,51 – Average ratio of municipality income surplus in budget 1997–2002.

–0,36 – Ratio of municipality liabilities to fixed assets in 2005.

Component *K*9 has decisive strength connection with the indicator showing the level of fixed assets provision of municipality. In towns and parishes better equipped with fixed assets, self-financing possibilities and budget surplus are higher, but the ratio between liabilities and fixed assets is lower.

*K*10 – Solvency of municipality

r – Name of initial indicator.

0,73 – Municipality current solvency ratio.

–0,53 – Income tax additional assessments per inhabitant in 2000.

0,41 – Ratio ofrevenue surplus to budget in 2000.
Component $K10$ is most tightly connected with current solvency ratio of municipality. Generally in municipalities with better solvency the **revenue surplus** is over Estonian average, but at the same time the number of income tax additional assessments per inhabitant is below average.

The ten synthetic components generalise the main information of all indicators. Each component transmits as variation the information in several initial variables in the set of viewed objects.

Relation of Municipality Revenue System to Expenditure Levels, its Structure and Dynamics

In order to analyse the impact of fiscal sustainability components K_i on variables Y describing provision of public services (expenditures) in municipalities, the multiple regression analysis will bw used:

(1) $Y = a_0 + a_1K_1 + \ldots + a_iK_i + \ldots + a_nK_n$

Regression models help to analyse factor K_i (i = 1, n) influence intensity on development variable Y – when factor K_i changes one unit, then variable Y changes by a_i units. Parameters a_i give statistical assessment of the importance of fiscal sustainability components K_i.

When switching to statistically independent components K_i describing factor space, the problem of multicollinearity is eliminated and regression models are made adequately interpretable.

According to our definition of fiscal sustainability towns or parishes should show the ability to cover expenditures by revenues for long time and in stable way. Therefore, rules of municipality revenue formation are interesting because of their influence on municipality expenditure level, structure and dynamics. The intensity and importance of that influence can be assessed with regression analysis using synthetic components of income system brought out in previous part. As dependent variable Y, different expenditure variables of municipalities are given, as independent indicators ten synthetic component variables: $K1$ – income level of tax payer; $K2$ – debt burden of municipality; $K3$ – share of tax payers in population; $K4$ – activity of using tax advantages; $K5$ – growth rate of tax payer's income; $K6$ – activity of tax payers in search of new income sources; $K7$ – level of loan money usage; $K8$ – growth rate of loan money usage; $K9$ – municipality provision with fixed assets; $K10$ – solvency of municipalities.

Regression equations of those expenditure variables are attained, in case of which factor components describe more than 15% of variable's covariation – such expenditure indicators were found in total 15. In text factors only with statistically significant ($\alpha < 0.05$) influence are brought out, although not selection set is analysed (in the set there are all Estonian municipalities). Normally there were three-four income

system components with statistically important influence in expenditure variable model, but in some cases the expenditure variable variation developed in co-influence of seven components. The multiple regression coefficient R^2 given for each expenditure variable shows which part of expenditure variable variation was described by factor components added in model.

Three variables – *Y*1, *Y*2 and *Y*3 – describe the level of municipality expendituress per inhabitant in different periods:

*Y*1 – Expenditueseper inhabitant in 1997– 2002, in kroons, $R^2 = 0.36$.
$$\boldsymbol{Y1 = 6262 + 400K5 + 1312K9 – 676K10}$$

*Y*2 – Total expenditures per inhabitant in 2003, in kroons, $R^2 = 0.62$
$$\boldsymbol{Y2 = 9152 + 268K1 + 321K2 + 2623K3 + 300K5 + 1391K9 – 637K10}$$

*Y*3 – Municipality expenditures per inhabitant in 2004, in kroons, $R^2 = 0.35$
$$\boldsymbol{Y3 = 9487 + 462K2 – 255K8 + 1448K9 + 142K10}$$

About half of expenditures made per municipality inhabitant were covered with municipality own reveneaus and with loans (R^2 values vary between 0.35–0.62), l because in Estonia there are important state budget support and special-purpose grants. The regression above shows that municipalities with higher expenditure level per inhabitant are better equipped with fixed assets (*K*9). *K*9 influence-intensiveness assessment is relatively stable in all three regressions, but the **influence span in relation to average varies**. Municipality solvency (*K*10) is important factor in all three models, but it is with negative impact in two models and with positive in one (year 2004 model). Before insolvent small municipalities were compensated through state budget to an extent that the level of expenditures per inhabitant was more than average. In 2004 situation changed. A higher normative expenditure level allows municipalities a higher solvency l.

From 2003 and 2004 expenditure level models it appears that higher expenditure level is achieved in municipalities with growing debt amount (*K*2). Also the expenditure level growth in municipalities is positively influenced by quicker growth rate of tax payer's income (*K*5). In the end it appears from the year 2003 expenditure level model, which is with highest variation description level ($R^2 = 0.62$), that expenditure level growth is supported by income level of tax payer (*K*1) and most intensively by growth in tax payers share in population (*K*3). In year 2004 model those principles do not emerge, which is a proof of instability in connections due to constantly changing political decisions.

According to that model it can be said that expenditures per inhabitant were more influenced by loans and income components connected with their repayments, than by income components connected with tax payer behaviour.

From the total expenditure growth model (*Y*4) it appears that with statistically important influence there are even 7 income system components of ten, but still they explain in total only 25% of expenditure growth variance:

*Y*4 – total expenditure growth 1997–2002, in times, $R^2 = 0.25$
$$\boldsymbol{Y4 = 1{,}90 + 0{,}15K1 + 0{,}10K2 + 0{,}08K4 - 0{,}06K5 - 0{,}09K7 + 0{,}11K8 + 0{,}13K9}$$

In comparison with expenditure level models there is no important connection with solvency component in expenditure growth rate model (*K*10). Generally in expenditure level and expenditure growth models same factors have same direction influence, but tax payers income growth rate (*K*5) has negative connection with municipality expenditures growth rate. As new important factors with important influence, the activity of using tax advantages (*K*4, which has positive connection with expenditure growth) and loan money usage level (*K*7, which has expenditure growth slowing down influence) emerge. Of course loan money usage growth rate (*K*8) has positive influence on expenditures' growth rate. Quicker growth rate of expenditures is achieved in municipalities with higher level of income (*K*1), which shows positive influence of private sector development level on public sector development speed.

Following three models describe the dependence of important investment indicators for municipality development on income system components:

*Y*5 – Investment share in total expenditures 2003–2004, %, $R^2 = 0.31$
$$\boldsymbol{Y5 = 14{,}6 + 1{,}0K1 + 1{,}0K2 + 1{,}4K4 + 4{,}2K9}$$

*Y*6 – Investment share in budget 1997–2002, %, $R^2 = 0.19$
$$\boldsymbol{Y6 = 7{,}0 - 0{,}9K6 + 1{,}1K8 + 2{,}7K9}$$

*Y*7 – Investment per inhabitant 1997–2002, kroons, $R^2 = 0.27$
$$\boldsymbol{Y7 = 498 - 60K6 + 63K8 + 323K9}$$

Investment variance in municipalities is by quarter described by revenue system components added in model (R^2 values are in range 0.19–0.31). Factors with statistically important influence have common component *K*9 (level of fixed assets provision of municipality) in all three models. That is why the higher the provision of municipality with fixed assets, the higher relatively investments are. It is logical, because municipality investments are mainly directed to renovating current fixed assets and less attention is paid to creating new fixed assets. In period 1997–2002 investment share in budget and investments per inhabitant were influenced remarkably and positively by loan money usage growth rate (*K*8) and negatively by the activity of tax payers in search of new income possibilities (*K*6). In 2003–2004 investment share model factors with remarkable positive influence were income level of tax payers (*K*1), debt burden of municipality (*K*2) and activity of using tax advantages (*K*4). Dependence of investments from loan money usage and from debt amount is logical, because they were mostly financed with loans. Important ties with

other components direct to the fact that investments are made in municipalities with richer and more active population.

Loan money usage for financing municipality expenditures (mainly investments) influences the share of interest payments in total expenditure (*Y*8) and interest payment dynamics (*Y*9), which formation rules are described by following models:

*Y*8 – Interest payments share in total expenditures 2003–2004, %, $R^2 = 0.24$
$$\boldsymbol{Y8 = 0{,}88 + 0{,}09K1 + 0{,}28K2 + 0{,}16K7 + 0{,}11K9}$$

*Y*9 – Interest payment change in comparison of years 2003 and 2000, %, $R^2 = 0.85$
$$\boldsymbol{Y9 = 469 - 132K7 + 2599K8}$$

From variance of the interest payments share four statistically important factor components can explain only 24%, whereas main influence have municipality debt burden (*K*2) and the level of loan money usage (*K*7), but positive connection is with municipality supply with fixed assets (*K*9) and income level of tax payers (*K*1). Interest payment dynamics is 85% described by the model, whereas the growth rate of loan money usage is the factor with main influence (*K*8). Logical is the fact that in municipalities with higher level of loan money usage the dynamics is slower (*K*7 has negative influence), because the base level is higher and possibilities to get loans more constrained.

From the change in majority of expenditure structural indicators, revenue system components added in models described less than 15% and there is no point in bringing out those models here. This means that municipalities are autonomous in expenditure structure developing and their decisions in many cases are not influenced by revenue level, structure and dynamics. One exception in expenditure structure is education expenditures, which level (*Y*10) and dynamics (*Y*11). The models are given as follows:

*Y*10 – Education expenditures per inhabitant 2003, in kroons, $R^2 = 0.46$
$$\boldsymbol{Y10 = 4604 + 188K1 + 183K3 + 365K9 - 341K10}$$

*Y*11 – Growth in education expenditures 1997–2002, in times, $R^2 = 0.15$
$$\boldsymbol{Y11 = 2{,}63 + 0{,}24K4 - 0{,}17K5 + 0{,}42K8 + 0{,}29K9 - 0{,}25K10}$$

From the dynamics of education expenditures (*Y*10), factors added in model describe 46%. As education expenses account for about half in municipality total expenditures, then the remarkable similarity of *Y*10 model with year 2003 overall expenditure level model (*Y*2) is understandable – factors important in educational expenditure model *K*1, *K*3, *K*9 and *K*10 have same influence direction, when compared to overall expenditure level model (*Y*2). Strong positive influence of provision with fixed assets (*K*9) on the level of educational expenditures comes from the fact that fixed assets connected with school are important part of municipality property. Negative influence of solvency component (*K*10) can be described with the fact that in small municipalities with low solvency state educational provisions

(capitation and investment aid) per individual are relatively higher. Natural is the positive influence of tax payers share (*K*3) and income level (*K*1) on the level of educational expenditures, because tax payers in working age are in most cases the parents of children going to school.

From the variation in dynamics of education expenditures the regression can describe only 15%, although 5 factor-components are considered statistically important – *K*4, *K*5, *K*8, *K*9 and *K*10. The strongest and positive influence is the growth rate in debts (*K*8) – municipality borrowing often comes from the necessity to develop own schools. Education expenditures' growth rate is higher in municipalities better equipped with fixed assets (*K*9). It is difficult to explain influence directions of other factors.

The following regression model of overall governance expenditures (*Y*12) is viewed, which describes 31% of its variation:

*Y*12 – overall governance expenditure per inhabitant in 2003, in kroons, $R^2 = 031$
$$\boldsymbol{Y12 = 1093 + 234K3 + 74K6 - 102K7 + 237K9 - 130K10}$$

Level of overall governance expenditures is positively dependent of the level of fixed assets provision to municipality (*K*9), because fixed assets need to be administered. Level of overall governance expenditures is risen by share of tax payers (*K*3) and their activity (*K*6), which make the municipality more entrepreneurial. In municipalities with higher public debts (*K*7) and with higher solvency (*K*10) the level of governance expenditures is lower.

Of the variation of economy expenditures (*Y*13) the regression model with income system components describes 36%:

*Y*13 – Economy expenditure per inhabitant in 2003, in kroons, $R^2 = 0.36$
$$\boldsymbol{Y13 = 788 + 334K3 - 111K7 + 338K9}$$

The growth in the level of economy expenditures has positive influence by better supply of municipality with fixed assets (*K*9) and larger share of tax payers (*K*3). Lower level of economy expenditures is in municipalities with high level of loan money inclusion (*K*7).

With the formation of residential and communal expenditures (*Y*14) 7 income system components out of 10 are statistically significantly tied, but still model describes only 21% of its variation:

*Y*14 – Residential and communal expenditures per inhabitant in 2003, in kroons, $R^2 = 0.21$
$$\boldsymbol{Y14 = 493 + 95K1 + 128K2 + 222K3 - 70K4 + 69K5 + 74K6 + 95K10}$$

Only the level of residential and communal expenditures is not connected with loan money usage (*K*7) and dynamics (*K*8), but also not with fixed asset usage level (*K*9)

in municipalities. With strongest influence and with most positive effect is the growth in tax payers share (*K*3) and level of debt amount (*K*2).

Of the variation of free time, culture and religion connected expenditures' level (*Y*15) regression model describes 32%:

*Y*15 – Expenditures per inhabitant on free time, culture and religion in 2003, in kroons, $R^2 = 0.32$

$$\boldsymbol{Y15 = 1059 + 84K1 + 294K3 + 128K5 + 70K7 + 222K9 - 103K10}$$

From the statistically important six income system components with strongest influence is the share of tax payers (*K*3), but also their income level (*K*1) and dynamics (*K*5) that means more active and economically insured population. Expenditures are increased by better supply with fixed assets (*K*9) and higher level of loan money usage (*K*7). The demand of that population group for services covered from free time, culture and religion expenditures is higher than the demand of population economically not so well insured. That is why the positive connection of income components *K*3, *K*1 and *K*5 with expenditures is expected. Expenditures are increased by better supply with fixed assets (*K*9) and higher level of loan money usage (*K*7), which can refer to the presence of sport complexes and/or building them.

The expenditure indicators' regression equations shows that revenue system components have relatively modest influence on expenditure indicators. This means that in future research the income indicators system must be improved by adding indicators of state budget support and provisions. At the same our time regression model presented pointed to many-fold connection and intensity of factors influencing municipality expenditure level and dynamics. However those models are with too unstable structure to be the base for quantitative assessment of municipality development reserves. That is already shown by different results of regressions describing total expenditures (*Y*1–*Y*3). This regression analysis show the statistical relation between some variables which can be used as fiscal sutainability indicators themselves such as municipal debts, *K*7, K8, solvency rate, *K*10, etc. and expenditures. A fiscal sustainability indicatr has a normative meaning as well, if.expenditures should be used as fiscal sutainability indicator at the left side then it must have a normative meaning, eg. The diffedrence between actual expenses *per capita* an a normative average. This can be the average of those regions where municipality have chances to survive as publi bodies. If the resulting difference is positive the municipalitie in that region seem tobe fiscally sustainable.

Concentating on other fiscal sustainability measures is the task of next studies.

Conclusions

Current definition of fiscal sustainability is more or less appropriate expressed by fiscal indicators. Those measures that show the fiscal sustainability well are not applicable under circumstances prevailing in Estonia. Therefore, a broad definition is used that can be filled up by factors of sustainability that are identify through our

analysis. We considered fiscal sustainability of municipalities in a region as analysis object. The main regional unit is the municipality (town or parish).

Fiscal activities of municipalities are characterised by tens indicators describing **income, revenues** and expenditure size, structure and dynamics. Each single indicator carries valuable information. Their variation is very capacious even when generalised on county level, on the level of several hundred municipalities it would be practically impossible to carry out systematic comparative analysis. Therefore, despite of remarkable amount of information available fiscal sustainability complex analysis of municipalities has not been carried out so far.

32 indicators describing income level, structure and dynamics of municipalities were used to carry out complex analysis, as a result of which 10 synthetic components of municipality revenue system were brought out, which described 82% of the variation of initial indicators. So the number of analysed revenue indicators decreased by 70%, whereas information loss was only 18%. Such information concentration makes it possible to comparatively analyse much wider object set. In addition to synthetic components of counties and total assessment values constructed according to them by counties, municipalities with extreme total assessment were brought out to illustrate the analysis results. Results of component analysis to some extent corrected the assessment developed in first subchapter of the current chapter. For instance when according to the first chapter Ida-Virumaa was seen as county with lowest fiscal sustainability, then according to total assessment of expenditure sustainability the estimation was not so pessimistic any more.

In order to identify development tendecies of municipality expenditure level, structure and dynamics, multiple regression analysis of those indicators based on synthetic components of income system was carried out. Regression models of 15 expenditure indicators were presented, where level of variation description was more than 15%. Although interesting connections came from the regression equations, the description level of expenditure indicators variation still remained quite low. Obviously it is necessary to work towards improving income indicator system in next researches, mainly adding state budget support and provisions level and dynamics indicators. Results of current analysis are too unstable to make conclusions according to them about fiscal sustainability of most towns and parishes.

The research results clearly show that modelling internal connections of data arrays exceeding possibilities of common comparative analysis helps to compress information without remarkable losses so much, that it is possible to comparatively analyse and comprehensively assess fiscal sustainability of municipalities.

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DELFI MEETOD JA SELLE RAKENDAMISE VÕIMALUSTEST KÕRGHARIDUSVAJADUSE PROGNOOSIMISEL EESTIS

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Käesolevas artiklis käsitletakse kõrgharidusvajaduse prognoosimise võimalikkust ning selle tähtsust ühiskonna jätkusuutliku arengu tagamisel riigi ja maakonna tasemel. Ühiskonna jätkusuutlikkus on ühiskonna võime säilitada oma arengupotentsiaal ja suurendada seda tulevikuhuvide seisukohalt. Tähtis on iga üksiku indiviidi haridustase kui ühiskonna keskmine haridustase tervikuna s.o. hariduse kui indiviidi ja ühiskonna võime mõista ja selle kaudu hinnata ümbritsevas keskkonnas toimuvat.

Kõrgharidus kui väärtus on ühiskonna ja majanduse arengu seisukohalt väga oluline. Maailmapanga, UNESCO ja Eurostati andmetel on kõrgharidusega inimestel oluliselt suuremad oskused, isiklik konkurentsivõime, tööhõive ja sissetulek kui keskharidusega inimestel ja kelle sissetulekud on omakorda suuremad kui põhiharidusega inimestel. Muutused ühiskonna keskmises haridustasemes on otseselt seotud ühiskonna jõukusega. 2002. aastal Euroopa Komisjoni poolt läbi viidud uurimuses toodi välja, et tööjõu keskmise hariduse omandamise suurenemine ühe aasta võrra võib lisada 0,3–0,5% Euroopa Liidu keskmisele SKP kasvumäärale ja suurendab märkimisväärselt riigi konkurentsivõimet rahvusvahelisel turul (European Higher Education ... 2005). Seades ühiskonna ette kaugeleulatuvad eesmärgid, mis on seotud rahva jõukusega ja arenguga on elanikkonna keskmist haridustaset puudutav prioriteetse tähendusega.

Eestis on viimastel aastatel ühiskonna initsiatiivil välja kujunemas trend, mille kohaselt kolmanda taseme hariduse omandajate arvu stabiliseerumine praeguses mahus viiks 20 aastaga inimeste keskmise kõrgharidustaseme 40%-ni töövõimelisest elanikkonnast. Soomes on sama trend tasemele 60%. Eestis on viimase 10 aasta jooksul kõrgharidusega inimeste arv pidevalt kasvanud, kuid spetsialistidena ja tehnikutena töötavate isikute hulk on vähenenud. Meil töötab pea kaks korda rohkem kõrgharidusega inimesi muudel, so. teadus- ja tehnoloogia inimressursiga mitteseotud erialadel kui EL-s keskmiselt. Täna valmistatakse ette kõrgharidusega inimesi erialadel ja mahus, milleks pole vajadust või kus inimesed pole motiveeritud töötama või omandavad inimesed kõrghariduse töötamaks muudel enda ja ühiskonna jaoks tähtsatel aladel, milleks otsest ettevalmistust pole. Selgepiiriline arusaam vajaduse mahust ja kvaliteedist hetkel puudub. Kõrghariduse omandamisele suunatavate ressursside kogus on märkimisväärne ja sellest tulenevalt on oluline ka nende kasutamise efektiivsus.

Ka kõrghariduse omandamise planeerimine täna tuleneb peamiselt mineviku ja oleviku mõistmisest mitte niivõrd tuleviku vajaduste arvestamisest. **Haridusvajadus** iseloomustab kui palju, millise haridustasemega ja millistel eri-, ameti- ja kutse-

aladel on vaja inimesi ühiskonna arengu ja eksistentsi seisukohalt. Vajadus on oma olemuselt objektiivne. Tuleneb ühiskonna ette püstitatud eesmärkidest. Vajaduse rahuldamine tagab arengu, ühiskonna jätkusuutlikkuse, kõigi ühiskonna liikmete elatustaseme tõusu. Haridusvajadus on tulevikku suunatud vajadus. **Haridusnõudlus** väljendab kui palju, millise haridustasemega ja millistel eri-, ameti- ja kutsealadel on vaja inimesi ettevõtete ja indiviidide vajaduste ja soovide rahuldamise seisukohalt. Nõudlus on oma olemuselt subjektiivne. Sõltub turuolukorrast, poliitilisest situatsioonist, moest, inimeste hoiakutest, nende majanduslikest võimalustest, kuulujuttudest, jmt. Nõudluse rahuldamine tagab indiviidide rahulolu, ettevõtjate lühiajalise majandusliku kasu. Haridusnõudlus on oma olemuselt olevikus eksisteeriv nõudlus. Riigi eesmärk on ühiskonna tulevasi vajadusi silmas pidades luua täna sellised tingimused, mis võimaldaksid potentsiaalset haridusnõudlust ühitada haridusvajadusega ja kindlustada ühiskond asjatundlike, motiveeritud ning haritud töötajatega. See on kõige otstarbekam ja ideaalsem ühiskonna seisukohalt. Samuti ka indiviidi seisukohalt, pidades silmas tema võimalikku rakendatust tööturul ja konkurentsivõimet tööjõuturul. Selle eesmärgi saavutamist teenibki haridusvajaduse ja -nõudluse prognoosimine.

Määratledes etteaimavalt õieti ühiskonna tulevikuvajadused spetsialistide, generalistide, juhtide jne järele peamistes tegevusvaldkondades ja regionaalselt suudaks ühiskond sihipäraselt tegutsedes saavutada enda ette püstitatud eesmärgid. Nagu on teadmistepõhine ühiskond lähtuvalt Euroopa Ülemkogu 2000. a. Lissaboni kohtumise otsustest, Eesti jõudmine 15 aastaga 5 Euroopa jõukama ja arenenuma riigi hulka jne. Autori eesmärk on töötada välja metoodika, mis võimaldaks hinnata ühiskonna tulevikuvajadusi kõrgharidusega spetsialistide osas Eestis. Käesolevas artiklis esitab autor esialgsed seisukohad ja lähenemised nimetatud metoodika väljatöötamiseks.

Prognooside koostamisel ja mõjude hindamisel on kasutusel mitmesuguseid meetodeid – kvantitatiivsed, kvalitatiivsed, segameetodid. Antud teema kontekstis on sobiv kasutada kvalitatiivseid meetodeid nagu eksperthinnangud ja intervjuud. Eksperthinnangud on sobivad, kui mitte ainuvõimalikud, prognooside koostamisel valdkondades, millistes on:

- Ebapiisav info varasemast. Kõrghariduse sisuline ja statistiline käsitlus on Eestis aastakümnete jooksul muutunud, ka teistes EU riikides. Seetõttu on andmeid ajalooliselt ja teiste riikidega võrreldes väga raske võrrelda.
- Väga paljude mõjutegurite üheaegne toime
- Edasise arengu suur sõltuvus peaasjalikult vastuvõetavatest otsustest ja vahetult ressursside olemasolust

Kõrgharidusvajaduse ja -nõudluse prognoosimine on oma olemuselt ekspert-hinnang. Sellise hinnangu koostamiseks on sobiv võtta aluseks Delphi meetod kui oma tähenduselt suunaandev, värskeid ideid ja lahendusi pakkuv. Samas võimaldab meetod kaasata laiapinnalise ettevalmistuse ja kogemusega spetsialiste eri elu valdkondadest, et paremini subjektiivseid hinnanguid objektiivsemalt üldistada. Tema rakendamine on võimalik operatiivselt ja paindlikult. Mida rangemalt järgitakse

nõudeid ekspertidele, seda objektiivsem ja informatiivsem on tulemus. Delphi meetodi laiendamine kõrghariduse omandamise vajaduse ja nõudluse prognoosimisel tähendab oma alal väga kompetentsete ja sõltumatute ekspertide valikut hõlmates võimalikult laiaulatuslikke valdkondi. Samuti johtub sellest ka sobiva materiaalse ja intellektuaalse baasi olemasolu kõrgkoolide ja innovatiivsete ettevõtete näol, kes on piisavalt mobiilsed ja kaasaegsed uusi, ühiskonna tulevikuvajadusi arvestavaid erialasi õpetama.

Delphi meetodi uurimine ja rakendus on kõrghariduspoliitika väljatöötamisel Eestis uudne. Teadaolevalt on Eestis koolitusalal läbi viidud ainult mõned uurimused: 1995. a. Leuveni ülikooli professori hr. W.Leirmanni poolt täiskasvanuhariduse küsimustes: "The Future Goals and Policies of Adult Education in Europe" ja sedagi ühe osana Euroopa riikide seas, Täiskasvanuhariduse uuring 1999, HTM Riikliku koolitustellimuse õppesuundade prioriteetsuse uuring 2002 ja 2003. Meetodit on Eestis rakendatud mõnedes teistes valdkondades nagu "Rahvastiku tervise arengu võimaluste uuring" (A. Kasmel). Eestis on Tartu Ülikooli ja Praxis teadlaste poolt (Eamets, Paulus, Võrk jt.) koostatud palju mitmesuguseid prognoose kasutades erinevaid meetodeid. Palju on käsitletud tööjõuvajaduse prognoosimist.

Delphi olemus ja tähtsus

Delfi meetod on protsess jõudmaks üksmeelsusele ekspertide grupi (edaspidi EG) arvamustes mingis probleemis või tulevikku suunatud asjaolus, kus kõik eksperdid jäävad teineteisele tundmatuiks. Traditsiooniliseks vormiks on ulatuslikud küsimustikud, mis jaotatakse ekspertidele. Sama ekspertide grupp peab vastama mitmetele küsimuste ringidele, mis koostatakse olemasoleva informatsiooni ja eelnevate vastuste põhjal. Saadud vastused sünteesitakse ja saadetakse tagasi järgmiste küsimustike näol, sisaldades ka tagasisidet. Väga tähtsal kohal Delfi meetodis on vajalike ekspertide leidmine ja valik ning täpselt ja õigesti koostatud küsimused. Eksperdid ei suhtle omavahel otseselt, pigem läbi administraatori vastuste näol. Delfi meetodi kaudu on võimalik saada optimaalselt usaldusväärset ekspertide üksmeelset arvamust. Konsensuseni jõudmiseks viiakse läbi ulatuslikke küsimustevoore ja nende põhjalikke sünteesimisi ning analüüse. Meetod toimib vaid siis kui kõik selleks vajalikud nõudmised on põhjalikult täidetud. Meetod nõuab suhteliselt palju aega, kuna koosneb mitmest erinevast osast pluss eeltestidest, kontrollimaks selle usaldusväärsust.

Delphit võib kirjeldada kui meetodit ekspertide grupi kommunikatsiooniprotsessi struktureerimiseks nii, et protsess oleks piisavalt efektiivne ja võimaldaks EG-l kui ühtsel üksusel tegeleda kompleksselt kogu probleemiga ja pakkuda lahendusi keerulistele küsimustele.

Saavutamaks "struktureeritud kommunikatsiooni" ja selle kaudu püstitatud eesmärki kindlustatakse töö käigus:

- teatud ulatuses tagasiside grupiliikmete individuaalsete teadmiste ja esitatud informatsiooni osas;

- teatud hinnang grupi otsuse või vaadete kohta tervikuna ja üldistatult;
- teatud võimalus indiviidele oma vaadete ümberhindamiseks ja muutmiseks;
- anonüümsus individuaalsete vastuste ja kommentaaride andmisel.

Delphi meetodit saab kasutada paljudel erinevatel juhtudel. Kuigi enim tuntud on kasutus prognoosimisel, võib kasutusvaldkondade nimistusse lisada ka alljärgnevad (Linstone, Turoff 2002):

- oleviku ja mineviku andmete kogumine (mis ei ole täpselt teada või kättesaadavad);
- ajalooliste sündmuste olulisuse uurimine;
- võimalike eelarvekulutuste hindamine;
- linnaplaneeringu ja regionaalse arengu plaanide analüüsimine;
- ülikoolilinnaku ja õppekava arenduse planeerimine;
- mudeli struktuuri koostamine;
- potentsiaalsete poliitiliste valikute positiivsete ja negatiivsete mõjude piiritlemine;
- komplekssete majanduse ja sotsiaalsete fenomenide vaheliste põhjuslike seoste avastamine;
- tegelike ja vaadeldavate inimeste motivatsioonitegurite välja selgitamine ning täpsustamine;
- personaalsete väärtushinnangute ja sotsiaalsete eesmärkide prioriteetide selgitamine.

Delphi tehnika kui tulevikku suunatud uuringu tehnika kasutamise sobivust ei määra mitte uuritava valdkonna omadused vaid spetsiifilist grupi kommunikatsiooniprotsessi ümbritsevad tingimused. Tavaliselt viib Delphi meetodi kasutamiseni üks või mitu alljärgnevatest põhjustest (Linstone, Turoff 2002):

- probleemi ei ole võimalik lahendada täpseid analüütilisi tehnikaid kasutades, kuid samas kollektiivsed subjektiivsed arvamused tooksid kasu;
- indiviididel, keda on vaja laiaulatusliku ja kompleksse probleemi lahendamiseks, puudub sobiva suhtlemise kogemus, neil on erinev taust kogemuste või teadmiste osas, mis võib pärssida ideede avaldumist;
- vaja on rohkem inimesi, kui on võimalik näost-näkku suhtlemise efektiivsel toimimisel rakendada, sihtgrupp on vahetuks suhtlemiseks liiga suur;
- aeg ja kulud muudavad pidevad grupikohtumised võimatuks või ebapraktiliseks
- näost-näkku kohtumiste efektiivsust oleks võimalik tõsta täiendava grupikommunikatsiooni protsessi kaudu, kui vahetu suhtlusega seotud suhtlusmüra võib segada põhiteemale keskendumist;
- indiviidide vahelised erimeelsused on nii suured või poliitiliselt talumatud, et kommunikatsiooniprotsess tuleb delegeerida kolmandatele isikutele ja/või tagada anonüümsus ja eeltoodu ei võimalda avatud suhtlemist;
- säilitada tuleb osalejate heterogeensus, et tagada tulemuste väärtus ehk vältida domineerimist arvuliselt või isiklike omaduste tõttu, lõpptulemus ei tohi olla mõjutatud grupiliikmete omavahelisest vahetust suhtlusest.

Eristatakse meetodi rakenduse nelja faasi:

- aruteluks oleva probleemi kohta andmete kogumine. EG liikmed saavad edastada enda hinnangul olulist informatsiooni arutelu teema kohta;
- arusaamisel jõudmine, kuidas EG tervikuna suhtub probleemi, milles ollakse ühel meelel, milles on lahkarvamused;
- suuremate lahkarvamustega ja vastuoludega tegelemine;
- kogutud informatsiooni analüüsimine, üle- ja ümbervaatamine koos EG ning vastava töögrupiga, hindamine.

Delphi meetodi senisest kasutamisest aastakümnete jooksul on tekkinud kogemuslikud tähelepanekud, millede arvestamine võimaldab edukamalt tegutseda. Kuigi nende põhimõtete järgimine ei garanteeri tulemust, saab vältida uurimise käigus tekkivaid probleeme:

- Arvatavalt eksperdilt nõusoleku saamine osalemiseks ekspertgrupi töös. Mitte lihtsalt piirduda ankeetide laialisaatmisega. Ekspertide valik on üks tähtsamaid küsimusi uuringu õnnestumiseks.
- Delphi meetodi põhjalik selgitamine ekspertidele.
- Vastuoluliste sündmuste vältimine, kus käsitletav sündmus koosneb osadest, kus eksperdil võivad olla vastakad arvamused.
- Kahemõttelise tähendusega sündmuste vältimine, ka kasutatava terminoloogia erinev mõistmine.
- Küsimuste sobiva hulga määramine. Eksisteerib praktiline ülemine piir kuni 25 küsimust. See sõltub ka küsimuse asetusest ja sisust. Erijuhtudel võiks see olla kuni 50.
- Vastuoluliste prognooside ilmnemine, eriti peale esimest küsitluste ringi.
- Küsitluse läbiviija arvamuse pealesurumine peaks olema välditav.
- Ekspertide töö tasustamine. Enamusel juhtudel on eksperdid osalenud tasuta. Kui kaasatavad eksperdid on oma valdkonna kogemustega spetsialistid, on nende töö motiveerimine oluline. Tasu peaks vastama sama taseme konsultatsiooni tasudega. Tasustamine võimaldab prognoosi tellijal kaasata kompetentsemaid eksperte ja saada seeläbi usaldusväärsema tulemuse, mis kokkuvõttes annab suurema säästu.

Delphi meetodi rakendamisel on ilmnenud kaks erinevat suunda:

- "klassikaline" Delphi, kus on peetud kinni anonüümsusest, eelneva küsitlusvooru tulemuste kasutamisest järgmises voorus ja andmete statistilisest töötlusest;
- variandid, kus üks või mitu eelnevat tingimust on muudetud.

Tegelikkuses ei pruugi Delphi meetod olla üks meetod, vaid kui meetodite kogum, millised võivad olla probleemile erineva lähenemisviisi teisendid, saamaks objektiivsemat tulemit.

Enamiku Delphi rakenduste eesmärk on usaldusväärselt ja loomingulise protsessi käigus ideede tekitamine ning otsustamiseks vajaliku informatsiooni kogumine ja loomine. Tegemist võib olla nii hinnangute andmisega olemasolevale või prog-

nooside koostamine edaspidiseks. Meetodi paindlikkusest ja laiapinnalisusest asjatundlike ekspertide kaasamise kaudu on ta sobiv kasutamiseks suurte ja oluliste ühiskonnaelu valdkondade ja riikliku prioriteeti omavate probleemide ja ülesannete lahendamisel.

Delphi kasutamine riiklikus planeerimises ja poliitikate kujundamisel

Ühiskond on oma olemuselt teadmistepõhine, kuivõrd tema arengut tagab teadmiste kasutamine nii ühiskonnaelus kui ka majandus-, kultuuri- ja sotsiaalelu protsessides. Seda omakorda tagavad kõige edukamalt avaliku sektori poliitikad kui eesmärgistatud tegevused. Riigi roll siirdumisel teadmistepõhisesse ühiskonda on tohutu. Riigi edukas, eesmärgistatud ja pikajaalise läbimõeldud strateegia elluviimisega tagatud tegevus toob ühiskonnale juurde enam inimesi, oskusi ja tehnoloogiaid, mis omakorda võimaldavad nii era- kui avalikul sektoril areneda. (Kattel 2004) Ressursside nappus teeb ühiskonna arengu s.h. tema majandustegevuse tulemuslikkuse võimalikuks üksnes juhul, kui riik teeb panuse intellektuaalse kapitali suurendamisele, tema kvaliteedi tõstmisele ja efektiivsele kasutamisele. (Saal 2006)

Riiklikul tasandil saab Delphi meetodit kasutada mitmes valdkonnas, nii riiklikul, regionaalsel kui ka organisatsiooni tasandil. Tehtud uuringud riiklikus valdkonnas liiguvad väljaspoole Delphi kui prognoosimistehnika kasutusalast ja rõhutavad selle meetodi tähtsust poliitika küsimuste arutamise kommunikatsioonisüsteemis. Poliitika küsimus on siinkohal defineeritud kui teema, mis kaasab olulisi aspekte, näiteks eesmärkide seadmist, ja mille osas puuduvad tavapärased eksperdid. Küsimuse otsustamine peab arvesse võtma erinevate huvigruppide vastuolulisi eesmärke ja väärtushinnanguid ning teisest küljest ka fakte ning analüüsitulemusi situatsiooni kohta. Sealjuures tuleb kindlalt meeles pidada, et Delphi ei asenda analüüse, komiteede moodustamist ega otsuste tegemist. Selle asemel korraldab ja selgitab Delphi erinevate huvitatud isikute vaateid anonüümselt ja toetab ning täiendab seega ekspertide tööd. (Linstone, Turoff 2002)

Delphi meetodi üheks potentsiaalseks kasutusvaldkonnaks on alad, kus teaduslikku informatsiooni tuleb tõlgendada teadlike otsuste tegemiseks hindamise ja analüüsimise kaudu.

Regionaalsel tasandil planeerimises on Delphi oluline seetõttu, et tunnetatakse vajadust parema suhtluse organiseerimiseks väga erineva taustaga inimeste vahel. Delphi meetodit on paljudes riikides väga sagedaselt kasutatud ka haridusasutuste uurimistöös.

Poliitika Delphi puhul on eesmärgiks võimalikult paljude erinevate vaadete kujundamine mingi võimaliku lahenduse kohta. Poliitika on valdkond, kus puuduvad eksperdid, on vaid informeeritud toetajad ja vastased. Ekspert või analüüsija võib küll välja tuua kvantitatiivse või analüütilise hinnangu mingi poliitika ellurakendamise tulemuse kohta, kuid on väga vähe tõenäoline, et selle analüüsi põhjal võetakse vastu mingi kindlapiiriline poliitika: sellisel juhul poleks tegemist enam

poliitilise küsimusega. Poliitika valdkonnas saavad süstemaatilised analüüsid, operatiivsed uuringud ja muud käsitlused anda vaid faktilist alust küsimuse toetajatele.

Poliitika kujundamise Delphi lähtub lisaks veel eeldusest, et otsuse tegija ei ole huvitatud sellest, et grupp tema eest otsuse ära teeks: teda huvitab, et informeeritud grupp pakuks talle välja kõik võimalikud lahendusvariandid ja neid toetavad tõendusmaterjalid, et ta saaks neid ise kaaluda. Poliitika Delphi on seega tööriist poliitiliste valikute analüüsimiseks, mitte otsustusmehhanism. Peamiseks eesmärgiks ei ole konsensuse loomine, kommunikatsiooniprotsessi struktuur ja ekspertgrupi kooslus võib olla selline, mis teeb konsensuse saavutamise väga ebatõenäoliseks. Tegelikkuses võib uuringu tellija isegi nõuda uuringu ülesehitust, selliselt, et konsensuse tekkimine ei oleks võimalik.

Ekspertgrupp on kõige tavalisem poliitiliste otsuste käsitlemise ja arutamise protsess. Selline lähenemine toob organisatsiooni eri osade inimesed kokku, et samal tasandil töötavad inimesed kogu organisatsioonis saaksid mingi küsimuse kohta oma arvamust edastada ja peale kõigi seisukohtade läbivaatamist saaks vastu võtta põhjendatud otsuse, mille juures on arvestatud eri gruppide huvidega.

Suured organisatsioonid, (nagu riik) või ühiskonnaelu valdkonnad (nagu haridus, majandus) teenivad enamaid funktsioone ja hõlmavad enda alla palju suuremat hulka valdkondi. Ekspertgrupid, mis tõeliselt esindavad kõiki huvigruppe, on väga suured ja seetõttu ebaefektiivsed. Kuna otsuste tegemiseks on enamasti antud kindel ajapiirang, muutub protsess kõigi huvide kuulamisest ja analüüsimisest siiski konsensuse ja kompromisside leidmiseks ilma põhjalikuma analüüsita. Üheks põhjuseks on ka see, et tänapäeva probleemide komplekssus nõuab EG tegevuses suurt hulka toetavat personali, seda aga ei ole pideva kokkuhoiu ja tiheda konkurentsi tingimustes võimalik eraldada. Seega muutub keeruliste küsimuste arutamine ja analüüsimine problemaatiliseks ning osalejad ei ole huvitatud nende esiletoomist kartuses, et neid võidakse süüdistada mittevajalikus ressursside raiskamises.

Ülaltoodud ja mitmete muude tegurite tõttu on ekspertgrupid muutunud ebaefektiivseks ning sellele on püütud leida alternatiive. Varasemad Delphi teemalised kirjutised on välja toonud alljärgnevad probleemid seoses komiteede (siin nimetatud EG-de) süsteemiga, need kajastavad enamjaolt komitee protsessi psühholoogilisi aspekte (Linstone, Turoff 2002):

- domineeriv isiksus või otsekohene indiviid võtab komitee protsessi oma mõju alla;
- indiviidide soov mitte võtta seisukohta mingi küsimuse asjus enne, kui on teada kõik faktid või kuni on teada, mis suunas kaldub enamuse arvamus;
- raskus, mis kaasneb kõrgemal positsioonil olevate inimestega avalikult vastuollu minemisega;
- soov mitte loobuda oma positsioonist peale seda, kui see on avalikult välja öeldud;
- hirm ideede välja toomise ees, mis võivad olla idiootsed ja põhjustada seega naerualuseks sattumist ja eneseuhkuse riivamist.

Väiksemas ekspertgrupis, kus on umbes kümmekond inimest, ja piisavalt aega, et läbi arutada ja kaaluda kõiki küsimusi, on piisavalt palju privaatsust, et võib arvata, et tehtud individuaalsed märkused jäävad komitee vestlusruumi seinte vahele ja seega ei ole ülaltoodud probleemidel erilist kaalu. Samas, kui komitee liikmete arv suureneb, kasutatav aeg väheneb ja tekivad organisatsioonilised probleemid, kerkivad üles ka psühholoogilised probleemid.

Delphi rakendamisel, kui uuring on läbi viidud, saab väike ja seega tööprotsessilt efektiivne EG kasutada saadud tulemusi vajaliku poliitika kujundamiseks ja ettepanekute tegemiseks maakonna ja riigi tasemel. Delphi ei ole mingiks asenduseks uuringutele, analüüsidele ega teaduslikule tööle. See on vaid organiseeritud meetod mingi konkreetse küsimusega seotud arvamuste ja informatsiooni kogumiseks ja süstematiseerimiseks, et anda võimalikult suurele hulgale informatsiooni ja arvamust omavatele indiviididele võimalus oma seisukohtade avaldamiseks. Kuna vastajad on anonüümsed, kaovad hirmud võimalike sanktsioonide või naeruvääristamise osas ja ükski indiviid ei ole sunnitud end avalikult siduma mingi konkreetse vaatepunkti kaitsjaks enne kui kõik alternatiivid on välja toodud.

Tulevikku suunatud Delphi peaks suutma täita ühte või mitut alljärgnevatest eesmärkidest:

- tagada, et kõik võimalikud lahendused on arutluseks välja pakutud;
- hinnata iga võimaliku lahenduse mõju ja tagajärgi;
- uurida ja hinnata iga võimaliku lahenduse vastuvõetavust.

Nimetatud eesmärkide saavutamine võimaldab teha asjatundlikke ja kaalutud otsuseid ametkondlikul või regionaalsel tasandil. Selliste otsuste kandepind on laiem ja alused läbimõeldumad ning põhjendatud.

Delphi meetodi põhimõtete rakendamisest riigi ja maakonna tasandil Eestis

Liikudes teadmistepõhise ühiskonna suunas tuleb Eestis juba homme hakata ette valmistama spetsialiste erialadel, milledest täna ei ole veel arusaamist. See on Eesti jätkusuutlikkuse küsimus. Tegemist on spetsialistide ettevalmistamisega, kes on võimelised töötama ja toime tulema kiiresti muutuvas keskkonnas, virtuaalses maailmas, valdavalt mittemateriaalse tootmise tingimustes.

Delphi meetodi, kui oma olemuselt eksperthinnangu laiendamine kõrghariduse omandamise vajaduse ja nõudluse prognoosimisel tähendab oma alal väga kompetentsete ja sõltumatute ekspertide valikut hõlmates võimalikult laiaulatuslikke valdkondi. Samuti johtub sellest ka sobiva materiaalse ja intellektuaalse baasi olemasolu kõrgkoolide ja innovatiivsete ettevõtete näol, kes on piisavalt mobiilsed ja kaasaegsed uusi erialasi õpetama.

Rakendades meetodit haridusnõudluse ja .vajaduse prognoosimisel Eestis tuleks lähtuda mitmetest aspektidest:

- **Harukondlik** käsitlus võimaldab saada paremat ülevaadet majandusest tervikuna, spetsialistide vajadusest, uutest arengusuundadest, tuleviku vajadustest.
- **Ametkondlik** käsitlus võimaldab saada paremat ülevaadet riiklikust seisukohast tulenevalt, riiklike investeeringute vajadustest ja võimalustest optimaalsemalt paigutada ressursse. See puudutab nii riiklikku koolitustellimust kui riiklikke tellimusi uurimis- ja arendustegevuses.
- **Maakondlik** ehk regionaalne käsitlus lisab sotsiaal-kultuurilise mõõte, võimaldab saada paremat ülevaadet regionaalsetest eripäradest ja aitab kohaliku omavalitsuse tasandil leida paremaid lahendusi piirkonna tuleviku arengu seisukohalt.
- **Ühiskondlik** ehk poliitiline käsitlus võimaldab saada paremat ülevaadet võimulolejate või võimu juures olejate pürgimustest muuta Eesti ühiskonda paremaks, kooskõlastada ja tasandada tulevikunägemusi.

EG-de endi ja nende tegevuse edukaks koordineerimiseks loodud töögrupi koosseisude moodustamisel vastavalt eeltoodud käsitlustele lähtutakse põhimõttest, et teadus saab oma võimu põhimõtteliselt ainult siis edukalt teostada, kui seejuures peetakse silmas järgmisi põhimõtteid (Gethmann 2005):

- **Tegevuse läbipaistvus** saab alguse teaduslike nõuandvate kogude kokkupaneku läbipaistvusest. Sellistesse komisjonidesse ei kutsu liikmeid mitte nõuande saajad, vaid *scientific community* institutsioonid.
- **Asjatundlikkusel põhinev tegutsemisõigus** on nõudmine, mille kohaselt *scientific community* kontrolliks tõendatult asjatundlikkust ja pädevust.
- **Erapooletu otsustamise** puhul on hädavajalik, et teadlaste kohad nõuandvates kogudes täidavad teaduse tegemises osalejad. Mitte, et nad määratakse poliitiliste jõudude või riiklike ametkondade poolt.

EG moodustatakse erinevate käsitluste puhul eri valdkondade spetsialistidest nii, et oleks kaetud kõik ühiskonnelu valdkonnad. Oluline, et oleks kaasatud kõik tööandjad sõltumata omandivormist: riigiasutused, äriühingud, FIE-d, MTÜ-d, sihtasutused ja -kapitalid.

Metoodika ja tulemuse vormistamine on kõikidel juhtudel ühesugune. Tulemused on suunanäitajad kõige otstarbekama lahenduse leidmiseks ja formuleerimiseks. Otstarbekus tuleneb nõudmise ja pakkumise vahekorrast, eesmärgist ja selle saavutamise võimalustest ehk lühidalt eesmärgist ja vajadusest. Tulemuste vormistamine peab olema vaba parteipoliitilistest kaalutlustest.

EG-d on püsivad. Koosseise muudetakse reeglina harva, eelkõige juhul, kui ekspert kaotab volituse või kompetentsi esindada ametkonda, valdkonda, asutust, organisatsiooni, ettevõtet. Ekspertide grupi koosseis on 20–30 inimest. Nõuded eksperdile sisaldavad teadmisi, oskusi, kogemusi, tööstaaži, saavutusi, edukust omal alal. Prognoose tehakse 3 ja 5 aastaks tulenevalt haridusmudelist 3+2. Kolmeaastase prognoosi alusel on kõrgkoolides võimalik järgmiseks õppeaastaks valmistada ette uusi õppekavasid (lõpetavad 3-ndal aastal). Samuti on võimalik korrigeerida õppekavasid viimase aasta spetsialiseerumistele nii bakalaureuse kui rakenduskõrg-

haridusõppes. 5 aastane prognoos võimaldab paremini ette valmistada magistriõppe kavasid ja praktikabaase. 10 aastased prognoosid on arengusuunda näitavad, võimaldavad õigel teel püsida, väldivad ebaotstarbekaid põhjendamatuid kõrvalekaldeid. 10 aasta möödumine on ka piisav aeg esimeste kokkuvõtete tegemisest EG prognooside paikapidavusest reaalses praktikas. Selline kokkuvõte tähendab hinnangu andmist prognooside põhjal koostatud õppekavade alusel õppinute ja vastavate teadmiste ning oskuste omandanute rakenduvusest tööturul ja konkurentsivõimest tööjõuturul. Selliste hinnangute andjaks saavad olla ainult indiviidid ise ja tööandjad. See omakorda eeldab 10–15 aastast pidevat kontakti kõrgkoolide lõpetanutega ja suuremate tööandjatega, vastavate andmebaaside loomist ja pidevat käigushoidmist.

Hindamise põhiküsimus on võrreldavates näitajates, aga samuti ka hinnangute vajalikus ja piisavas täpsuses. Hinnatakse näitajate suhteid ja võimaluse korral muutust s.o. dünaamikat. Prognooside koostamisel on vältimatu pidev hinnangute andmine praegusele reaalselt eksisteerivale olukorrale teatud väljavalitud ja põhjendatud perioodide möödumisel. Selline järjepidevus võimaldab tulevikus käsitleda juba muutuste dünaamikat ja võrdlusi tegelike lahendustega. Ajaline ja sisuline katkematus võimaldavad prognoosida tulevikkusuunatud kõrghariduse arengustsenaariumeid oluliselt usaldusväärsemalt ja korrigeeriks neid pidevalt tegeliku eluga. Sellise hinnangu andmisel tuleks, tuginedes prof. Ü. Vooglaiu suunistele, olemasolevat olukorda võrrelda lähtudes kahest aspektist:

1. **reaalsusel põhinevast** s.o. võrrelda:
   - minevikuga, et näha oma arengut või taandarengut;
   - kehtiva või kehtima hakkava standardiga;
   - meiega ajaloolis-kultuuriliselt sarnaste ja geograafiliselt lähedaste ühiskondade arengutega, et näha oma kohta teiste seas ja seada sihte, keda võiks eeskujuks seada ja milleni jõuda (näit. Balti riigid ja Põhjamaad);
   - tarbija vajadustega;
2. **ideaalil põhinevast** s.o. võrrelda:
   - tulevikuvajadusega, et näha, mida peaks veel tegema, kui kaugel ollakse (näit. teadmistepõhine Eesti ühiskond);
   - kultuuri stereotüübiga;
   - ideaaliga.

Võrdlusperioodid on 5 ja 10 aastased tsüklid, mis on statistikas levinud ja põhjendatud perioodid. Hetkeseisuks tuleb võtta viimane statistiliselt käsitletav täisaasta. Käsitletakse 5, 10 ja 20 aastaseid trende nii minevikust kui tulevikku suunatuid. Nende trendidega võrreldaksegi hetkeseisu ja antakse hinnang. Need hinnangud ja trendid on üheks võrdlusaluseks ja orientiiriks tulevikku suunatud hinnangutele. Kokkuvõtte esialgse projekti koostab teadlaste töögrupp. Kõikide eri käsitluste ekspertgruppide esindajatest moodustatakse finaalekspertgrupp, mille töö tulemust võrreldakse teadlaste töögrupi esialgse projektiga. Hälbed arutatakse ühiselt läbi jõudmaks üksmeelele.

Prognoosi täpsus ja usaldusväärsus sõltub mitmesugustest asjaoludest (Литвак 2004):

- kui oma olemuselt hinnang ja prognoos on ta ebatäpne ja ei põhine empiirilistele andmetele;
- vaadeldava perioodi kestus, mida lühemas perioodis sündmusi hinnatakse, seda täpsem on prognoos;
- prognoosi regulaarsus ja sagedus suurendavad täpsust;
- lähteandmete valik ja ekspertgrupi informeerituse ulatus ja objektiivsus;
- ekspertgrupi kompetents, asjatundlikkus.

Kõrgharidusvajaduse ja -nõudluse prognoosimise metoodika rakendamine Eestis eeltoodud põhimõtete alusel võiks toimuda mitmes etapis:

- ühes maakonnas läbiviidav uuring, mille käigus metoodika lõplikult välja töötatakse. Saadakse praktiline kogemus EG moodustamisel ja töös ekspertidega, formuleerub läbiviijate töögrupp;
- teises maakonnas ja ühes majandusharus läbiviidav uuring, mille käigus metoodikat viimistletakse, ühildatakse erinevate EG-de tulemused, korrigeeritakse küsimustikku;
- ametkondliku ja ühiskondliku lähenemisviisi alusel teostatud uuringud, mille tulemusi võrreldakse ja ühildatakse varasemate EG-de tulemustega, korrigeeritakse küsimustikku ja metoodikat tervikuna;
- üleriigiline uuring, mis käsitleks kõiki nelja lähenemisviisi – harukondlik, maakondlik, ametkondlik ja ühiskondlik. Metoodika on lõplikult välja töötatud ja mugandatud kohalikele vajadustele ja iseärasustele.

Sellise etapiviisilise arengu tulemusena on 1,5–2 aasta jooksul formeerunud koolitatud ja praktilist kogemust omav statsionaarne töörupp, mis oma olemuselt võiks ja peaks olema sõltumatu kõrgkoolidevaheline institutsioon. Metoodika on põhimõtteliselt kasutatav ka muudes valdkondades ja poliitikas lisaks kõrgharidusele.

Kokkuvõte

Autor on artiklis käsitlenud Delphi meetodi olemust ja tema põhimõtete rakenduslikkuse võimalikkust kõrgharidusvajaduse- ja nõudluse prognoosimisel. Delphi näol võib tegemist olla nii hinnangute andmisega olemasolevale olukorrale kõrghariduses kui prognooside koostamisega edaspidiseks. Informatsiooni saamiseks ja loomiseks kasutatakse küsimustikke, mida esitatakse kahes või enamas voorus sõltuvalt probleemi ulatusest ja keerukusest. Pärast igat küsimustevooru tehakse kokkuvõtted ja üldistused ning jagatakse põhjendustega tagasisidet eelmise küsimustevooru tulemuste kohta, hinnatakse eelmise ringi tulemusi teatud kriteeriumide alusel. Küsimused ja tagasiside on enamasti anonüümne. Vastajatel ja protsessis osalejatel on võimalus igas järgnevas küsitlustevoorus oma esialgseid seisukohti uue informatsiooni ja tagasiside valguses muuta. Protsess lõpeb järelduste tegemisega pärast ettenähtud küsimustevooru arvu või konsensuseni jõudmisel.

Artiklis on määratud autori käsitluses kõrgharidusvajaduse- ja nõudluse mõisted, esitatud kõrgharidusvajaduse- ja nõudluse harukondlik, ametkondlik, maakondlik ja ühiskondlik käsitlus. Maakondlik lähenemine võimaldab paremini mõista regiooni iseärasusi ja vajadusi. Regionaalsete ekspertgruppide töö tulemuste üldistamine annab ülevaate ühiskonna vajadustest tervikuna. Nii korraldatud tegevus oleks säästlik ja efektiivne. Lisaks maakondlikule käsitlusele on olulised ka ametkondlik, harukondlik ja ühiskondlik lähenemine kõrgharidusvajaduse lahtimõtestamisel. Delphi meetodi vahendamine kõikides eelnimetatud valdkondades võimaldab luua ühtset käsitlust kõrghariduse vajadusest riigis tervikuna ning seda senisest tõhusamalt prognoosida.

Autor on esitanud ekspertgruppide ja nende tegevust koordineeriva töögrupi tegevuse põhimõtted ja ajakava, samuti kõrgharidusvajaduse ja -nõudluse prognoosimise metoodika väljatöötamise vajaduse ja Eestis rakendamise etapilisuse. Hinnangute andmise kriteeriumide juures on autor rõhutanud järjepidevust prognoosides, mis võimaldab neid võrrelda tegelikkuses aset leidnud sündmustega ja seeläbi korrigeerida. Selline protsessi ülesehitus annab tõhusama ja täpsema tulemuse. Esitatud on ka peamised hindamiskriteeriumid, mis rajanevad ideaalil ja reaalsusel.

Autor on jõudnud järeldusele, et kõrgharidusvajaduse ja -nõudluse prognoosimine Eestis on meie ühiskonna eesmärgistatud arengu seisukohalt tähtis, kui isegi mitte vältimatu tegevus. Kõrghariduse omandamise planeerimisel täna arvestatakse peamiselt minevikule ja olevikule baseeruvaid võimalusi, nagu intellektuaalne ja materiaalne baas, mitte niivõrd ei koondata ressursse tulevikuvajadusi arvestades. Sobivaim viis vastavate prognooside koostamisel, järelduste ja ettepanekute tegemisel on võtta aluseks Delphi meetod.

Kõrgharidusvajaduse ja -nõudluse sihipärane ja järjepidev prognoosimine võimaldab õigeaegselt ette valmistada vajalikke spetsialiste, planeerida selleks ressursse, leida parimaid koolitajaid ja kogemuste vahendajaid kogu maailmast. Sel eesmärgil on otstarbekas moodustada Eesti ja tulevikus EL eri kõrgkoolide ning ametiasutuste asjatundjatest sõltumatute ekspertide töörühm, mis pidevalt koostaks nimetatuid prognoose ja analüüsiks tulemusi. Sobivaks organisatsiooniliseks töövormiks võiks olla, kuid mitte ainult, sihtotstarbeline mittetulundusühing (MTÜ). Sellised prognoosid peaksid olema aluseks riikliku, ühiskonna arengu seisukohast olulise tähendusega kõrgharidusega spetsialistide vajaduse ja -nõudluse planeerimisel.

Käesolevas artiklis esitatud seisukohad on üheks võimaluseks vastava metoodika väljatöötamiseks kõrgharidusvajaduse ja -nõudluse prognoosimiseks Eestis.

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ETTEVÕTLUSAKTIIVSUS JA SELLE ARENDAMISE VÕIMALUSED EESTIS[1]

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Sissejuhatus

Ettevõtluse areng tagab riigi majandusliku ja sotsiaalse arengu. Ettevõtluse edukusel on otsustav roll iga maa arengus. Aga sisuliselt ainult siis, kui ettevõtluse areng seostub inimeste ettevõtlikkuse tõusuga, mille tulemusena suureneb jõudsalt uute, alustavate, elujõuliste ettevõtete arv, ettevõtete positiivne *iive* ning lõppkokkuvõttes *ka* ettevõtlusaktiivsus. Käesoleva artikli eesmärgiks on välja pakkuda lähenemisviis ettevõtlusaktiivsuse käsitlemiseks konkreetse riigi seisukohalt. Eesmärgist lähtudes:

1) selgitatakse ettevõtlusaktiivsust ettevõtliku inimese kujunemise kaudu, arvestades Eesti ajaloolise tausta olulisemaid aspekte;
2) hinnatakse ettevõtlusaktiivsust Eestis mitmete arvnäitajate alusel;
3) käsitletakse ettevõtlusaktiivsuse arendamise praktikat Eestis ja võimalusi nii soodsa ettevõtluskeskkonna loomise kui ka ettevõtlusalase hariduse edendamise kaudu.

Ettevõtlusaktiivsuse kujunemine ja ettevõtlikkus

Ettevõtlusaktiivsuse kujunemisega riigis on otseselt seotud kolm omavahel läbipõimunud mõistet – *ettevõtja*, *ettevõtlikkus* ja *ettevõtlus*. Teemast johtuvalt on oluline avada esmalt *ettevõtluse* erinevad tähendused. Üldistusena võib ettevõtlust selgitada:

- inimeste ettevõtliku tegutsemisena, seda nii era- kui ärielus;
- ettevõtlusena riigis, regioonis, vm piirkonnas; väike- ja suurettevõtlusena; ettevõtlusena tegevusalade lõikes.

Loomulikult on need kaks tähendust omavahel seotud. Esimesel juhul on rõhuasetus rohkem ettevõtlikele inimestele, potentsiaalsetele ettevõtjatele ning seostub rohkem ettevõtlusaktiivsuse kujunemisega. Teisel juhul ilmneb juba selle ettevõtliku tegutsemise tulemus tegutsevate ettevõtjate ja ettevõtete näol, mis kujundab ettevõtlusmaastiku ja ettevõtlusmaailma mitmekesisust ning ettevõtlusaktiivsust ja seostub otsesemalt ettevõtlusaktiivsuse hindamisega.

Ettevõtlusaktiivsuse kujunemisel mängivad autorite arvates otseselt kõige olulisema rolli kaks tegurite gruppi: isikuga ja keskkonnaga seotud tegurid. Isikuga seotud tegurid:

a) isikuomadused (eneseteostusvajadus, riskivalmidus, enesedistsipliin, kohuse- ja vastutustunne, ausus, algatusvõime, püsivus, mõõdukus jt);

[1] Artikkel on ette valmistatud ETF Granti nr 7018 toel.

b) isiklik sobivus (sobiv vanus, hea tervis, vaimuerksus, stressitaluvus, energia, hoiakud, identiteet, motivatsioon);
c) teadmised/kogemused (juhtimis-, analüüsi-, otsustus-, suhtlemis-, organiseerimisoskus jt)

Keskkonda on ettevõtlusaktiivsuse aspektist mõttekas käsitleda autorite arvates mitmetahuliselt, eristades järgmisi keskkondi:

- mikrosotsiaalne – sõbrad, elukutse, töökoht, perekond, elukaaslane;
- makrosotsiaalne – poliitilised vaated, infokanalid, õpikeskkond;
- makromajanduslik – eelkõige ettevõtlus- ja õiguskeskkond.

Keskkonna ja isiku vahele on A. Reiljan (1997) paigutanud teadlikkuse (info hankimine ning töötlemine) ja aktiivsuse (mikrokeskkonna kujundamine isiku poolt), kuigi autorite arvates on isiku ning keskkonna vahelised seosed ja mõjud hoopis keerulisemad.

Siinkohal võib etteruttavalt lisada, et Eestis pöörati 1990ndate aastate algul erilist tähelepanu mitte niivõrd ettevõtlusvaimu ärgitamisele, kuivõrd ettevõtluse õiguslikule keskkonnale, selle korrastamisele ja reguleerimisele. See oli ka mitmete asjaoludega põhjendatud. Nimelt ei saa unustada, et Eesti iseseisvuse kaotamisele 1930ndatel aastatel järgnes ettevõtluse lämmatamine, kuigi ettevõtjalikult käituvaid inimesi leidus ikka. Legaalne eraettevõtlus sai uue hoo 1986. a. 1989. a. võeti vastu Eesti Ettevõtlusseadus. Eesti iseseisvuse taastamise järgselt võeti vastu võtta rida seadusi, et turumajandus saaks normaalselt funktsioneerida (Maksukorralduse seadus 1993, Raamatupidamise seadus 1994, Äriseadustik 1995). (Miettinen, Teder 2006)

Ettevõtlusvaimu liikumapanijaiks peetakse väikefirmasid ja nende asutajaid – väikeettevõtjaid. Ettevõtlusvaim on otseselt seotud isiku ettevõtlikkusega. 1930ndate aastate majandusraamatutes (nt Fählmann 1933) nimetati seda *ärivaimuks*. Esimestes tõlkeraamatutes (Johnsson, Karjalainen 1996) on kasutatud ka mõistet *ärikihk,* mille all mõeldakse soovi rohkem teenida ja rohkem riskida, kusjuures lõpptulemus võib olla vägagi tasuv, aga võimalik on ka palju kaotada. Viimane ilmutab end just ärivõimaluste leidmises ja nende õiges kasutamises: paljud lähevad neist võimalustest hooletult mööda, üksikud kasutavad neid ja siis juba suure eduga. Põhimõtteliselt sama väljendab ka *äritegemise pisik*. (Laas 2001)

Ettevõtjat peetakse äritegevuse peamiseks mootoriks turumajanduses. Äri mõistetakse siin kui kauba või teenuse tootmist ja müüki – s.o väärtuse loomis- ja vahetusprotsessi. Ettevõtjale on omane näha ja teostada ümbritsevas keskkonnas ärivõimalusi, mida ülejäänud inimesed ei märka, ei mõista või ei ole mingil muul põhjusel (initsiatiivi ja otsustusvõime puudumine, riski kartus, hirm avaliku arvamuse ees jne) valmis realiseerima. (Edukas väikeettevõtlus ääremaal … 2006) Ettevõtlik inimene valib ettevõtjakarjääri palgatöö asemel.

Tänases Eestis pakuvad nii majandusteadlastele kui ka -poliitikutele huvi küsimused: kas eestlane on *ettevõtlik*, kui hästi on esindatud ettevõtlikkuse geenid eestlase DNAs?. “Eestlase identiteedis on ettevõtlikkus mõiste, mis pole end veel täielikult

kinnistanud ning me peame alles otsustama, millise minevikukogemusega ennast rohkem samastama hakkame." (Parts 2007) Minevikukogemuse positiivseteks näideteks on mõisnike käest maade ostmine 19. sajandil, vahvliküpsetajatena alustajad 1990ndate aastate algul. Negatiivseks kogemuseks on kahtlemata vahepealne kolhoosimentaliteet ja ükskõiksus ümbritseva suhtes.

Jaapanlased teavad ammu, et nende suurim rahvuslik rikkus on ettevõtjad. Kogu maailmas otsitakse valitsuse tasandil võimalusi habrast ettevõtjataime paremini väetada. (Unt 2005)

Autorid nõustuvad Miettinen, Teder (2006) järgmiste arvamustega:

- ettevõtlik täiskasvanu ilmneb sageli esmalt ettevõtliku lapsena, kes juba väikesest peast püüab kõikvõimalike asjadega raha teha;
- ettevõtjate lastel on suurem tõenäosus kujuneda ettevõtjaks, kuna ilmselt jätab vanemate elustiil lastele tugeva jälje.

Suurim tõenäosus ettevõtjaks kujuneda on perekonna vanimal lapsel. Eriti suuri lootusi seovad vanima pojaga näiteks jaapanlased. (Miettinen, Teder 2006)

Ettevõtlikkust ja ettevõtlusaktiivsust rõhutavad autorite arvates järgmised definitsioonid. *Ettevõtjaks* võib lugeda inimest, kes:

- soovib muuta ja on võimeline muutma uue idee või leiutise edukaks innovatsiooniks (Schumpeter 1950);
- käivitab ettevõtte ja/või arendab seda läbi innovaatilise tegevuse (Fry 1993);
- teeb muutusi; leiab nõutavaid ressursse võimaluste kasutamiseks; lisab väärtust; on hea võrgustiku looja; on asjatundlik; loob kapitali; juhib riske; on otsustanud vastasseisu trotsida (Davies *et al*. 2002);
- asutab uue majandusüksuse pakkumaks uut või olemasolevat toodet või teenust uuel või olemasoleval turul ettevõtluse kaudu (Pramann Salu 2005);
- märkab ja kasutab ära võimalusi; omab oma äri üle kontrolli; asetab kliendid esimeseks (Butler 2006).

Palju on vaieldud küsimuse üle, kas ettevõtjaks sünnitakse või saadakse. (Richards 1999) Paljud uurimused kinnitavad, et ettevõtjad on oma olemuselt sarnased, et eksisteerib *ettevõtja tüüp* oma kindlate tunnustega. Siiski on olemas liialt vähe häid tõendeid, et ettevõtja tüüpi olemine oleks ultimatiivselt seotud ettevõtlusjulgusega. (Pramann Salu 2005) Ettevõtja tüüpe on esitatud arvukalt. (vt. Türk, Siimon 2004) Siinkohal lisame Cole (1959) poolt nimetatud: innovaator, kalkuleeriv leiutaja, ülioptimistlik edendaja ja ettevõtte ülesehitaja.

Ettevõtjate käitumise seletamise probleem tuleneb selle grupi suurest varieeruvusest ja heterogeensusest, mida on raske mõõta. (Virtanen 1996) Samas on oluline rõhutada, et ettevõtjaks saamisele aitavad kaasa teatud iseloomuomaduste olemasolu. Teemast johtuvalt pööramegi siinkohal isiksuse teguritest põhitähelepanu esmalt isikuomadustele ja võimetele. Ettevõtjale vajalike iseloomuomaduste kohta on kirjanduses antud hulgaliselt loetelusid ja analüüsitud nende arenguid ettevõtlusalaste

uuringute tulemusena (Landström 2004). Ettevõtjat kui inimest iseloomustavad isikuomadused, millest osa on pärilikud, osa omandatud (vt tabel 1).

Tabel 1. Ettevõtjate omadused ja võimed erinevate autorite käsitluses

Autor(id) (aasta)	Omadused	Võimed
Collins, Moore (1970)	range, pragmaatiline, harva valmis alistuma võimule	
Kirzner (1973)		võime näha nõudluse ja pakkumise tasakaalustamatust
Hisrich, Peters (1989); Busenitz, Barney (1997)	enesekindel, püüd iseseisvusele	üldistamisvõime
Pickle, Abrahamson (1991) Pramann Salu (2005)	teotahteline, loova ja analüütilise mõtlemisega, innovaatiline	vaimsed võimed, suhtlemis-, empaatia- ja kommunikatsioonivõime, otsustusvõime ning kontseptuaalne võime
Bird (1992)	intuitiivne, kaval, leidlik, nutikas, osav, mitte tundeline, olupoliitikale ja loovusele tuginev	
Casson (1994)	enesetunnetuslik, ettenägelik	kujutlusvõime, analüüsivõime, organiseerimisvõime
Timmons (1994)	pühendumus, sihikindlus	
Richards (1999)	kõrge riskivalmidus, optimistlik meelestatus õnnestumise osas	suur ettekujutus-, paindlikkus-, loovus- ja innovatsioonivõime
Laas (2001)	kokkuhoidlik, riskivalmis	
EKI (2004)	riskivalmis, enesekindel, loov, palju energiat	organiseerimisvõime
Miettinen, Teder (2006)	energiline, loov, järjekindel, jõuline	ettekujutus- ja algatusvõime, võime luua enda ümber innustunud ja innustavat õhkkonda

Allikas: Autorite koostatud.

Üldistusena võib rõhutada isikuomaduste ja võimete tihedat seost. Kui nendele omadustele lisada inimese olemuslikud vajadused, siis on ettevõtjaks saamine nende jaoks reaalne perspektiiv. Sellisteks vajadusteks on nt saavutusvajadus, tungiv vajadus luua (ehitada) (McClelland 1961); vajadus sõltumatuse ja saavutuse järele (Collins, Moore 1970).

Siiski pole ettevõtlikkus ja ettevõtjaks saamine seotud üksnes isikuomadustega ja võimetega. Näiteks selgitavad Bolton ja Thompson (2005) ettevõtlikkust kui tasakaalu kolme karateristiku vahel:

1) talent: võimed, nagu loovus, võimaluste märkamine ja võrgustik;
2) temperament: isiklikud vajadused, nagu vastutussoov, toetusvõime, tungiv vajadus tegutsemiseks;
3) töötamisviis: personaalsed oskused ning tehnikad talendi arendamiseks ja temperamendi juhtimiseks.

Konkreetsemalt on võimalik ettevõtjaks saamist hinnata kahe teguri maatriksi alusel: 1) teadmised ja oskused ning 2) motivatsioon. Nende tegurite esinemise (+) või mitteesinemise (–) alusel eristuvad järgmised ettevõtjad:

- potentsiaalsed ettevõtjad: teadmised ja oskused (+) ning motivatsioon (+);
- ettevõtjaks oskusliku motivatsiooni korral: teadmised ja oskused (+) ning motivatsioon (–);
- ettevõtjaks koolitamise abil: teadmised ja oskused (–) ning motivatsioon (+).

Teadmised on õpitavad ja oskused/kogemused omandatavad. Seda saab tagada isikute enesearengu ning arendamise kaudu õpi- ja ettevõtluskeskkonnas.

2004. aastal uuris Eesti Konjunktuuriinstituut (EKI) ettevõtluses alustamise motiivi potentsiaalsete ettevõtjate hulgas Eestis. Motiividest olid teiste hulgas esindatud: olla iseenda peremees (86% vastanutest), end proovile panna (82%), viia ellu ideed või uuendust (76%), hobi arendamine äritegevuseks (75%) ja olla tehniliste ideede rakendamisel esirinnas (36%). (EKI 2004) Need on kõik positiivsed motiivid, mis on olemuslikud *tüüpilisele* ettevõtjale.

Samas ei tohi unustada, et ettevõtjaks hakkamisel on oluline eristada kahte suurt mõjurit (Edukas väikeettevõtlus ääremaal … 2006):

- vajadus alustada oma äri, nn sunnitud ettevõtlikkus – puudub töö ja võimalus leida tööd, palgatöö ei taga äraelamist – omane kvalifitseerimata või madalalt kvalifitseeritud tööjõule ja suhteliselt madala sissetulekuga ühiskonnale;
- võimalustest tulenev, nn loov ettevõtlus – omane eelkõige haritud ja kvalifitseeritud tööjõule ja kõrgema elatustasemega riikidele.

Nende omavaheline proportsioon erineb riigiti, periooditi ja vajaks autorite arvates põhjalikumat analüüsi. Arenenud riikides on reeglina ülekaalus *loov* ettevõtlus, kuigi majanduslanguse perioodidel on täheldatud *sunnitud* ettevõtluse osa suurenemist. Autorite arvates on Eestis viimase osakaal teiste riikidega võrreldes mõnevõrra suurem. Seda kinnitavad kaudselt järgmised uurimistulemused.

1. Uuringust *Flash Eurobarometer 160* (Miettinen, Teder 2006) selgub, et Eestis põhjendas ettevõtjaks olemist motiiviga – vältida hõivega seotud ebakindlust (12%). Samal ajal kui selle motiivi osakaal oli Soomes 1%, USAs 2% ja Euroopa Liidu 25 liikmesriigi keskmine 4%. Siiski tuleb lisada, et vastuses otsesele küsimusele hädavajaduse osakaalu kohta, sellist erinevust ei ilmne. Samas on Eestis vastuste hulgas suhteliselt rohkem nii neid kes ei tea või jättis vastamata kui ka neid, kes pidasid mõlemat tegurit (hädavajadus/ärivõimaluste ärakasutamine) oluliseks.

Autorite arvates võib siiski täheldada suundumust, et sundettevõtluse osa Eestis väheneb. Seda kinnitab näiteks ka võrdlus varasema uuringuga (Teder, Teder 2003), mille kohaselt aastatel 1994–2001 intervjueeritud ettevõtjatest moodustasid sunnitud põhjustel ettevõtjateks hakanud kokku 16%, sh 12% väljapääsmatu olukorra tõttu ja 4% konflikti tagajärjel.

2. EKI (2004) poolt Eestis läbiviidud uuringus märgiti ettevõtjaks hakkamise põhjustena muuhulgas ka kaht n.ö sundpõhjust – töö kaotust (67% vastanutest) ja rahulolematust praeguse tööga (28%).

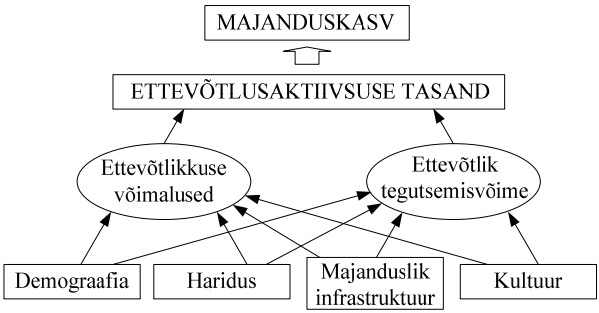
Siinkohal on oluline lisada, et Eestis on FIEdest ettevõtjaid jaotatud koguni kolmeks: ühed on ettevõtjad sellepärast, et nad ei suuda leida rahuldavat palgatööd; teised on sunnitud ettevõtjad, kes tegelikult teevad palgatööd ja kolmandad on need, kes tahavad ettevõtjad olla. (Kirsipuu 2007) Seega on *sunnitud ettevõtjate* mõiste Eestis kasutusel ka hoopis teises tähenduses arenenud riikidega võrreldes. 2004. a. intervjueeris Kirsipuu 27 FIEt erinevatel tegevusaladel. Intervjueeritutest 50% tegutseb ainult füüsilisest isikust ettevõtjana. Nendest 25% on *sunnitud ettevõtjad*, kuna mõned äriühingud on seadnud tööle soovijad fakti ette, et pakutavat tööd saab teha ainult FIEna registreeritu.

Ettevõtliku tegutsemise liikumapanevaks jõuks on inimeste ettevõtlikkus. Ettevõtlik tegutsemine seostub autorite arvates märksõnadega algatamine, loomine, uuenduslikkuse taotlemine, võimaluste avastamine ja nende väärtustamine, nende poole püüdlemine, riskide võtmine, isetegemine, suurema vastutuse enda kätesse võtmine, ettevõtlikkusteadlikkuseni jõudmine. Oluline on jõuda seisundini, mida iseloomustavad ühelt poolt ise elus hakkama saavad inimesed ja teiselt poolt paindlikud ja konkurentsivõimelised ettevõtted. Teisisõnu ettevõtliku ja ise hakkama saava ühiskonna kujundamine.

Ettevõtlusaktiivsuse hindamine

Ettevõtlusaktiivsust võib hinnata mitmeti, nii otseselt kui ka kaudselt. Konkreetseteks ettevõtlusaktiivsust iseloomustavateks arvnäitajateks on järgmised:
1) ettevõtlusaktiivsuse indeks;
2) ettevõtjakarjääri eelistamise osakaal;
3) ettevõtete arv 1000 elaniku kohta;
4) majanduslikult aktiivsete ettevõtete osakaal.

Ettevõtlusaktiivsuse indeks on enim kasutatav riikide hinnangulist võrdlust võimaldav suhtarv, mis sisuliselt hindab uute ettevõtete rajamise aktiivsust ettevõtluse arengu iseloomustamiseks. Alates 1999. aastast on läbi viidud rahvusvahelist võrdlusuuringut *Global Entrepreneurship Monitor* (GEM), mille eestvedajateks on olnud London Business School ja Babson College USAst. GEMi lähenemine ettevõtlusaktiivsusele (vt joonis 1) hõlmab erinevaid tasandeid. On esitatud neli valdkonda, mis mõjutavad nii ettevõtlikkuse võimalusi kui ettevõtlikku tegutsemisvõimet ja nende koondmõju kaudu ettevõtlusaktiivsust ja selle mõju majanduskasvule.



Joonis 1. GEM lähenemine ettevõtlusaktiivsuse mõõtmisele. (Burns 2007: 22)

Ettevõtlusaktiivsuse indeksi (*Early-Stage Entrepreneurial Activity index*) leidmisel liidetakse nn sündivad ettevõtjad ja ettevõtjad, kelle ettevõtted on alla 42 kuu vanad. Riigiti varieerub ettevõtlusaktiivsus väga suures ulatuses. 2004. a. ettevõtlusaktiivsus oli kõrgeim Peruus, Ugandas, Ecuadoris ja Jordaanias. Väga madal oli see Jaapanis ja Belgias. (Teder 2006) Keskmine näitaja GEM uuringus osalevates riikides oli 2005. a. 8,4%, Soomes 5% ja Lätis 6,6%. Eesti ei ole kahjuks uuringus kordagi osalenud. Lähedaste, kuid mitte päris võrreldavate uuringute tulemuste põhjal oleks Eesti vastav näitaja 5 ja 6 vahel. Sama aasta uurimuse tulemuste kohaselt on näiteks ettevõtlusaktiivsus kõikides põhjamaades alla Euroopa kesktaseme. (Miettinen, Teder 2006)

Paljud uurijad usuvad, et ettevõtlusaktiivsuse ja riigi majandusarengu (SKP ühe elaniku kohta) vahel valitseb U-kujuline sõltuvus. Madala arengutasemega riikides on ettevõtlusaktiivsus sageli kõrge, kuna töökohtade nappusest ja sotsiaaltagatiste puudumisest tulenevalt ollakse sageli sunnitud endal hinge seeshoidmiseks mingi pisiäriga tegelema. Koos majandusarenguga ettevõtted kasvavad ja luuakse uusi töökohti. Paljud nn sundettevõtjad eelistavad võimaluse korral stabiilset palgatööd. Kõrgema arengutasemega riikides tõuseb ettevõtlusaktiivsus aga taas tulenevalt uute ärivõimaluste ärakasutamisele suunatud ettevõtlusaktiivsuse tõusust. Selle kõrval mängivad muidugi olulist rolli kultuurilised erinevused: arenenud ettevõtluskultuuriga USAd iseloomustab vastavalt ka kõrge ettevõtlusaktiivsus, rohkem palgatöötajate ühiskonna orientatsiooniga Rootsi leiame edetabeli lõpust. (Miettinen, Teder 2006) Kõrge ettevõtlusaktiivsus näitab inimeste julgust ja tahet võtta endale ettevõtlusega tegelemise riske ning sellega seonduvat koormust.

Ettevõtjakarjääri eelistamise osakaalu võib kasutada ka eraldi näitajana, mis iseloomustab kaudsemalt ettevõtlusaktiivsust, soovi tegeleda ettevõtlusega. Sellealaseid uuringuid tehakse Euroopas *Eurobaromeetri* raames. Küsimustele, kas eelistatakse endale tööandjaks olemist või palgatööd, eelistas enesele tööandjaks olemist 47% vastanutest Leedus, 41% Lätis, 34% Ungaris, 30% Eestis, 20% Rootsis ja 15% Soomes. Lähema viie aasta jooksul luges palgatööd eelistatavaks 68% vastanutest Soomes, Rootsis – 61, Lätis – 53, Eestis – 48, Leedus – 39. (Flash 2004) Siit järeldub, et Eestis on ettevõtlikke inimesi, ettevõtjaid suhteliselt vähem. Kui inime-

sed saavad kooli ajal ettevõtte algatamise kogemuse, annab see oskuse ja enesekindluse siirdumiseks ettevõtlusesse. Samuti on muret tekitav, et nii Eestis kui kogu Euroopas on märgata ohtlikku trendi – noorte ettevõtlushuvi väheneb ja suuremat stabiilsust otsitakse just riigitööl. (Unt 2005) See näitab ettevõtlusaktiivsuse arendamise vajalikkust Eestis.

Ettevõtete arv 1000 elaniku kohta on üheks ettevõtlusaktiivsuse regionaalset jaotust iseloomustavaks näitajaks. Eestis on keskmiselt 23 äriühingut 1000 elaniku kohta. See viitab eestlaste suhteliselt madalale ettevõtlikkusele võrreldes näiteks Euroopa Liidu keskmisega – 52 ettevõtet 1000 elaniku kohta. (Edukas väike-ettevõtlus ääremaal … 2006) Kui lisada siia ka FIEde arv, mis on Eestis keskmiselt 43 tuhande elaniku kohta, siis ei ole erinevused ettevõtlusaktiivsuses teiste riikidega võrdluses enam nii olulised. Võrreldes varasemate uuringutega on suurenenud ettevõtlusaktiivsus nii Eestis kui ka Euroopa Liidus keskmiselt. Näiteks oli Phare programmi raames läbiviidud uurimuse põhjal Eestis tegutsevaid ettevõtteid 1000 elaniku kohta (20) ligikaudu kaks korda rohkem kui Lätis ja ligikaudu kolmandiku võrra enam kui Leedus. See on ka rohkem kui Rumeenias (17) ja Albaanias (12), aga väiksem kui Poolas (27), Bulgaarias (36) või Sloveenias (37). Eesti ettevõtete arv 1000 elaniku kohta moodustab ligikaudu kaks kolmandikku Kesk- ja Ida-Euroopa keskmisest tasemest (31) ja ligikaudu poole Euroopa Liidu keskmisest tasemest (42,8). (Väikeettevõtluse olukorrast Eestis … 1999)

Eesti maakondade ettevõtlusaktiivsuse analüüsist Statistikaameti andmetel seisuga 01.01.2005 selgus, et kogu Eesti keskmine on 48 ettevõtet 1000 elaniku kohta. Kõige kõrgem on see Harju maakonnas (65 ehk +17 keskmisega võrreldes) ja kõige madalam Ida-Virumaal (21 ehk –27 keskmisega võrreldes). Seega on üldhälve lubamatult suur (+/–44 ettevõtet 1000 elaniku kohta). Kõige vähem on ettevõtjaid neis piirkondades, kus domineeris suurtööstus või põllumajanduslik suurtootmine. Nii Ida-Virumaa kui ka Kesk- ja Lõuna-Eesti madala ettevõtlusaktiivsuse põhjused tulenevad nende piirkondade majanduse iseloomust. (Varrak 28.02.2008)

Kuigi ettevõtlus on enam koondunud suuremate keskuste ümber, on ettevõtlusaktiivsus tõusnud kõigis piirkondades. Olemasoleva ettevõtlusaktiivsuse säilitamine ei pruugi olla kerge, sest koos elatustaseme tõusuga võib üha suurem osa inimestest eelistada suurema ettevõtte või riigiasutuste palgal olemisega kaasnevat kindlat sissetulekut, suuremaid garantiisid ja väiksemaid riske. Paljude arvates nõuab ettevõtjaks olemine liiga palju, võrreldes selle rahalise tasuga, mis ta pakub. (Miettinen, Teder 2006)

Ettevõtlusaktiivsust iseloomustab ka **majanduslikult aktiivsete ettevõtete osatähtsus** ettevõtete üldarvust. 1999ndate aastate alguses oli see Eestis 60%, mis andis 8. koha 11 Kesk- ja Ida-Euroopa riigi hulgas (Siimon, Lumiste, Lumiste 2000). Samas oli välja toodud ka aktiivsete ettevõtete arv 1000 elaniku kohta ja 100 töötaja kohta. Eesti oli nende näitajate poolest riikide tagumises pooles, kuigi ületas keskmist ja edestas teisi Baltimaid, Albaaniat ja Rumeeniat. Uuemad võrdlusandmed kahjuks puuduvad. Võib vaid lisada, et näiteks ettevõtete arv 100 töötaja

kohta oli 2006. aastal Tallinnas 12,2, Tartus 7,5 (Eesti keskmine 7,6). (Jaanson 27.09.2007)

Lisaks nendele neljale arvnäitajale iseloomustavad kaudselt ettevõtlusaktiivsust ka ettevõtete, sh majanduslikult aktiivsete ettevõtete arvu järjepidev kasv. Oluline on ka ettevõtete jätkusuutlikkus, st tegutsema jäänud ettevõtete osatähtsus äriregistris olevate ettevõtete arvust. (Siimon 2000) Ettevõtete jätkusuutlikkust iseloomustab tabel 2.

Tabel 2. Ettevõtete jätkusuutlikkus aastatel 2000–2005

Ettevõtte registreerimise aasta	Tegutsevate ettevõtete osakaal, %					
	2000	2001	2002	2003	2004	2005
1999	67,4	61,7	55,9	51,8	47,9	45,4
2000		66,1	62,1	57,5	54,9	51,9
2001			67,8	64,2	61,5	57,7
2002				68,4	66,9	63,1
2003					72,9	71,0

Allikas: Kello 2007.

Jätkusuutlikkust on püütud hinnata ka näiteks intervjuude põhjal. Kirsipuu (2007) artikli eesmärgiks oli uurida, kas 2004. a. intervjueeritud 27 FIEd jätkavad oma ettevõtlustegevust. 2006. a. samade ettevõtjatega kontakti võtmisel selgus, et 88,8% nendest tegeleb aktiivselt ettevõtlusega.

Eeltoodust selgub, et ettevõtlusaktiivsuse võrdleva hindamise täiustamiseks on veel palju võimalusi, alustades sobivate hindamisnäitajate valikust ja lõpetades vajaliku infobaasi loomisel. Korrektne ettevõtlusaktiivsuse hindamine loob kindlapiirilise aluse ettevõtlusaktiivsuse arendamise vajaduste ja võimaluste täpsustamiseks.

Ettevõtlusaktiivsuse arendamine

Ettevõtlusaktiivsuse arendamise vajalikkust kinnitab nii ettevõtlusaktiivsuse kujunemise teoreetiline käsitlus kui ka hinnang ettevõtlusaktiivsusele Eestis võrdlevalt teiste riikidega. Ettevõtlusaktiivsuse arendamiseks on põhimõtteliselt kaks võimalikku teed:

- soodsa ettevõtluskeskkonna loomine, mis motiveerib ja toetab ettevõtlikkuse kasvu; kujundab tugisüsteemid ning meetmed potentsiaalsete ja alustavate ettevõtjate toetamiseks;
- ettevõtlusalase hariduse arendamine.

Neid kaht võimalust on aegade jooksul kasutatud suhteliselt eraldi, kuid kaasajal annab kõige paremaid tulemusi nende sümbioos. Siinkohal käsitleme teemast johtuvalt eelkõige ettevõtlikkusõppega seotud problemaatikat. Selle aktuaalsus on jätkuvalt seotud:

1) seisukohaga, et ettevõtlust saab õppida ja et suures osas määrab asjaolude kokkulangevus selle, kes alustab oma ettevõttega;

2) ettevõtlusalaste teadmiste ja oskuste omandamise vajadusega.

Mitmetes uuringutes on hinnatud ettevõtlusalase kompetentsuse tähtsust seoses uue ettevõtte eduka alustamise ja ärisse püsimajäämisega. (Bird 2002; Onstenk 2003) Haridusasutuste seisukohalt on rõhutatud õppijatele isikliku ettevõtlusalase kompetentsuse arendamise võimaluse pakkumist. (Bird 2002) Mitmed autorid on pakkunud erinevaid hinnanguid selle kohta, milliseid oskusi on vaja omada selleks, et edukalt kasutada ärivõimalusi. Erinevate autorite seisukohalt peaksid ettevõtjal olema järgmised oskused ja teadmised (Pickle, Abrahamson 1991; Casson 1994; Timmons 1997; Richards 1999): otsimisoskus, arvutamis-, suhtlemis- ja delegeerimisoskus, kontseptuaalne mõtlemine, praktilised ja tehnilised teadmised jne.

Ettevõtlikkusõppele on piisavalt tähelepanu pööranud juba ettevõtlusuuringute klassikud, kes on andnud oma panuse ettevõtlikkusõppe kontseptsioonide arendamisse (vt tabel 3).

Tabel 3. Klassikute panus ettevõtlikkusõppe kontseptsioonide arendamisse

Autor(id) (aasta)	Panus
Schumpeter (1934)	Kujutlusvõime ja innovatsioon on loomupärase ja sotsiaalse õppe tulemus
Kirzner (1973)	Loov ja avastuslik õppimine tekitab võimaluste märkamist
Reuber, Fischer (1993)	Hiljutise konkreetse kogemusega seotud konteksti väärtus
Young, Sexton (1997)	Äriliste (ettevõtlike) teadmiste kui asjatundja ressursside omandamine, talletamine ja kasutamine
Deakins, Freel (1998)	Viie võtmeoskuse õppimine väikeettevõttes
Minniti, Bygrave (2001)	Kogemusel baseeruva ettevõtliku otsustamise algoritmiline mudel
Rae, Carswell (2001)	Kindlustunne ja eneseusk, mis on seostatud õppimise edusammudega (saavutustega)
Gibb (2001); Hartshorn (2002)	Väikeettevõtlik elulaad kui dünaamiline ettevõtlikkusõppe keskkond
Mitchell *et al*.; Shepherd, Krueger (2002)	Teadmiste struktuuri, tunnetuse ja otsuste langetamise rakendamise ettevõtlikkuse protsessi etappide ratsionaalsed mudelid
Cope (2005)	Dünaamiline õppimine koos sellele omaste arengufaaside, protsesside ja tunnustega
Politis (2005)	Karjääri, transformatsiooni ja teadmiste, iseloomuliku õppimisprotsessi ja teadmiste resultaadi dünaamiline raamistik
Dutta, Crossan (2005); Lumpkin, Lichtensein (2005); Corbett (2005)	Sidemed organisatsioonilise õppimise, võimaluste äratundmise, loovuse ja ettevõtlikkusõppe protsessi vahel

Allikas: Rae 2007: 31.

Autorite arvates on tabelis esitatud üldistusse süüvimine igati vajalik, sest haridusasutustel on tähtis teada, milliseid oskusi (kompetentsust) oleks vaja arendada tulevaste ettevõtjate ja ettevõtlike kodanike koolitamisel. (Venesaar *et al*. 2006), sest teadmiste ja oskuste puudus Eestis on nimetamist vääriv ka EL liikmesriikide

ettevõtlusteadlikkuse uuringu põhjal, mis viidi läbi detsember 2006 – jaanuar 2007. Selgus, et Eestis märkis nimetatud puudust 24% vastajatest. Lätis oli see veidi suurem (26%), samal ajal kui Soomes (8%) oli see mitu korda väiksem. (Kello 2007)

Ettevõtlikkusõppe kontseptsioonid on siiski valdavalt rakendatavad kesk-eri ja kõrghariduse tasandil. Ometi tuleb ettevõtlusalaste teadmiste jagamisega alustada juba tunduvalt varem, sest varases nooruses omandatud arusaam ettevõtluse toimimise põhimehhanismidest on aluseks ettevõtliku inimese kujunemisel. Ajaloo pärandit üle öö muuta ei saa, aga suhtumist ettevõtlusesse, hoiakuid ja teadlikkust saab mõjutada küll. *Junior Achievement* Arengufondi (JAA) tegevdirektor Epp Vodja (2007) märkis oma ettekandes, et JAA programmide põhiolemuseks on õppida tegevuse kaudu. Nende ettevõtl(ikk)usharidus seisneb ettevõtliku kodaniku kasvatamises ja ettevõtlusteadmiste andmises ning juba algkoolis alustatakse programmiga "Ettevõtliku inimese kujundamine", mis jätkub põhikoolis minifirma programmiga. 1992. a. algatas JAA gümnaasiumis õpilasfirma programmi ka Eestis. JA-YE on Euroopas suurim ettevõtlushariduse pakkuja – 2006. aastal osales 2,2 miljonit õpilast 42 riigist. Norra ja Rootsi uuringud näitasid, et 20% õpilasfirma programmi lõpetanuist teeb oma firma, s.o viis korda sagedamini eakaaslastest. Õpilasfirma suurendas soovi teha oma firma: Euroopas kokku 44%, Eestis 59%, õpilasfirma lõpetanutest tegutseb ettevõtluses: Euroopas kokku 15%, Eestis 21%. (Vodja 18.01.2008)

Olulisel kohal ettevõtlikkusõppe edendamisel on erinevate koolide ainekavad ja kasutatavad õpikud. Edasiantavad teadmised sõltuvad suures osas aineõpetaja tahtmisest, oskustest, teadmistest ja ettevõtlikkusest muuta aine huvitavaks, kaasahaaravaks. Toome siinkohal näitena 1999. aastal õpilasfirmana alustanud ja aasta parimaks õpilasfirmaks valitud pehmete helkurite tootja Smilex, millest nüüdseks on saanud OÜ Heatuju Maaletooja. Viimase juhatuse liige Karoli Hindriks märkis, et praegu õpetatakse üldhariduskoolides massi, mitte indiviide, oma minapildi leidmisele ja tulevikuplaanide koostamisele pööratakse liiga vähe tähelepanu. Tema hinnangul tuleks koolide juurde luua korralik tugi- ja karjäärinõustamissüsteem, mis aitaks noortel leida kindlust ja tugevust, et langetada südamelähedasi valikuid. (Edukale ettevõttele saab … 2006) Positiivsena võib lisada, et Eestis oli 2007. a. registreeritud 140 õpilasfirmat. (Vodja 18.01.2008)

Ettevõtlikkuse arendamisele pööravad tähelepanu ka ülikoolid. Kui Tallinna Tehnikaülikool on ennast teadvustanud ettevõtliku ülikoolina, siis Tartu Ülikool ettevõtliku teadusülikoolina. Kuna viimasel ajal rõhutatakse kolme subjekti – looja, ettevõtja, investor – sümbioosi tõhusust, siis mõlemas ülikoolis on eeldused, tõsi küll spetsiifilised eeldused, olemas just looja (loovteadlase) ja ettevõtja näol. Tallinna Tehnikaülikoolis on ühenduslüliks ettevõtliku ülikooli ja ärisektori vahel. Tehnoloogia ja Innovatsioonikeskus.

Tartu Ülikoolis (TÜ) võib autorite arvates eraldi rõhutada aastatel 2001–2006 toimunud kaht väga olulist korralduslikku muudatust seoses ettevõtluse arendamisega. 2001. aastal rajati TÜ Tehnoloogiainstituut, 2003. aastal loodi majandusteaduskonna

juurde TÜ ettevõtluskeskus. TÜ Tehnoloogiainstituudi missioon on luua teadus- ja arendustegevusega alus kõrgtehnoloogilisele majandussektorile Eestis, edendada innovatsioonis aktiivse osalemise kaudu Eesti firmade konkurentsivõimet ja osaleda aktiivselt Eesti inimkapitali arendamisel, eriti tehnoloogilise pädevusega teadlaste, praeguste ja tulevaste ettevõtete juhtide koolitamisel ja ettevalmistamisel. Tartu Ülikooli Ettevõtluskeskus aitab kaasa ettevõtliku teadusülikooli kujunemisele, soovides kokku viia ettevõtjaid ning teadlasi ja õppejõudude. (Tartu linna ettevõtluse arengukava 2007–2013)

Uutmoodi õppimiskeskkond on Tartu Ülikooli majandusteaduskonna Ettevõtluskodu, mille põhiidee on panna noored huvituma ettevõtlusest, anda neile teadmisi, oskusi ja kogemusi ning näidata võimalusi. Ettevõtluskodus õpitakse tegevus- ja projektõppe meetodeid kasutades ning toetatakse eelkõige projektitöö- ja ettevõtlusoskuste omandamist.

Juba aastaid on üliõpilaste ettevõtlikkuse ja aktiivsuse arendamisel osalenud üliõpilasorganisatsioon AIESEC, võimaldades omandada juhtimis- ja ettevõtlusalaseid kogemusi eelkõige rahvusvahelise koostöö kaudu. Alates 2005. aastast korraldab AIESEC õppesarja "Klapid eest!" üritusi nii Pärnus, Tartus kui Tallinnas, mille eest said nad Eesti Noorteühenduste Liidult parima noorteprojekti auhinna. Õppesarja eesmärk on harida ja arendada noori ning julgustada neid olema muuhulgas ka ettevõtlikud.

Kahtlemata ei ole ettevõtlusõppe arendamine eesmärgiks omaette. Hoopis olulisem on, et selle kaasabil ja tulemusena tekiks üha uusi ettevõtjaid. See on omakorda majanduse stabiilse kasvu üheks eelduseks. Selle saavutamiseks on vaja riiklikke tugiüksusi. Nii ongi Ettevõtluse Arendamise Sihtasutus on loonud programme ja teenuseid, mis on suunatud konkreetselt nii alustaja ettevõtja toetamiseks ning arendamiseks kui ka ettevõtluskeskkonna parendamiseks. Neid programme finantseeritakse Eesti ja Euroopa Liidu rahadest. (Varrak 28.02.2003)

2005. aastal otsustas Euroopa Komisjon hakata tunnustama Euroopa Liidu tasandil parimaid algatusi, mis on suunatud ettevõtluskeskkonna ning tugistruktuuride arendamisele. Selleks korraldas Euroopa Komisjon 2006. aastal esmakordselt konkursi "*European Enterprise Awards*", mille korraldamisega soovitakse välja selgitada, tunnustada ja laiemale avalikkusele esitleda silmapaistvaimaid tegevusi ja tegijaid, kes on panustanud piirkondliku ettevõtluse edendamisse. Konkurss on kaheetapiline. Esmalt korraldatakse liikmesriikides siseriiklik konkurss. Seejärel esitab iga liikmesriik oma kaks parimat projekti üleeuroopalisele konkursile "*European Enterprise Awards*". Eesti siseriiklik konkurss kannab nime "Tunnusta ettevõtluse edendajat" ja see viiakse läbi Euroopa Komisjoni poolt etteseatud tingimuste järgi. (Majandus- ja Kommunikatsiooniministeerium 02.02.08)

Ettevõtluse tugiorganisatsioonid on olnud aktiivsed mitmesuguste ettevõtluse, innovatsiooni ja tehnoloogiate rakendamise konverentside, seminaride ning foorumite korraldamisega. Sama võib öelda ka erinevate Eesti linnavalitsuste kohta. Ühe

näitena ettevõtluskultuuri edendamise kohta võib tuua Tartu linna, mis on asunud pöörama tähelepanu ettevõtlusaktiivsuse suurendamisele, et julgustada rohkem inimesi ettevõtlusega tegelema ja ergutades ka järelkasvu. Kolmandat aastat korraldatakse ettevõtlusnädalat "Ole ettevõtlik!". Tartu ärinõuandla on linna toel käivitanud mitmeid projekte noorte ettevõtlikkuse ergutamiseks ja saanud selle eest ka tunnustuse. (Jaanson 27.09.2007) Näiteks korraldab Tartu Linnavalitsus alates 1998. aastast ettevõtjate tunnustamiseks konkursse. Alates 2003. aastast tunnustatakse ka Tartu Kutsehariduskeskuse parimaid koostööpartnereid ning Tartu linna kliendisõbralikumaid ettevõtteid. Alates 2005. aastast on lisandunud töötajasõbralikkuse ja Tartu Teaduspargi edukaima ettevõtja kategooriad. Ergutamaks noori ettevõtjaid realiseerima oma ideid Tartus, korraldas linnavalitsus 2006. aastal koostöös SAga Archimedes innovatiivse ja kõrge rakendusväärtusega ettevõtte loomise projektikonkursi. (Tartu linna ettevõtluse arengukava 2007–2013)

Ettevõtlusalase aktiivsuse kasvu suurendamine on viimastel aegadel olnud arutelu objektiks Euroopa Liidu riikides, mille eesmärgiks on olnud mitmete poliitiliste meetmete ja tegevuste algatamine, toetamaks uute ettevõtete ja töökohtade loomist. (Venesaar *et al*. 2006) Eesti ettevõtluspoliitika eesmärgid järgnevateks aastateks on sõnastatud dokumendis "Eesti Ettevõtluspoliitika 2007–2013": tugev ettevõtluskultuur, ettevõtlust ja ettevõtlikkust soosiv õiguskeskkond, väike- ja keskmise suurusega ettevõtluse ligipääs kapitalile ning ettevõtete kasv ja edukas rahvusvaheline tegevus. Kõigi nende eesmärkide täitmine eeldab ettevõtlusalase kompetentsi kasvu koolituse toel. Ettevõtlusalase hariduse arendamist toetavad ka viimastel aastatel Euroopa Liidus ja Eestis vastuvõetud dokumendid (nt Green Paper on Entrepreneurship 2003; Entreprising Estonia 2002).

Ettevõtluse tekkele aitab kaasa kvaliteetne elukeskkond. Kokkuvõtlikult võib öelda, et ettevõtlusaktiivsuse suurendamisele aitab kaasa alustavate ettevõtjate nõustamine ja motiveerimine, ettevõtlusalase koolituse korraldamine, noorte ettevõtlikkusalaste teadmiste suurendamine, sh oskustöötajate ettevalmistamise kaudu.

Kokkuvõte

Ettevõtjateta pole rahvuslikku rikkust. Seetõttu on ettevõtlusaktiivsuse hindamine ja arendamine Euroopa Liidus ja kogu maailmas valitsuste üks prioriteete. Autorid jõudsid artiklis toodud probleemide käsitlemisel järgmistele järeldustele.

- Konkreetse riigi seisukohalt on sobilikuks lähenemisviisiks ettevõtlusaktiivsuse kujunemise, hindamise ja arendamise problemaatika seostatud käsitlus.
- Ettevõtlusaktiivsus Eestis on tõusnud, kuid olemasoleva ettevõtlusaktiivsuse säilitamine ei ole kerge, sest mingi osa inimestest võib eelistada kindlat sissetulekut, suuremaid garantiisid ja väiksemaid riske kui seda võimaldab ettevõtjaks olemine.
- Ettevõtlusaktiivsuse võrdleva hindamise täiustamiseks on Eestis veel palju võimalusi, alustades sobivate hindamisnäitajate valikust ja lõpetades vajaliku infobaasi loomisega.

- Nii ettevõtlusaktiivsuse kujunemise teoreetiline käsitlus kui ka hinnang ettevõtlusaktiivsusele Eestis võrdlevalt teiste riikidega kinnitab ettevõtlusaktiivsuse arendamise vajalikkust.
- Eriti olulised tänapäeva Eesti ja Euroopa üldisi suundumusi arvestades on ühelt poolt ettevõtluse üha julgem toetamine tugisüsteemide kaudu ja teiselt poolt ettevõtliku mõtlemise õpetamise süvendamine erinevates õpikeskkondades.

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ESTONIAN BANKS ARE HIGHLY PROFITABLE[1]

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Introduction

Financial sector reforms for transition countries were not an easy task for high speed of changes and for effects of economic and financial crises in this period. Therefore the risk management skills of the staff of banks were short and the banking regulations were in a forming stage.

While reconstructing their banking systems to adjust them to a market economy, some transition countries like Estonia have preferred commercial banks. The main purpose of commercial banks' shareholders and executive management is to increase the value of the company, which requires both a quick rise in the capacity of financial services and incomes and a high level of profitability of their business activities.

The managements of banks must therefore ensure high profitability of banks in order for their banks to remain competitive despite any unforeseeable developments in the market. Thus, they eagerly grasp at any profit opportunities.

In our paper we try to analyze the roots of high profitability of Estonian banking sector. Our first hypothesis is that in all stages of a transition period banks may have a high effectiveness due to taking high risks by the rapid growth of their market shares, a quick implementation of new products and skilful exploitation of the peculiarities of a transition economy. Our second hypothesis is that due to the volatility of the macroenvironment and the differences in the level of risk management the productivity of different banks is very different and the profitability is very volatile. The profitability of basic banking services is more stable and uniform, but that of new products and participation in non-financial businesses is more unstable.

Profitability of Estonian banks

In spite of the large amount of empirical literature devoted to banking efficiency on all continents (Molyneux *et al.* 1996; Berger, Humphrey 1997; Dietsch and Lozano-Vivas 2000; Goddart *et al*. 2001), there are only a few studies that measure banking efficiency in transition economies. A likely reason for this deficit may be the relative lack of banking data in these countries, with long periods of data missing.

The most extensively studied developing countries are in developing countries in Asia, where markets of Thailand (Leightner, Knox Lovell 1998), Korea (Gilbert, Wilson 1998), Singapore (Rezvanian, Mehdian 2002), Pakistan (Hardy, Bonaccorsi

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di Patti 2001), India (Bhattacharyya *et al*. 1997), Turkey (Isik, Hassan 2002) were analyzed. Some studies investigates a number of countries in Central and Eastern Europe and the Commonwealth of Independent States (Grigorian, Manole 2002; Tomova *et al*. 2003; Uiboupin 2005; Athanasoglu *et al*. 2006), Hungary (Hasan, Marton 2003), Croatia (Kraft, Tirtiroglu 1998), Poland (Opiela 2001; Havrylchyk 2003), and Ukraine (Mertens, Urga 2001) and Baltics (Hansson, Tombak 1996).

Financial sector (and especially banking system) development, performance and efficiency have been considered as one of the most important factors for the successful implementation of economic reforms. But the banking system is vulnerable to systems crises which are typical for transition period. So Estonia expected serious banking crises in 1992–1994 and later in 1998–1999. After 2000, profits in Estonian banking sector have stabilized (Table 1). In 2006 in euro area banks average cost-income ratio was 60.4% and ROE 19.6% (ECB, 2007: S30). In Estonia cost-income ratio was only 46.6%.

Table 1. Key efficiency ratios in Estonian banking, %

	Solo banks				Euro area financial institutions average 2006
	2000	2002	2004	2006	
Cost to income ratio	72.5	61.6	45.8	46.6	60.40
Return on assets	1.2	1.6	2.1	1.7	1.54
Equity multipler	7.4	7.3	8.8	10.7	11.51
Return on equity	8.0	14.7	20.0	19.8	19.60
Net interest margin	4.3	3.6	2.4	2.2	
Spread	4.1	3.4	2.3	2.1	

Source: Eesti Pank. Financial Stability Review; ECB Financial Stability Review 2007.

Data of the Table 2 also confirm the tendency that banks efficiency is rising for cost saving management. In period 2000–2006 expenses of banks grew two times, but incomes 2,4 times. Profit before taxes grew during this period even near 6 times (see also Appendix 1).

From Table 2 we see that the main source of income of banks is interest income (67% from total income in 2006) and quite high is the share of commission income (servicing fees) 18.3%. Probably the fees are a bit too high. For example the survey of the GfK Custom Research Baltic of bank customers showed that in Estonia bank customers are most unsatisfied about high servicing fees and they have the opinion that banks are interested only of their profits (Eestlased käivad usinalt netipangas, 2008). Some commentators have also mentioned that in Sweden servicing fees are in mother banks lower than in Estonia.

Table 2. Profit of Estonian banks

	2000	2006	Growth 00/06	
	EEK mln	EEK mln	EEK mln	%
Interest income	3744	9340	5596	249
loans	2818	8007	5189	284
deposits	386	822	436	213
Commission income	965	2555	1590	265
Other income	1101	2051	950	186
Income total	**5810**	**13946**	**8136**	**240**
Interest expense	1812	4845	3033	267
loans	214	1260	1046	589
demand deposits	355	1034	679	291
time and saving deposits	710	1629	919	229
Commission expense	256	661	405	258
Administrative expenses	1374	3195	1821	233
Other expenses	1755	1587	–168	90
Expenses total	**5197**	**10288**	**5091**	**198**
Profit before taxation	**613**	**3609**	**2996**	**589**

Source: Eesti Pank 2008.

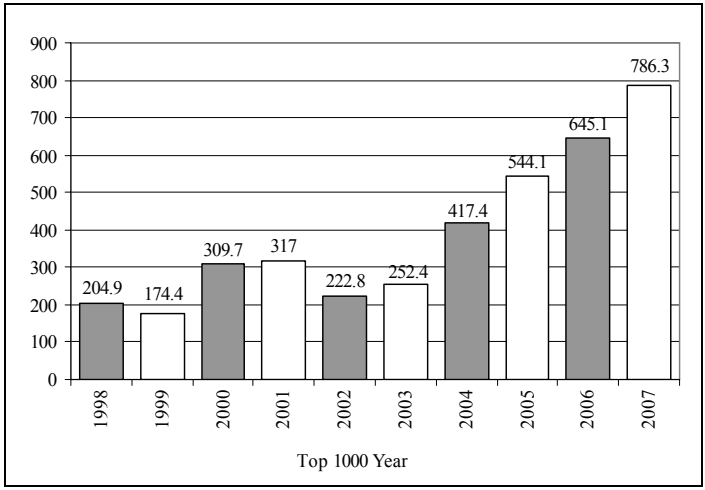

Figure 1. Total pre-tax profits ($bn). (The Banker 2007)

In this millennium in world leading banks pre-tax profits have rapidly grown. From 2002 to 2007 they have grown 3,5 times (Figure 1). So a bit quicker growth in Estonia is very normal taking into account a very quick growth of GDP in Estonia in this period.

Reasons of high profitability of Estonian banks

Reforms in Estonian banking sector started in 1988. During the two decades five banks remained from more than 50 licensed commercial banks, the rest were not able to continue independently, they merged or have failed. The bad result of such kind of development was also the excessive high concentration in banking sector. Market share of the biggest bank by assets in Estonia is over 50% (Figure 2).

Researches have shown that the increase in the degree of concentration in the European banking sector is negatively related to competition (Bikker, Groenveld 2000). Higher concentration and lower competition are linked to higher ROA (Athanasoglu *et al.* 2006). As banking concentration in Estonia is very high it is helping bigger banks to increase their profits.

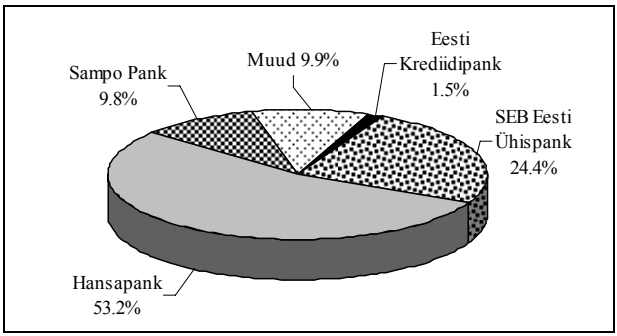

Figure 2. Market Shares of Banks in Estonia According to Total Assets at the End of 2006. (Eesti Pank; author's calculations)

The second reason of high profitability of Estonian banks is cheap loan resources. The development of the banking sector during past 20 years has been stormy and has undergone crises in which a remarkable share of the population either lost their savings in their entirety or lost part of their savings exchange value during hyper-inflation period.

Such developments after the crisis period have made the population suspicious of the banking sector. The research which was ordered by Eesti Pank in November 2007 showed that one quarter of respondents are doubtful about creditability of banking sector in Estonia even now (Estonian residents' opinion 2007) This is indicated by the large share of demand deposits of banks' deposits in Estonia. From Figure 3 we see that credibility of banks started to decrease during the second banking crisis in years 1998–1999 when the share of demand deposits grew and stabilized on the level a bit higher of 60%. Surely demand deposits share is too high taking into account Estonian currency board monetary system stable economic policy and that fact that the main owners of leading banks are all known Scandinavian banks.

Extremely high share of demand deposits has also second reason. Near every adult citizen in Estonia has the banking account and gets his or her regular incomes to this account. But more than half of bank account holders are not able to save. It may be notised also from the average sum of the deposits, which was at the end of 2006 approximately 36,2 thousand kroons by all groups of customers and of individuals only 15,2 thousands (*ca* € 1000) (Table 3). Average wages in Estonia in 2006 were less than 10 thousand kroons per month.

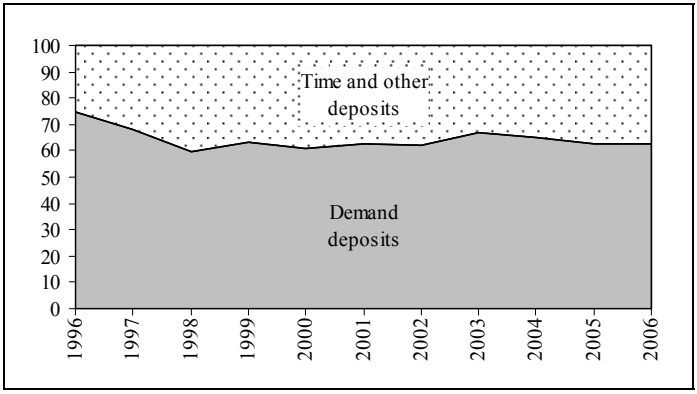

Figure 3. Structure of Deposits of Individuals in Commercial Banks (%, end of year). (Eesti Pank, authors' calculations)

Table 3. Average deposits by groups of customers (end of the year, EEK thousands)

	2004	2005	2006
Average deposit	**22.1**	**30.0**	**35.2**
Average deposit attracted from general government	308.0	492.9	796.1
financial institutions	1,996.5	1,671.4	1,993.1
commercial undertakings	163.8	246.3	277.3
individuals	10.7	13.0	15.3

Source: Eesti Pank.

Denizer and Wolf (2000) suggest that savings increased, in the ex-communist countries, after the fall of the communist regime, whish is explainable, taking into account three mechanisms:

- The state got less involved in financing public services, which made people resort to savings for paying their access to health services, educational services, legal services, etc.
- During the communist regime, a greater than usual amount of cash in hand (in home) was necessary for the rapid purchase of consumption good which might have appeared in town over night (for instance, a superior quality blanket, or a chandelier). Afterwards, the free distribution of these goods made superfluous the amount of cash retained for "surprise" buying.

- Finally, the elimination of involuntary savings (like mutual help funds, or the lists for buying a car) allowed more rational individual and/or family saving plans to emerge.

These reasons are in force also in case of Estonia. This would count as an indicator of transition progress in developing countries, as savings rate is high in developed countries. (Tomkiewicz 2003)

The intress rate of current accounts in Estonia in last years is usually 0.2–0.25% per year. When more than 60% of deposits are namely current deposits, the average prise of credit resources for banks is very low.

Third reason is extremely quick growth of loan portfolio. From Table 4 we see that in this millennium Estonian banks loan portfolio grew more than five times. Additionally to the domestic resources banks borrowed money also from mother banks. These sums have grown near 10 times like we see also from Table 4.

Table 4. Growth of loans and its sources of Estonian banks

Year	Loan portfolio, EEK bln	Loans from foreign banks, EEK bln	Share, %
2000	34,3	3,5	10.2
2001	40,7	4,1	10.1
2002	50,0	6,1	12.2
2003	69,2	6,3	9.1
2004	92,6	9,9	10.7
2005	125,5	31,0	24.7
2006	177,7	34,6	19.5
Growth % 2000–2006	518,0	989,0	191

Source: Eesti Pank. Financial Stability Review 2007.

Research has found that it is profitable for international banks to open subsidiaries in transition economies for profitability of these subsidiaries exceeds that for parent banks in home countries (Havrylchyk, Jurzyk 2006). For example, by data of Estonian banks in third quarter of 2007 SEBs (SEB Eesti Ühispank owner) ROE was 17.3% and Swedbanks (Hansapanks owner) ROE 18.1%. In Estonian banking sector at the same time ROE was comparatively 31.0%.

After joining EU in new EU member states credit to the private sector started rapidly to grow. From Figure 4 we may notice that in Estonia, Latvia and Romania growth was the highest and per GDP in Latvia and Estonia the portfolios were bigger.

The fourth reason of high profitability of Estonian banking is introduction of e-banking. From Figure 5 we see that electronic payments and card payments share in Estonia is continuously and quickly growing.

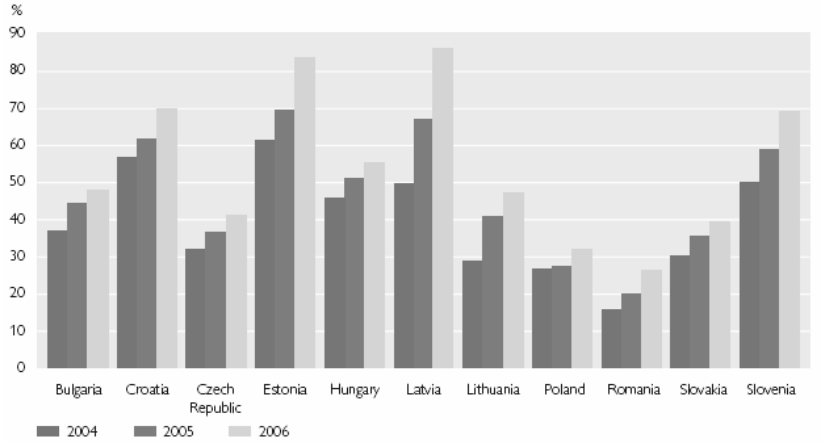

Figure 4. Private sector credit-to-GDP levels, end of 2004 to end 2006. (Backe *et al*. 2007)

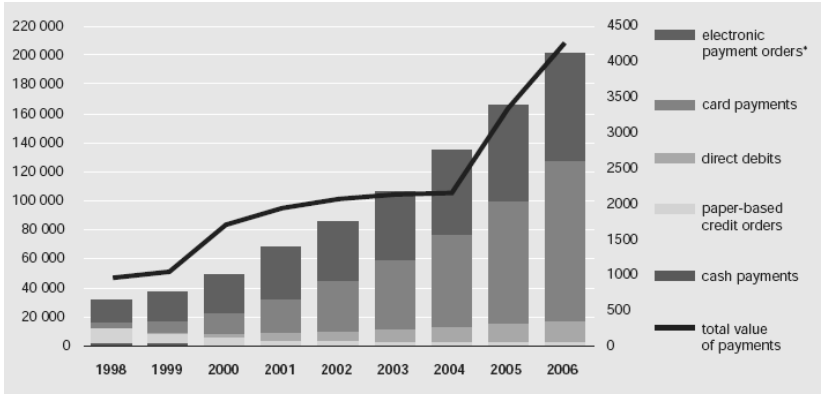

Figure 5. Number of payments (thousands; left scale) and their turnover (EEK bn, right scale) by payment methods. (Eesti Pank)

The total number of payments in 2006 exceeded that of 1998, the initial year of collecting payment statistics, six-fold and the total turnover of payments was four times bigger. Within nine years, the volume of payments made via direct debits has grown most drastically (142 times). The number of card payments has increased nearly 25 times. Lately, cash payments and paper-based credit orders have not been very popular among residents who prefer effective electronic payment methods and their use has been decreasing year after year. (Eesti Pank Annual Report 2006, 2007)

Card payments formed the largest share (55%) in the number of payments in 2006, although the relative importance of their turnover remained below 1% of the total payment turnover. The next popular payment methods were internet bank and telebank credit orders. In 2006, the share of cash among payments made through banks comprised only 0.3% of the total number of payments and 0.04% of the turnover.

By the year-end, Estonian credit institutions have issued a total of 1.6 million payment cards, exceeding the result of 2005 by 14%. 79% of the bank cards issued was debit cards (1.3 million) and 21% were credit cards (over 340,000). 25% of all payment cards were passive. At the end of 2006, 95% of the population had debit cards and a quarter owned credit cards.

By the end of December 2006, Estonia had 918 ATMs and 85% of them enabled cross-usage. Within the year, 77 new ATMs were installed, i.e. approximately as much as in 2005. The number of points of sale (POS) that accept card payments increased 15% in 2006 compared to the previous year and as at year-end, 14,665 POS provided the opportunity of using payment cards. (Eesti Pank Annual Report 2006, 2007)

The main goal of every company is to maximize profits for its owners and banks are not any exception. E-banking services offer a perfect opportunity for minimizing costs. Our previous research showed that relative costs of e-banking are several times smaller than servicing in the branch office (see Table 5).

According to numbers in the table above all e-channels provide significant cost saving for banks. The difference in a net cost between the US and Finnish banks can be explained by smaller population in Finland and the scale effect in case of the US. Forrester research (2003) covered Europe largest banks and found that average online transactions cost 14 times less than branch tellers'.

Table 5. Unit costs for transactions in different distribution channels

Channel	Europe average (Forrester 2003)		USA average (Booz-Allen & Hamilton Inc. 1996)		Nordea (Fin) (Dynamo 2001)		Union Bank (Est) (Toomla 2003)
	Euro	%	US $	%	US $	%	%
Branch	2.00	100	1.07	100	1	100	100
Call Center	0.96	48	0.54	50			67
Mail	0.27	14					161
ATM	0.22	11	0.27	25			14
Online	0.14	7	0.01	1	0.11	11	7
Direct debit	0.04	2					1
Offline bank			0.015	1			2

Source: Liuhto *et al*. 2007.

One way to increase the profit capacity is to establish and overtook financial institutions which offer nonbanking services. From Table 6 we see that in the year

2006 in Estonian banks groups profits were bigger than in solo banks (except Sampo Bank).

Table 6. Estonian banks profits before taxes in 2006, EEK mln

Banks	Solo banks	Bank group	Share of solo bank, %
Eesti Krediidipank	75,7	80,3	94.3
SEB Eesti Ühispank	913,0	1389,6	65.7
Hansapank	2012,4	5527,3	36.4
Sampo Pank	337,0	333,0	101.2
Tallinna Äripanga AS	35,2	57,8	60.9
BIG	155,5	178,4	87.2
SBM	3,5	3,5	100.0

Source: Eesti Pank.

In Table 6 we may also see that our biggest bank Hansabank earned two third of profits outside of solo banking services. The second biggest bank SEB Eesti Ühispank earned one third of profits from additional financial services. Last published data from the year 2003 are showing that banks ownership in other financial intermediaries was in Estonian leasing sector 99.2%, in life insurance 68.3%, in investment funds 90.3% and in pension funds 87.8%. (Eesti Pank Annual Report 2003, 2004)

The implications of newly important financial products, such as hedge funds, private equity funds, wealth and pension funds, are yet not fully understood – it is not clear they will forster stability or volatility in financial sector. (Mauro, Yafeh 2007)

In future banks should to find ways to compensate the tendency of decreasing interest margins and to increase credibility of banks. Last survey from TNS Emor commissioned by Eesti Pank was done at the end of 2007. From Figure 6 we see that only 28% of respondents think that Estonia's banking sector is strong and stable and their money is safe. (Estonian residents opinion 2007)

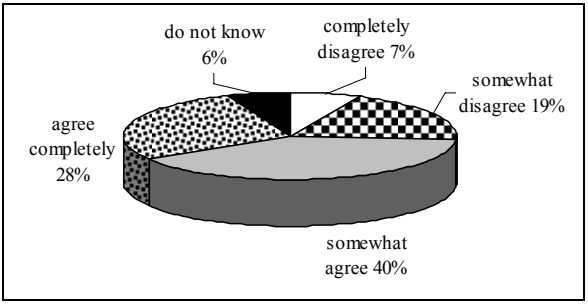

Figure 6. Please indicate the extent to which you agree with the statement … Estonia's banking sector is strong and stable and my money is safe. (Eesti Pank 2007)

Entrepreneurs and students are more convinced in the credibility of the Estonian banking sector. Apparently, they have a better knowledge of the banking system and/or they have a more positive outlook, will and faith in Estonia's success.

Conclusions

Our study examines developments in the profitability, profit sources and success strategies of Estonian banks. Despite the unstable economic and legal environment, banking in transition country has been much more profitable than in developed countries. But at the same time effectiveness of banking in a transition economy is volatile and bank failures risk is high. We also prove that new electronical channels provide to banks more cost saving possibilities than traditional channels and explain what the difference in the cost structure is.

Estonian commercial banks were mostly established 10–15 years ago. Less than ten banks have remained from more than 50 licensed banks, the rest had not been able to continue in the conditions of economic crises independently or have failed. Taking too high risks and lack of risk management skills have also plaid certain role in this process.

Our analysis of the development of commercial banking in Estonia points out several features, which are typical of the starting period of commercial banking in transition countries.

First of all. In all stages of a transition period banks may have a high effectiveness due to taking high risks by the rapid growth of their market shares, a quick implementation of new products and skilful exploitation of the peculiarities of a transition economy. But due to the volatility of the macro-environment and the differences in the level of risk management the productivity of different banks is very different and the profitability is very volatile.

Our research showed that the very high concentration in Estonian banking sector is helping bigger banks to increase their profits. Banks loan resources are also cheap for high share of demand deposits quickly for they borrowed money also from mother banks. However operating costs of banks grew slower than the loan portfolio profitability also increased. Banks also increase the profits capacity establishing undertakings which offer nonbanking services.

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Appendix 1. Consolidated profit/loss account of Estonian banks

	31.12.00	31.12.01	31.12.02	31.12.03	31.12.04	31.12.05	31.12.06
Interest income	3,744.2	4,308.1	4,253.5	4,195.8	4,644.8	5,933.1	9,340.2
Loans	2,816.8	3,308.2	3,309.9	3,363.5	3,975.2	5,156.8	8,006.9
Deposits	386.2	360.2	189.7	121.5	189.0	340.7	822.4
Debt securities and fixed income securities	309.9	379.6	409.6	360.8	151.1	104.3	144.0
Derivatives	164.5	205.9	256.1	299.8	284.2	282.0	301.2
Other interest incomes	66.8	54.2	88.3	50.3	45.3	49.4	65.6
Interest expense	1,811.9	2,125.6	1,883.1	1,918.2	2,165.7	2,944.2	4,844.9
Loans	213.6	192.6	295.3	334.6	444.6	512.4	1,260.3
Demand deposits	354.6	431.0	270.1	268.8	340.4	563.1	1,034.0
Time and savings deposits	710.4	838.8	643.0	581.0	534.5	908.1	1,628.8
Debt securities and fixed income securities	288.9	369.5	338.2	322.7	487.2	668.0	582.4
Items of capital nature	94.3	94.0	74.7	54.6	38.2	26.4	181.1
Derivatives	145.3	195.7	257.2	356.2	320.9	257.1	155.2
Other interest expenses	4.8	4.0	4.5	0.2	0.1	9.0	3.3
Net interest profit/loss (+/–)	1,932.4	2,182.4	2,370.5	2,277.7	2,479.1	2,988.9	4,495.2
Net profit/loss on financial investments (+/-)	35.8	707.8	72.8	65.7	1,027.3	889.7	119.8
Shares in subsidiaries (+/-)	18.6	683.3	50.0	54.7	987.0	798.3	44.8
dividends	–	675.9	25.9	21.5	740.5	760.0	9.5
income calculated by using the equity method	13.2	7.4	23.8	32.1	248.0	–	–
expense calcualted by using the equity method					1.5	–	–
other (+/–)	5.4	–	0.3	1.1	–	38.3	35.3
Shares in associated undertakings (+/-)	11.3	9.2	1.1	3.9	7.9	1.2	66.8
dividends	–	1.9	9.5	–	–	–	–
income calculated by using the equity method	11.3	7.3	-8.4	3.9	9.5	–	–
expense calcualted by using the equity method					1.6	–	–
other (+/–)	0.0	–	–	–	–	1.2	66.8
Other shares (+/-)	6.0	15.2	21.7	7.1	32.4	90.2	8.2

Appendix 1 continued

	31.12.00	31.12.01	31.12.02	31.12.03	31.12.04	31.12.05	31.12.06
Dividends	3.9	12.1	20.0	7.1	32.4	79.9	0.4
other (+/–)	2.1	3.1	1.7	–	–	10.3	7.8
Commission income	965.3	1,062.6	1,202.6	1,343.6	1,618.0	2,112.7	2,555.0
Commission expense	255.9	282.9	333.4	354.5	444.5	527.3	661.1
Net profit/loss on financial operations (+/–)	505.6	443.2	359.5	404.2	382.3	431.3	631.0
Profit/income	755.0	690.7	1,031.4	970.8	978.1	1,204.4	1,485.9
Loss/expenses	249.4	247.6	671.9	566.6	595.8	773.1	854.9
Administrative expenses	1,373.6	1,583.9	1,757.8	1,778.2	2,079.7	2,522.9	3,194.7
Wages and salaries	519.6	663.0	803.2	795.3	971.0	1,136.5	1,465.3
Social and unemployment insurance costs	163.7	189.4	222.1	238.2	261.6	309.7	389.9
Pension costs (non-state)	–	–	–	–	–	–	–
Other administrative expenses	690.2	731.4	732.5	744.8	847.1	1,076.7	1,339.5
Value adjustments of investments properties, tangible and intangible assets (+/–)	−668.3	−538.6	−415.8	−251.4	−221.4	−156.2	−155.1
Value adjustments of claims and off-balance sheet commitments (+/–)	−319.9	−84.4	−136.5	−101.9	−187.9	−87.5	−214.6
Value adjustments of long-term financial investments (+/–)	−129.7	−74.3	−5.0	−2.7	−4.2	−0.3	7.6
Other operating income	73.8	66.2	53.7	74.1	104.9	242.4	348.1
Other operating expenses	152.5	194.3	195.8	188.4	145.5	264.5	297.7
Extraordinary income	–	–	–	–	–	–	–
Extraordinary expenses	–	–	–	–	–	–	–
Profit/loss before taxation (+/–)	613.1	1,703.8	1,214.8	1,487.9	2,528.3	3,106.2	3,633.4
Income tax expenses	–	20.4	61.6	170.0	64.7	16.7	24.8
Profit/loss of the reporting period (+/–)	613.1	1,683.4	1,153.2	1,317.8	2,463.6	3,089.5	3,608.6
Income total	5,809.8	7,203.1	6,866.9	6,787.7	8,544.7	10,517.7	13,946.1
Expenses total	5,196.7	5,499.3	5,652.1	5,299.8	6,016.3	7,411.5	10,312.7

Source: Eesti Pank.

PERSONAL FINANCIAL DEBT

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Introduction

There has been a significant lending/borrowing explosion in Estonia since 1999/2000 in similar pattern like in other Central and Estern Europe countries. This accompanied the sustained economic boom during this period and followed by the gradual expansion of financial services together with relaxation of credit constraints. The credit boom started with mortgages and other types of secured loans have now spread to the unsecured financial instruments' sector like credit cards, different type of product leasings and quick-credit services.

Financial indebtedness has become a serious problem also in developed countries where the consumer credit has grown more than reasonably predicted. Eventhough the low interests and the economic growth has been enjoyed recently also in developed countries still the growth of borrowing would rise questions of economic reasoning of those credits.

The expansion of credit would cause several discussions in policymakers. In one hand the lending in developing countries would be necessary to finance the development under the lack of internal savings. There has been discussed also the role of lending to stabilise current account deficit. In other hand monetary policymakers mainly in developed countries have become concerned about the extent of personal indebtedness. The main concern has been problematic debt where most of them are associated with consumer credits.

In current paper the recent literature of reasons of financial indebtedness has been discussed. We have limited our study with models of behaviour analysis as well as excluded aspects from supply side of credit market. Our main focus in literature is to discuss the influence of interest rate to the borrowing activity and the interest rate elasticity. These parameters have been considered the main difference between the models of rational classical credit market and the models of financial mismanagement.

The question of the essence of rapid credit expansion in different countries would need first an insight of credit market participants, mainly borrowers. Even though there are always two parties in credit market most studies quote the borrowers' behaviour to be crucial in development of the credit market. Also the subject of study in most of papers is the specific credit instrument or specific group of the responding which makes conclusions limited with the debt of the research. Therefore the result of studies could rather be used as hypothesis to describe development of credit markets.

The paper has organised as follows. First we give an overview of trends and recent developments of Estonian credit market where the main focus is to compare the market with other countries. In second section we introduce models with classical desriptive approach where has been assumed the elasticity of interest rate in credit market. Those studies have mainly focused on the development of models and then compared it with data available. In third section we focus on to approaches of financial mismanagement where no assumptions about the interest rate elasticity has been made. Those studies are mainly discriminant analysis looking for different statistical significance of different parameters. The paper has been summaries in the section of conclusion to present findings and underline further studies.

Credit market in Estonia

Estonia has enjoyed a rapid growth of borrowing since 1999/2000. The rapid growth of credit has been accompanied by low interest rate, remarkable growth of economy and incomes. Also the growth of credit has partially replaced the foreign direct investments in capital account and therefore had a significant influence in balance of payment. (Sõrg 2005)

In 2004–2006 the growth of credit has continued despite the rising interest rates and a rapid increase of risk margins (see Figure 1). Beside the fast growth of housing loans – the growth during that period has been approx 160% – the demand for private consumer credit also continued to be high growing on the same scale as the housing loan. (Eesti Pank 2007)

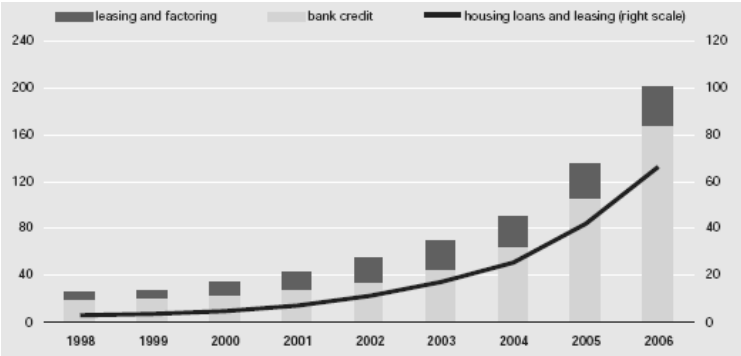

Figure 1. Public and non-financial sector financing, EEK bn.

Differently on developed countries Estonia lacking its own savings and therefore mainly borrows financial resources from foreign countries. There has been radical growth of total outstanding foreign debt in Estonia on 2000–2004 growing from 30 bnEEK more than 150 bnEEK. (Bank of Estonia 2005) In recent years the growth of total foreign debt has been softened by the growth of domestic savings.

To analyse deeper the foreign credit development in Estonia we have to notice two important factors where Estonia differs from other CEEC.

First, the influence of the governmental agents to the credit market is quite moderate to compare with other EU and CEEC. (Brzoza-Brzezina 2005) All Baltic countries are lowest borrowers within the EU in governmental level.

Table 1. Public sector debt, % of GDP

	2001	2002	2003	2004
Czech Republic	26.3	29.8	36.8	36.8
Estonia	4.7	5.8	6.0	5.5
Latvia	15.0	14.2	14.6	14.7
Lithuania	22.9	22.4	21.4	19.6
Hungary	52.2	55.5	57.4	57.4
Poland	36.7	41.2	45.3	43.6
Slovakia	49.2	43.7	43.1	42.5
EU average	62.0	61.4	63.0	63.4

Second, Estonia has introduced during the currency reform back in 1992 the currency board system (CBS) as the principle of the foreign exchange policy. This principle hedge away the risk of fluctuation of home currency against the anchor and therefore makes the evaluation of the credit risk for lender much easier. On the other hand it exposes Estonia to a possible liquidity risk based on the fact that central bank doesn't behave as the lender of last resort for commercial banks.

Most quoted indicators of countries' indebtedness and credit policy besides the public sector debt ratio are the private sectors' debt-to-GDP ratio and the debt-to-reserves ratio. The debt-to-GDP ratio has been used to describe indebtedness of the country where debt-to-reserves ratio should be applied countries with high foreign borrowing rate. (Uusküla 2005)

Table 2. Private sector debt ratios on 2002

Country	Debt-to-GDP	Growth of Debt-to-GDP, %	Debt-to-reserves	Growth of Debt-to-Reserves, %
Czech Republic	0.32	–8.24	1.03	–15.58
Estonia	0.29	8.88	1.99	23.15
Latvia	0.29	10.57	2.04	14.56
Lithuania	0.14	1.67	1.05	0.18
Hungary	0.35	–1.08	2.36	1.41
Poland	0.29	59.20	1.98	14.52
Slovakia	0.40	–2.33	1.14	–16.49
EU average	0.71	5.80	16.61	5.33

The private sector's debt referes mainly credits from banking sector. Due to the developing credit markets and banking sector as well as the small size of companies main inflow of loans comes through the banking sector in most of CEE countries. Therefore the acsess to the credits, specially to the foreign savings, depends very

much of health of the banking sector. Estonian banking sector is very concentrated and wholly dominated by banks of foreign ownership.

Analysing the private sector debt there is specific trend in Estonia compared with other CEEC – relatively strong demand of credit from private persons. (Trigon Asset Management 2005) Other CEEC companies are main borrowers of private sector credit.

Table 3. Dynamic of credit taken by private persons, loans granded, % of GDP

Borrowing of private persons/GDP	2000	2001	2002	2003
Estonia	10	12	16	17
Latvia	4	6	9	10
Lithuania	n/a	2	3	n/a
Poland	7	8	8	9
Czech Republic	5	5	7	7
Hungary	5	6	9	10
Bulgaria	2	3	4	5
Rumenia	0.5	0.7	1.4	2.1
EU average	49	49	49	47

High level of debt is often related with macroeconomic unstability. After the Asian crises in 1997 has carried on a massive wave of analysis to find causalities between high debt ratios and financial crises. Eventhough there has been found causalities between the crises and debt-to-GDP ratio and the crises and growth of debt-to-GDP ratio these correlations are not statistically significant. (Uusküla, Luikmeel, Kask 2005) In the papers where only the countries in crises has been analysed debt indicators precede crises, whereas countries not in crises are included these debt indicators fails to signal to the crises. (Brzoza-Brzezina 2005)

The financial crises in CEE countries in 90-s also doesn't confirm importance of debt ratios to foresee financial crises. Eventhough the analysis in CEE countries prove that with higher debt level the duration of crises tends to be longer. Also there is some evidence that a higher level of indebtedness is associated with higher crisis costs in terms of GDP. (Uusküla, Luikmeel, Kask 2005) Mainly the crises in CEE countries are explained by underestimation of the credit risks where banks after the liberalisation have expanded into the new business areas where they have little expertise

A good proxy for personal financial debt is the credit cards. A report reveals that the number of credit cards in Central and Eastern Europe (CEE) more than tripled in the two year period up to the end of 2006. Credit card holders in CEE numbered 27 million in 2006. (epnn. network 2008) The total number of payment cards (including debit, charge and credit cards) has grown by 64% to 187 million in 2004–2006.

By the year-end of 2006, Estonian credit institutions have issued a total of 1.6 million payment cards, exceeding the result of 2005 by 14%. (Eesti Pank 2006)

79% of the bank cards issued was debit cards (1.3 million) and 21% were credit cards (over 340,000). 25% of all payment cards were passive. At the end of 2006, 95% of the population had debit cards and a quarter owned credit cards.

Financial indebtedness has risen quite significantly during the 1990s and 2000s also in developed countries. The amount of revolving credit in the US averaged about 692 billion USD in 2001 the result of a more than 30% increase in just over five years. (Stone *et al*. 2006) In UK total outstanding consumer credits have increased from 27 billion GBP in 1982 to 138 billion GBP in 2002 where less than 1% of this change can be explained by the 5% growth in the size of the UK population during that period. (Brown *et al*. 2005)

Those trends have deeply worried the policymakers who have become concerned about the extent of personal indebtedness, its sustainability and the impact on aggregate economic performance. (Bank of England 2004) The concerns have arisen the rapid increase of individuals and families with problematic debt where most of them are associated with consumer credits arising from bank loans, credit cards, store cards, catalogue debts or hire purchase debts. (NACAB 2003)

Finally should be mentioned also the other aspects of indebtedness as the overall wellbeing as well as stress of borrowers. Outstanding credit influence significantly the psychological well-being of household heads whereas personal unsecured debt has asymmetrically strong influence compared with secured debt. (Brown 2005)

Classical model / descriptive models

Most quoted model bases on the classic idea of third-degree price discrimination where the loan price determines the borrowers' demand for a loan along with income and other personal characteristics. (Cavaluzzo 1998; Gary-Bobo 2003; Brueckner 2000) For simplicity the budget constraint for borrower is assumed. The demand of loan is defined as follows:

(1) $L = \Phi(x) W^{\gamma} A^{\sigma} P^{-\varepsilon}$,

(2) $P = P(r,T) \equiv \dfrac{1-\dfrac{1}{1+r}}{1-\left(\dfrac{1}{1+r}\right)^{T}}$,

where

A – savings (which would be used full as a downpayment for loan),
W – the wage,
ϕ – other observable borrower's characteristics,
r – interest rate,
T – maturity time for loan,
$\gamma, \sigma, \varepsilon$ – positive parameters.

The obvious conclusion is that the demand for loan is determined by interest rate.

Researches using those equations accompanying supply side where the behaviour of lender will be described. There could be used very different approaches to define proper supply side and those approaches will define final model for data analysis. In the current paper we focus more on assumptions of the borrower's behaviour and therefore the study of final equations would not be important.

Studies about mortgage demand would rather focus to demand for housing instead of loan which could be expressed as follows:

(3) $H = L + A \equiv \Phi(N) W^{\gamma} A^{\sigma} P^{-\varepsilon}$,

(4) $P = \Psi C^{\delta} \left(\frac{A}{H} \right)^{\beta}$,

where

P – the price of house,
H – demand for house,
C – the effort ratio measuring the debt burden of borrower,
Ψ – the combination of positive parameters.

In these equations interest rate is not seeable directly and is considered through the downpayment. The approach through the housing prices and downpayments would give better estimates then the direct model mentioned before. (Gary-Bobo 2003) Also the formula captures the idea that a heavy debt burden increases the risk of repayment problems.

More sophisticated models have used also continuous time specification of the model. (Brueckner 2000) Still, the basic assumption would be similar as the previous models. The utility function of borrower depends on consumption X and the demand of housing H respectively:

(5) $U(X,H) = X + \gamma \frac{H^{\alpha}}{\alpha}$,

where

γ, α – positive parameters.

The consumption of housing would depend on the price of house (ρ denotes the house price per square meter) with repayment factor P dependent of T – maturity time and r – interest rate:

(6) $H = \frac{L + A}{\rho}$,

(7) $P = P(r,T) = \frac{r}{1 - e^{-rT}}$.

Assuming that the lender is endowed with a form of market power the equilibrium loan price is in turn derived from profit maximation of banks. Another approach to model supply side is based on idea of competition in mortgage loan contracts by lenders based on observable borrower characteristics. (Gary-Bobo 2003)

These descriptive classical models have not only been applied in mortgage market. The approach is widely used also in studies of consumer credits and credit cards. Those studies are focusing mainly to analyse the pool of data to discover interest rate elasticity, elasticity of substitution between different cards or implications of liquidity constraints. There has been found small effects of interest rates on consumption and savings (Hall 1988) however these findings have been questioned by methodology complications. (Gross 2003) There has been discovered the implication of interest rate elasticity to monetary policy, business cycles as well as tax incentives for saving. (King 1988)

Recent studies would quote beside the fundamentals which are statistically significant like debt levels, account age, credit ratings are important other variables, which have been considered external variables. (Gross 2005) Also asymmetry of interest rate has been discovered where elasticity of interest rate is larger for declines in interest rates then increasing interest rate. This effect gives a reason for widespread use of temporary promotional rates.

Models of financial mismanagement

The essential characteristic of models of financial mismanagement is the absence of the influence of interest rate to the loan decision or amount borrowed. There are different methods to study the borrower's behaviour of financial mismanagement: direct approach or questioners and indirect approach through the studies of consumer credit instruments

Questioners

Very few studies have analysed borrowers' behaviour directly through the questioning of (potential) borrowers. The aim of these studies is to figure out possible behaviour of borrowers and group them based on different criteria (s.c. risk group identification). (Kalafatelis 2005)

One of the early studies have been carried on by Livingstone and Lunt to collect and to analyse wide range of different data that possess sufficient demographic, economic, psychological and situational factors to fully specify an explanatory model of borrowing decision. (Livingstone 1992) Those explanatory variables have presented as follows (see Table 4).

Those specific variables by homogeneity of the demographics of the respondent sample with respect to age, education and occupation were or were not statistically significant may become more or less important for older or more educated groups. (Stone 2006) Therefore the obvious limitation of those studies is typically in most cases a few or a subset of demographic, economic, psychological, and situational factors or too homogeneous group of respondences.

Table 4. Statistically significant variable list by Livingstone and Lunt (1992)

General category	Specific variables
Demographic variable	• social class • partner's social class
Economic variables	• disposable income • number of debts • total amount of debt
Enduring psychological variables	• people get respect they deserve • believe credit useful but complicated general coping – less cool and calm • value achievement over social concern attitudes • pro-credit rather than anti-debt
Economic attribution	• important to keep up with the Jones's • blame external disaster rather than hedonism
Satisfaction in life	• satisfied in own standard of living
Economic behaviour	• reward self with purchase • think about money • willing to use credit • number of bank accounts • enjoy shopping for clothes • shop in favourite shops • pay total off credit card each month • enjoy shopping with family

The obvious limitation of those studies is the number of respondances to cover wide spectre of population. Therefore those studies would be rather rare in literature. Few of those kind of studies are targeted to study the financial behaviour of population, to specify the "risk groups" and specify the pattern of their financial behaviour. (Kalafatelis 2005; Stone 2006)

There has been studied Australians' financial behaviour to design tools of financial protection of risk groups. (Kalafatelis 2005) This study has covered wide spectrum of the population allowing to make wider conclusion about the whole population which has been presented in Table 5.

Table 5. Summary of key findings

a large proportion (23%) of the population in general reported they "know little/nothing at all" about money matters
two-third (66%) of the total population reported worring about spending and/or borrowing beyond their means
over one-quarter (29%) accepted that they are not good in savings
one in five (19%) don't pay attention how much they spend
about one in five (22%) admitted that they run out of money before payday
only 10% reported not being confident about making decisions about money matters
28% of all respondents reported mostly borrowing for essencial items whereas 19% reported borrowing for non-essential items

Based on those findings there has been developed the concept of the risk group as follows in Table 6. Risk group definition bases on borrowers' attitudes (confidence and competence) to money matters. (Kalafatelis 2005) There are approximately 20% of population who could be considered as a risk group based on their financial behaviour.

Table 6. Risk group characteristics

consumers in the risk group believe they are reasonably knowledgeable about money matters
risk group people admit that they have difficulties with savings
risk group people also admit that they run out of money before pay-day
they do not worry about spending and borrowing beyond their means
all consumers at risk group have a loan agreement but they do not understand/lack confidence in their agreement

According to those studies consumers in risk group are younger people under 40, in minor nationality and living in households with children. Therefore the risk group will match with group of peoples who would be in lover income group anyway.

Indirect models of financial mismanagement

Most of the studies in this area have been carried through analysing different financial instruments of consumer credit. Most popular research topic has been the stickiness of the credit card interest rate. Credit cards play an important role in consumer finance where about 20% of aggregated personal consumption in US is already being purchased using credit cards. (Chimerine 1997) Moreover, most of credit cards represent also the leading source of unsecured credit.

For credit card users, annual interest rate charged by use of the credit would be irrelevant if the balances actually repaid every month. However, at time of making a decision whether to adopt a credit card, the decision is based by a customer's belief to repay, not to the actual outcome. Ceteris paribus, the higher degree of unrealistic optimism – the stronger belief to pay off balance at the end of each month – would cause the less sensitivity to the credit card interest rate.

The credit card market has been analysed by different authors. The rigidity of the credit card interest rates is the outcome of the "irrational behaviour" of customers who do not intend to borrow on their credit card accounts but find themselves doing it so anyway. (Ausubel 1991) Those customers with unrealistic optimism of their future ability to pay off open balances would tend to have weaker preferences to the card interest rate relatively to more realistic customers and stronger preferences to credit card fees than more realistic customers. (Yang 2006) Also customers with unrealistic optimism tend to be less willing to search for credit cards that offer better features than are those customers with a more realistic view to their future borrowing. (Calem 1995) Credit card usage by consumers is changing radically the landscape of consumer behaviour motivating them to buy more often and promoting impulse buying. (Sulaiti 2006)

There are also studies dealing with the low interest elasticity in the aggregated level where has been noticed that aggregated household debt does not change for several quarters after the strong monetary shock (Christiano 1996) whereas the sensitivity of customers to the mortgage rate is significantly higher. (Gross 2001)

There are several studies which focus instead of the overall economic matters more to the protection of risk group people. Several studies point out a wide spread of different behaviour between different groups. (Ausubel 1991; Gross 2001; Stone 2006; Brown 2005)

Analysis indicates that no single set of characteristics (economic, psychological, situationa, institutional etc) is sufficient to explain the indebtedness of the people. After combining those characteristics into the single explanatory equation, representing the complex nature of people's attitudes towards the usage of money, the ability to predict outcomes will increase dramatically.

Conclusions

The explosive growth of credit market in Estonia as well as in other countries can be studied through the study of behaviour of borrowers. Even though there has been remarkable increase of consumer credit in recent decades there is no good reasoning of that process. Models which relay only to the interest rate are obviously not sufficient to describe recent developments in the credit market.

In the current study has been given an overview of different approaches to the consumer credit in recent literature. Models describing behaviour of borrowers can roughly divide into two based on the influence of interest rate into the amount of borrowing. First group of models are classical descriptive models stating the interest rate influence to the borrowers' behaviour. These models have been mainly used for description of mortgage market but also for other types of credit market.

Another group of models are s.c. financial mismanagement models (sometimes called also models of unrealistic optimism). Different to classical descriptive models those models stating independency of borrowing decision from interest rate. The borrowing decision is based more on personal or social characteristics or could be explained on unrealistic optimism of borrower's future financial status.

Based on the scope of financial services models can be grouped as the models of specific financial instrument or models describing borrower's financial behaviour. One possibility to study in wider borrower's behaviour is to analyse directly their attitudes towards the money matter. These studies would state the proportion of 20% from total population as the risk group in money matters. Taking into consideration recent development in credit market – strong growth of unsecured personal credit accompanied with the financial engineering in the level of final consumer from supply side – there can be involvement of those risk groups in credit market.

Those findings explaining also anomalies of credit market in aggregated level. Effects as the stickiness of elasticity of interest rate or the time lag of monetary shock and consumption of loans can be explained better with financial mismanagement models than classical descriptive models.

Last but not least should be mentioned wide discussions over the regulation of consumer credit market. Monetary policymakers have become more concerned about the extent of personal indebtedness, its sustainability and impact on aggregate economic performance.

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THE VALUE CHAIN PESPECTIVE ON THE ESTONIAN ENETERPRISES' BEHAVIOR PATTERNS: SOME HINTS TO THE STRATEGIC ISSUES[1]

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Introduction

The strategic management of an organization is often hindered by problems that can be successfully solved by tapping into value chain concept. Herein, the value chain is a useful way of analyzing resources and functions within the organization in the context of how they might contribute to competitive advantage. The concept of value chain could serve as the framework for the relevant analysis because researchers as well as practitioners use this term if they want to underline the important dimension of firm strategy and a potentially significant source of competitive advantage.

During the transition period Estonia passed essential changes in numerousness areas of social life and it has caused several similar understandings and processes in the Estonian organizations. (Vadi, Vedina 2007; Vadi, Roots 2006) Of course, the societal factors put impact on behavioral patterns of enterprises but the other side of the picture is that the organizations choose different strategies due to their aspirations, management, values, assessment of their environment etc. This behavior of enterprises is strongly affecting the economy and development of social life both directly and indirectly, on the one hand, while on the other, behavior of enterprises is influenced by understanding of their position in the value chain. Therefore, the enterprises' opinions about the value chain may open important strategic issues of those business organizations and provide the broader picture of potential problems that can influence economic processes significantly.

The aim of the article is to evaluate how the Estonian enterprises understand their position in the value chain and to explore what kind of behavior patterns correspond to the different positions. We focus also on the question whether the Estonian enterprises see the need to improve their position in the value chain. The results of the study provide policy makers with information about which areas of management need special attention and so may lead to better competitiveness of economy in Estonia. In this paper, the viewpoint will be taken to the level of enterprises and it will analyse what are their behavioral patterns in making strategic choices. In the following review, we will discuss how value chain concept opens the possibility to analyze the enterprises' strategic choices and behavior patterns. In the empirical part we will introduce the study of selected Estonian enterprises, and the final part discusses the results of from the perspective of behavior patterns.

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The role and potential of value chain approach in the strategic choices

In the globalizing world the companies must to think seriously about strategy because the important question is how to maintain and develop competitive advantage. There is a need to change many domains in organizations (i.e. attitudes towards technology, market, customers, the position in the value chain) in order to create added value. The latter has become especially crucial due to the limited resources and capacity of markets on the one hand, on the other; efficiency and effectiveness are actual themes in the modern organizations. It leads to question whether the enterprises are able to set proper goals and at first of all, to analyze their role in the competitive environment. If the enterprise has an intent to increase its efficiency, it must to find out to what extent there is a need or possibility to cut down the expenditures, raise profit and to change the position in the business in general (i.e. the value chain position, where is possible to be more focused or make steps ahead). Indeed, all the companies consider abovementioned factors, while if the enterprise concentrates on some of those, we can refer it to the strategic choice or the specification of strategic issues by the company.

These issues and especially the details of that are well presented by Thompson & Martin (2005). They have expressed it has follows: "Competitive advantage stems from the individual and discrete activities that a firm performs. A cost advantage can arise from low-cost distribution, efficient production or an excellent sales force that succeeds in winning the most appropriate orders. Differentiation can be the result of having an excellent design team or being able to source high-quality materials or high-quality production. Value-chain analysis is a systematic way of studying the direct and support activities undertaken by a firm. From this analysis should grow greater awareness concerning costs and the potential for lower costs and for differentiation?"

The result of specialization along the value chain will be a product that will be more competitive in terms of price, quality, and innovation and could be interpreted in the context of last decade when the globalization has also been a major trend. Globalization has many dimensions, but for the transitional countries like Estonia we emphasize the movement of manufacturing activities to low wage locations. It was the tendency that certainly took place in the sphere all the transitional countries. If we put it into actual environment, we argue that the issues of specialization and competence development are on the scene contrary to the cost-oriented discussions about make-or-buy decisions in earlier decades. For the transitional countries would be beneficial perspective when companies try to broaden their expertise and to enter into activities for which he as not originally contracted, like product development. It is clear that by doing so, the contract manufacturer may in time become a competitor of its customers by developing his own brand, by doing his own research or by a combination of both. The regional and national governments in the low wage country will strongly encourage companies to follow that course. (Greenstein 2005; Dankbaar 2007)

Companies create value when they make their offerings more qualified and closer to the customers. In this light could be mentioned that the most valuable links on the chain are people who have knowledge about customers. This locus of value-creating possibilities applies just as strongly to retail and service firms as to manufactures. (Hitt 2007: 89–90) If the companies are oriented towards increasing of value added, they meet the need to analyze what kind of impact comes from their plans and activities. Again, the value chain approach gives the conceptual framework for the interpretation of enterprise's position in the competitive environment. (Porter 1985) Porter's work continues to provide remarkable insights into the nature of competition and strategy and thus his ideas are proper for the analysis in various contexts nowadays. (Stonehouse, Snowdon 2007)

In the light of the need to create a better understanding of strategic perspectives the academic value chain analysis is not yet very helpful for policy-makers, because it fails to identify clear causal relationships and it cannot provide sufficient empirical evidence to prove its hypothesis. (Altenburg 2006) This analysis provides policy makers with comparisons in respect with various factors (i.e. industry, location, technological level), and thus rationally analyze the alternatives of actions.

The value chain shows how a product moves from the raw-material stage to the final customer and the essential idea of the value chain is to create additional value without incurring significant costs while doing so and to capture the value that has been created. (Stonehouse, Snowdon 2007) Value chain approach is based on the matter the degree of enterprise's involvement in the process of production is evaluated. (Hitt, Ireland, Hoskisson 2007) The position in the value chain is higher when the new value for the customer is added or the enterprise increases its role in the creation of inputs like raw materials and technology. Indeed, it implies the a better knowledge of what market and customers consider as value first hand, whereby the following aspects are commitment to quality, high level of services, immediate reaction to the opportunities and strengths. Least not least, the innovation may give significant advantage if enterprises want to improve their position in value chain. (Thompson, Martin 2005: 119) The better position in the value chain is one of the preconditions for adding value. Value chain analysis allows the firm to understand the parts of its operations that create value and those that do not

If to look table 1, the following aspects can be underlined. A firm's value chain is segmented into primary and support activities, while primary activities are involved with a product's physical creation, its sale and distribution to buyers, and its service after the sale support activities provide the assistance necessary for the primary activities to take place. Table 1 presents the domains that can be evaluated to determine the value-creating potential of primary and support activities.

The information in the table 1 is also useful for making comparisons with the competitors. All domains should be evaluated relative to competitors' capabilities and this enables to get broader picture about the enterprise's position. A resource or capability must allow the firm to perform an activity in manner that provides value superior to that provided by competitors or to perform a value-creating activity that

competitors cannot complete. These are strategically issues for the companies and strategic success depends upon the way in which the organization as a whole behaves.

Table 1. Primary and support activities in the value chain

Primary Activities	
Inbound Logistics	Activities relating to receiving, storing and distributing the inputs to the product or service (materials handling, stock control, transport, etc.).
Operations	Activities to convert the various inputs provided by inbound logistics into the final products or service (machining, assembly, packaging, etc.).
Outbound Logistics	Activities involved with collecting, storing, and physically distributing the final product to customer (warehousing, materials handling, distribution, etc.).
Marketing and Sales	Activities completed to provide means whereby consumers are made aware of the product or service and are able to purchase it (sales administration, advertising, selling, promotion, etc.).
Service	Activities, which enhance or maintain the value of a product or service (installation, repair, training, etc.).
Support Activities	
Firm Infrastructure	Includes the structure of the organization, planning, financial controls, quality management, etc.
Human Resource Management	Involves activities relating to recruiting, selection, training, evaluating, rewarding, and etc. people within the organization.
Technological Development	Improves a firm's product and the processes used to manufacture it (know-how, research, process development, technology, design, etc.).
Procurement	Purchases the inputs needed to produce a firm's products (raw materials, supplies, machinery, equipment, building, etc.).

Note: The table is created based on Johnson, Scholes, Whittington 2006: 136–138; Thompson, Martin 2005: 255.

The value chain approach evolves the vertical and horizontal perspectives and these explore that value could be created not only horizontally within the firm but also vertically through the supply chain. Here the critical factor is an understanding of a customer's value chain and attempt would be reduced the customers' costs. All in all, Weinstein, Barrett (2007) have put it as follows: "An organization must understand everything the customer does associated with the product and the same is true for the ultimate consumer, to attain the full advantage of vertical analysis." This idea describes well the role and possibilities that value chain approach gives to the analysis of businesses.

Methodological remarks

It is clear that enterprises and organizational environment in Estonia changed rapidly at the beginning of the 1990s and organizations had passed different stages in their development. In this paper, the viewpoint will be taken to the level of enterprises and it will analyze what are their behavioral patterns in making strategic choices. It

will try explaining whether a readiness for changes could be seen, which could raise the competitiveness of enterprises in the recurrent economic environment, and if there are, then which ones. The limitations of previous studies derive from the speed of the changes, which did not allow the assessment of all aspects of strategic thinking and planning in Estonia. Therefore, the empirical study was conducted in October 2007.

The Estonian development can be characterized by some specific features in this time. Namely, Estonia enjoyed the remarkable growth since the year 2000 and it has put impact on both economic and social life. In the economic sphere many enterprises grew very quickly and labor force became one of the most limited factors for many companies. The growth generated the illusion that whatever you do you can be successful because there was a need for several products and companies were not able fully to serve all the customers. This situation did not force enterprises to think intensively about their future plans. The positive side of this growth was that people's living standard has become much better than it was in nineties. The second half of year 2007 brought signs that economic situation is changed and several indicators confirm the tendency of decline. For example, the production index that characterizes well the overall shape of economy has decreased in the end of 2007 significantly if compare it with previous periods (Economic and …). The new environmental tendencies give good reason for unpacking the enterprises' understandings about the future developments.

The approach is based on an empirical study in the course of which original interviews were conducted on the basis of a common plan (primary sources) and expert opinions were gathered, which were compiled on the basis of earlier studies, media publications, presentations, and the materials of the interviews. Organizations were from private sector and some of them were market leaders in respective sectors, while others were not as successful. Financial results, size of the business varied significantly as well as headcount of organization varied from 10 to a few thousands. The entire sample and results obtained can be considered as representative of the above mentioned organizations and industries in Estonia.

Two kinds of sources were analyzed for getting an overview about the situation in the Estonian companies in respect with strategy, and more specifically the enterprises' how companies do evaluate their position in value chain and what are their aspirations for future. First, the figureheads of enterprises were interviewed and as abovementioned 14 enterprises were involved. Second, about the 25 enterprises were expert assessments drawn up. The compilers of expert opinions possessed prior direct contacts with the enterprises under focus.

The main focus of the interviews was on the enterprises' strategy and several special questions were under discussions such as profit and costs and the position in the value chain. There nine main questions in the interview plan, while there were also several sub-questions in order to direct the respondent's attention on the themes that were under investigation. The interviews lasted about two hours and these were recorded and after the direct communication the interview protocols were drawn up

and the interviewed persons were asked to check the proposed material. The themes of the interview are presented in figure 1.

Figure 1. The themes of the interview. (Modification based on the model by M. Porter 1985)

Specifically, the following themes were presented to the figureheads of enterprises: how have changed the structure and target of your products/services? What main circumstances do affect the activities of your enterprise in coming five years? What do you consider as the strengths and weaknesses, opportunities and threats? How have you reacted on the increased expenditures on workforce? What factors do hinder the raise of productivity? Have you received some help from the government? What kind of sources do you use for financing of main changes in your company? What measures have you used or do you plan for increasing efficiency in your company?

The latter question consists of several parts and the measures that were proposed to representatives for estimation covered the themes as enhancement of products (rise in prizes and raise of quality), supplementary services (transportation, services), changes in the core business, advancement in technology, new methods of marketing, entry to new markets, cutting the production costs and relocation of production, recruitment of employees from abroad, contractor work from other enterprises, finally what is planned for the development of an organization and management? The raised questions were related to the networks, collaboration, training programs etc.

The empirical data about types of behavioral patterns of enterprises

Two focuses were taken as a basis for systemizing the behavioral patterns of enterprises: first, insofar as activeness takes place within the limits of its field of activity, and secondly, to what extent they want to extend their value chain. As an explanation, it could be said that in intensifying its activities within the limits of its field of activity, it is weighed to what extent they wish/can reduce costs, increase incomes and move towards the objectives set by the management techniques and

means. All enterprises pay attention to these aspects to a certain extent, but concentrating on one characterizes a strategic choice in a more specific sense. In expanding the value chain, the end consumer is approached and new value is added for the consumer, which enables to better explore the consumer and consider more his needs.

On the basis of the two above-mentioned focus questions, the enterprises were provisionally divided into three groups/types, which are handled here as behavioral patterns of enterprises. (Eesti … 2008)

I type: enterprises **do not wish (cannot)** change the technology and their position in the value chain to a remarkable extent, and in case of problems they apply simple or passive manners.

II type: enterprises **wish and can** change within the framework of the given field of activity. For that purpose, the strategy will be changed in a way it would enable creating additional resources and abilities, which would secure the achievement of a competitive advantage for the enterprise. Attention is paid to an active management of benefits and costs and to the improvement of the enterprise's management system.

III type: **the focus** of the main activities of the enterprise **changes**. Choosing such a strategy assumes the enterprise having an ability to overcome the barriers in exiting the previous branch of activity and the barriers in entering the new branch. Therefore, the competencies of enterprises should be transferable into another field of activity.

Below, the connection of the behavioral patterns with the creation of value added in the economic branch will be observed. From the productivity analysis, it appeared that a very big variability in the value added created per employee by sectors of the economy.

High productivity enterprises

High productivity enterprises in creating value added wishing to change their position in the value chain belong mostly to type II. The above-mentioned enterprises try to change within the framework of their field of activity by creating value added mainly by methods targeted at increasing incomes. A part of the enterprises extend their value chain, incl. for example Balti Laevaremonditehas (Baltic Ship Repair), which has improved considerably its position in the value chain, and Baltika, which has vigorously moved from the economic branch that is less value added creating (sewing industry) on into the retail trade.

As a positive example, one could also mention Regio, where traditional basic competencies and technologies are integrated with new technologies by creating a unique competitive advantage. That has enabled a small enterprise integrate successfully into a value chain of a global group (Ericsson) becoming thereby also itself a global knowledge-based enterprise. But also in traditional industry sectors, it is

possible to change constantly – for example, Kunda Nordic Tsement is steadily extending and puts into use new technologies – this year, more than 200 million kroons were invested. Enterprises of high productivity economic sectors do not place a low price level in the forefront, but a higher quality or combining the product with a service, which in its own turn might bring much closer to the consumer, or to a remarkable motion in the value chain (an extract from an interview: "Price is not a number one, a stable quality is number one, the second is the stability of suppliers, price comes third").

In these enterprises, they understand that it is impossible to grow value added without a distinguished compensation and necessary development of the personnel. For example, they do not save on labour in the Haapsalu Uksetehases, as in case of original products labor plays a very big role and skilled labor is very important for the enterprise. In Viking Windows, there is no shortage of labor and the salary in the enterprise exceeds the average salary of Estonia in similar works. The enterprise invests in technical solutions and training of the employees, checks the characteristics of its products in test centers abroad and on its own test bench. The activities of Tartu Maja are targeted at creating more conscious employees (an extract from an interview: "We would like to move partially towards time wages, which presumes attestation, evaluation of the level, and paying according to it. More competent and qualified labor force gets paid also in case there is not so much work.").

At the same time, it is concerning that several managers in their field of activity handle the organization as static (an extract from an interview: "There are no changes in the structure. Only as much we buy new technology. Also no changes could be seen in the management, no changes could be predicted for the future."). Furthermore, it appeared that they cannot always assess, or they even have not thought in which stage of development (growth, stability, or decline) the enterprise or its various fields of activities are. Often, they underestimate the necessity for manager development (an extract from an interview: "Trainings and everything actually increase labor costs, at least in the first line. We have not trained managers or middle managers in how to save labor costs. We do train, but we organize special trainings – on the required characteristics of some engineers, or required knowledge for an accountant, or something like that.").

Not a very critical attitude towards management developing might come from a feeling of success that a majority of enterprises of that group have experienced. It can be said that in enterprises with high value added, on one hand, efforts are made for finding new possibilities (an extract from an interview: "We have not set as an objective to limit the costs, but to increase the incomes."), but on the other hand, they are not aware of the necessity and opportunities to develop management. It appeared that they could not point out clearly what are the expectations towards the State or the partner.

Medium productivity enterprises

In creating value added in medium productivity enterprises of the sectors of the economy, they think on saving costs rather than on increasing incomes. Exceptions were *Estiko Plastar* and *RPM* where appeared a mentality oriented at increasing incomes and where they try to take the product development to a qualitatively new level. For example, in the dairy sector both producers and processors are actively looking for opportunities for improving their position in the value chain and have maintained a critical point of view in relation to the current situation. For example, in *Tartu Agro* they are aware that in Estonia the rate of return is by *ca* 2–3 times lower than the European level. The acknowledgement of that is a step in the way of development, as it makes you analyze the substantive reasons of the problems.

Surely the saving of costs has an important role, but in several cases it appears to be **a barrier to increasing value added**. Many enterprises are not able to open trade representations alone and it should be done together with partners and competitors. Selling its production to dealers by a third or even up to a half cheaper is a too high price of seclusion and enterprises could cooperate more also with their competitors.

Enterprises of that group point out several problems in the supply of resources (raw material, labor) and restrictions (EU quotas). Many enterprises complain over the lack of raw materials. For example, the Estonian timber has become a deficit and expensive, occasionally being even more expensive than in England, Finland, and Sweden. The price of timber is formed at an auction where, however, dominate large sawn timber producers who are temporarily able to buy also an expensive raw wood. For example, Näpi and Imavere Sawmills use several times more Estonian wood than some ten Estonian log cabin producers altogether. Supporting small-size enterprises with a strong export potential in procuring raw material would ensure their remaining and development in the future. Small producer timber enterprises help securing people with work in rural areas and preserving life there. For example, in Sweden further producers are subsidized via income tax incentives. That helps ensuring employment and human environment in rural areas.

The problem of agricultural producers and food industry enterprises (primarily producers of dairy products) are EU quotas. The observed enterprises suffer from an earlier policy of EU, which is intended to be changed in Europe. Food industry is a sector of the economy with big changes, which gives job for many people and for the production of which there is both the international and domestic demand. The structure of the Estonian dairy producers is fairly good and that development is seriously hindered by quotas. In Estonia, the production of crude milk could, pursuant to estimations, be increased by ca twice in case EU eliminated the quota on milk production. The efforts of Estonian politicians in this respect would be very much appreciated.

Lack of qualification of employees and specialists (for example, designers, experts of printing and film industry) and workers is a serious problem. That is well illustrated by an example given at Stora Enso Timber – (an extract from an interview:

"Workers are excessively concentrated on the salary. You go there where you get paid more, which brings about a big labor turnover. When in analogous enterprises of the Central Europe the labor turnover is a few per cents, then here it is 20–30% a year. People are constantly looking for something better and also their training is therefore ineffective."). In the surveyed construction enterprises, steps have been taken to apply foreign labor, whereas in one they pointed out the complexity of the arrangement process and, in the other, that step turned to be a failure due to the lousy quality of the work. Construction sector is the one where the most new jobs were created in the near past, which has affected the labor market the most. Also the representatives of the industrial enterprises of this sample (for example, Estiko Plastar, Silmet) acknowledge that the fast development of the construction sector has tightened the situation on the labor market. At the same time, there are clear signs in both the conducted interviews and in the statistical reports that in this rapidly grown sector there are signs for deceleration, which decreases the demand for builders.

From marketing measures, a significant problem has become the trademark of the enterprise. Raising the prestige and trustworthiness of the Estonian enterprises both as producers and partners is a key issue in the sales of the majority of products. For example, Baltika has successfully managed to design its brand and with the help of that has managed to get closer to its clients.

Among the enterprises of the sectors of the economy with low productivity in value added creation, the variety of behavioral patterns of enterprises is the biggest – among them are enterprises that are actively looking for solutions (from the surveyed companies Ilves-Ekstra, Toom Tekstiil Nonwovens, Fein-Elast Estonia OÜ), and several enterprises where a bigger attention is being paid to ancillary activities (like realizing the existing real estate). In this group, there are mostly such enterprises that try to manage with relatively simple methods.

For example, a furniture producer is exporting furniture to Germany, England, Finland, etc. mainly through dealers and resellers. The sales strategy is passive and the enterprise is sent the orders and drawings of the dealer (client). Although the creative process takes place in Estonia, such a production could be considered also sub-contracting. There are huge problems in this industrial sector, which are primarily caused by the decrease in demand of the world market. In the industrial sector, it is probably necessary to radically decrease the number of employees and simultaneously raise the sales ability, which presumes big changes in the value chain of the furniture industry, moving closer to the client, and increasing the share of end products in the production, which requires big investments. Some of the enterprises are trying to renew their technology, but thereby the problem is the importing outdated technology from the Scandinavian countries, which does not guarantee an effective production.

Low productivity enterprises

Low productivity enterprises in value added creation include large textile companies, which have not been able to adjust their former strategies to the new economic

situation where EU has opened its textile market to the Asian producers and the Estonian labor has become much more expensive. Production capacity would enable producing more, but the volume of orders is decreasing and, in case of one example, it can be said that the market of the USA has been lost, which 10 years ago gave approximately a half of the turnover. In a studied footwear industry company, it appeared that so far they have not actively dealt with marketing and that is still being built up.

The level of value added in the Estonian leather, footwear, textile and sewing industry companies does not grow, but what increases fast is the share of labor costs. It means a lot of companies and employees for the State. In order to evaluate more precisely the development perspectives and sustainability of these industrial sectors, additional studies should be conducted and prepared for a significant decrease of production and retraining of employees of these sectors and for engaging them elsewhere. In the activities of the above-mentioned sectors, also the regional factor is of a critical importance, which might cause big disproportions in the next few years (e.g., in Narva, but also in Abja-Paluoja and elsewhere) in demand for and supply of labor.

Surely, it is necessary to develop marketing in these enterprises, but with that they should have started much earlier. That is confirmed by the example of Baltika (in 2001, a new brand was created and an international retail network established), where the investment in marketing gave a strong impulse for the development of the entire enterprise. As a result of these changes, it can be said that by autumn 2007 Baltika has grown three times bigger than in 2001. The total number of sellers has exceeded the total number of sewers and the employees have acquired new skills.

In the footwear industry companies, they wish to maintain the advantages of cheap labor and plan employing workers from other countries. Problems connected to labor cost and the qualities of labor were considered serious ones in this group (an extract from an interview: “Very few employees are eager or able to learn 2–3 new tricks of work.”). It is hard for these companies to compete with the products manufactured in China. They even see an economic recession as a way out, which would enable finding labor more easily. They hope that economic recession might create also better opportunities in finding domestic investors, because capital starts then transferring also into industrial sectors on the account of real estate investments, for example.

Discussion and conclusions

In all sectors of the economy, there are enterprises that try improving their position in the value chain. Unfortunately, the amount of such enterprises is too small. Irrespective of the sector of the economy, a majority of enterprises is characterized also by an underestimation of the working culture. They do not see in it an opportunity for saving costs and increasing incomes. Estonia is considered as a country with a protestant work ethic and, therefore, it is presumed that dedication to work and dignified working culture are important. Irrespective to the fact that a lot

of people have the opposite practical experience, little attention is being paid to careless and incompetent work behavior. When it was asked to point out what is hindering bringing the rate of return of the labor force to the level of the developed countries, then in only one interview the working culture was mentioned.

The severity of the problem is also shown in the study conducted in the retail trade on positive and negative servicing situations. (Sõstra, Vadi 2006) The results indicate that among negative episodes the cases connected with the behavior of attendants constituted as much as in the next two groups of events (events with the servicing system and the products) altogether. While comparing the above-mentioned results with an analogous study conducted in the USA, it appeared that there were much more negative behavior events among the personnel of the Estonian retail trade than in the USA. Poorness of the personnel and work ethic is also shown in the results of *The Global Competitiveness Report*, which suggest that workers with an unsuitable training, weakness of public administration and a lousy work ethic are the most burning problems in Estonia.

It is evident that by directing the behavioral patterns of employees and work ethic, it is possible to raise productivity in many sectors of the economy. For that purpose, the managers must be trained and increase their management competence. High-level management, incl. for example a skilful implementation of performance pay systems, helps raising labor productivity. Enterprises still have sufficient reserves for intensifying production and decreasing the number of employees by leaving the salary fund to the same level enabling to raise the average salary of employees. A good and skilled employee must be worthily rewarded, otherwise he will leave. At the same time, the first signs could be detected that in equalization of the level in wages (e.g., construction sector), the people that have gone work abroad will be returning.

An important problem is an insufficient cooperation, on one hand, between the enterprises themselves and, on the other hand, the cooperation with the State. Entrepreneurs express their expectations towards the State differently. A part of the enterprises have used the supports provided by the Enterprise Estonia and by means of that promoted the activities of some domains but, however, the general opinion could not be considered a very positive one, because the interviewees have a critical attitudes both towards the opportunities provided by Enterprise Estonia and the application thereof. Representatives of various sectors of the economy noted critically the untransparency connected to the issues related to the public procurement and unclarity in its criteria.

Behavioral patterns of enterprises could be classified ensuing from the activity of the function and the position in the value chain (see Figure 2) and, on the basis of that, assess the position of the enterprises of sectors of the economy with various added values.

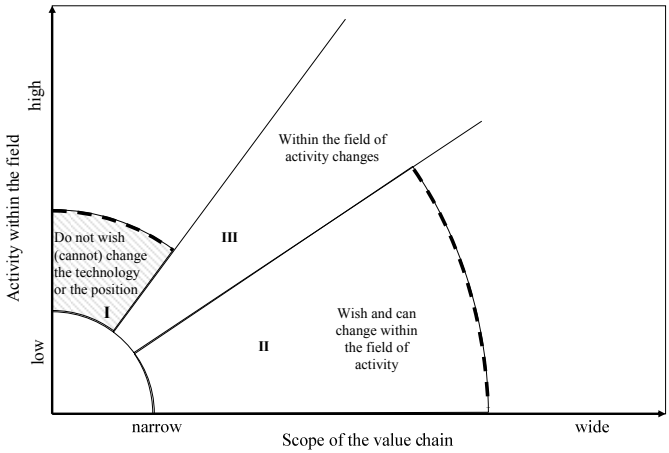

Figure 2. Assessment in value added relation to the behavioral patterns of enterprises of sectors of the economy with low, medium, and high productivity (types I, II, III).

The results of the management analysis of the Estonian enterprises are close to the European Union innovation study according to which a third of the enterprises are capable to change, a tenth could change their position in the value chain, but 40% cannot/are not able to see the necessity for a change. To characterize the behavioral patterns, the following generalizations could be made.

- There are too few enterprises that are actively looking for opportunities for increasing value added and **achieving a better position in the value chain**. That result leads to an opinion that there are no ideas on how to achieve a better position in the global division of labor.
- **Very few entrepreneurs have a global ambition**. That could be a behavioural aspect influenced by path-dependency, which is of a critical importance in increasing the competitiveness of Estonia.
- People have different knowledge on potential developments of the organizational environment. In some enterprises, they value global and local trends, but overwhelmingly **it does not appear what is the assessment on the rate of fluctuation of the environment** and how many factors are considered to influence the development of the enterprise in the future.
- In enterprises of sectors of the economy with **higher productivity**, they think primarily on **how to increase the incomes**. The representatives of sectors of the economy with **medium and lower productivity** look at the functioning of the organization rather **through decreasing the costs**.
- **There is a lack of employees** with both complex and simple working skills. In the first case, the requirements of enterprises concerning the labor force are justified; in case of the second one, however, it is either an inefficient field of activity or unsuitable managing strategies that are being applied.

- **Problems of the management** and organization are not sufficiently perceived. Only some of the interviewees used an opportunity to substantially analyze how to turn the management of the enterprise more effective.
- Management and the organization are seen to be static and people **do not think on the organization's capability to change** as a competitiveness-supporting factor.
- Creation of **cooperation** and collective knowledge, as well as the joint use of resources is insufficient. Also, the preparedness of enterprises for a **partnership with the State**, whom they perceive as a fairly abstract and distant phenomenon, is modest.

Besides the hitherto global economy, more attention should be paid also to the sector-based economy. That helps to pick out strong and competitive sectors of the economy and fields of activities on which the State should concentrate its attention and supports. We should deal primarily with the development of these fields where it is possible to achieve success in the longer perspective. When summarizing the analysis results, it can be said that in order to secure and increase the Estonian competitiveness, we will need both a flexible adaptation to the changing circumstances and a preparedness to actively influence the competition environment in the future. The future development of the Estonia's economy depends on how well we cope with these tasks.

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REGIONALE DISPARITÄTEN UND CLUSTERBILDUNGEN – HERAUSFORDERUNGEN FÜR EINE REFORM DER REGIONALPOLITIK

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Einleitung

Mit der Erweiterung der Europäischen Union haben sich die wirtschaftlichen Bedingungen für die Entwicklung der Regionen in den neuen EU-Beitrittsländern Mittelosteuropas nachhaltig verändert. Dabei ist zu beobachten, dass sich die Angleichung zwischen den Volkswirtschaften in den wichtigsten makroökonomischen Kennziffern Osteuropas und Westeuropas rascher vollzieht als die Überwindung der regionalen Ungleichgewichte innerhalb der "neuen" und "alten" EU-Mitgliedsländer. Trotz eines neuen einheitlichen Rahmens in Gestalt des EU-Binnenmarktes bestehen die Unterschiede zwischen den Regionen nicht nur fort, sondern können sich sogar im Ergebnis durchgeführter ausländischer Direktinvestitionen noch vergrößern. (Zschiedrich 2007)

In der Tat fördert die Globalisierung der Produktion die **Differenzierungsprozesse** nicht nur zwischen den Volkswirtschaften der EU. Vor allem durch zunehmende Foreign Direct Investment und Clusterbildungen wachsen die Ungleichgewichte zwischen den Regionen. (Zschiedrich 2006) Dies liegt darin begründet, dass die einzelnen Regionen und Sektoren recht unterschiedliche Voraussetzungen besitzen, um in die Bildung internationaler Wertschöpfungsketten eingebunden zu werden. Diese differenzierte regionale Wettbewerbsfähigkeit ist es auch, die dazu führt, dass die Globalisierung sowie die Öffnung der Märkte sich recht unterschiedlich auf die einzelnen Regionen auswirken. Es ist daher ein Ziel des Beitrages aufzuzeigen, wie sich die ausländischen Direktinvestitionen als "Motor" der Globalisierung auf die regionale Entwicklung auswirken. Hierbei wird in der Praxis klar erkennbar, dass die ausländischen Investoren sich weniger für einzelne Länder/Wirtschaften Mittelosteuropas als Ganzes interessieren, sondern eine viel größere Bedeutung erlangen regionale Clusterräume. Besonders deutlich wird dies am Bsp. der Herausbildung von Clustern in der Automobilindustrie (vgl. Regionen wie Bratislava, Györ, Mlada Boleslav, St. Petersburg etc.). Mit anderen Worten: "*Competition for FDI is now no longer between nations, but more between strongly networked regions – so called Industrial Clusters*." (Mc Kinsey Report 2004) Ein weiteres Ziel dieses Beitrages ist es deshalb, die Wirkungen von Clusterbildungen auf die regionalen Entwicklungen darzustellen. Hier sollten die verantwortlichen Regionalpolitiker in den neuen EU-Beitrittsländern, die bereits in den westlichen Industrieländern (Japan, USA, Deutschland, Irland etc.) gesammelten Erfahrungen nutzen, die sich aus den Auswirkungen von Globalisierungsprozessen und internationalen Direktinvestitionen ergeben haben. Bereits vor einigen Jahren hatte der "World Investment Report" (2000) in diesem Zusammenhang jedoch auf eine Konsequenz aufmerksam gemacht: "*Where agglomeration economies are significant, the rest of the countries is of little relevance to the FDI decisions of multinational firms*". Dem muss die Regional-

politik auf nationaler und europäischer Ebene noch stärker Rechnung tragen. Der Zufluss ausländischer Direktinvestitionen allein wird somit als notwendige Bedingung keineswegs ausreichen, um ein stetiges Wirtschaftswachstum zu ermöglichen und vorhandene regionale Disparitäten abzubauen. Hier muss die Regionalpolitik mit moderner Clusterpolitik kombiniert werden, d.h. die Clusterförderung mit der Stärkung der kleinen und mittleren Unternehmen verbunden werden, damit es gelingt, die nationalen Firmen in den jeweiligen Regionen an das Produktivitätsniveau der transnationalen Unternehmen heranzuführen und die Betriebe in den Regionen in die globalen Wertschöpfungskette der Investoren fest zu integrieren. Da der Markt in den neuen EU-Beitrittsländern offenbar während des Transformationsprozesses allein nicht dafür sorgen konnte und regionale Disparitäten eher noch größer geworden sind, soll im Beitrag schließlich dargelegt werden, wie differenzierte Instrumente der Regionalpolitik dafür sorgen können, die beiden Ziele Konvergenz und Stärkung von Wachstumspolen miteinander zu verbinden. Dabei ist dem Prinzip, "wirtschaftliche Effizienz mit Subsidiarität und Dezentralisierung zu verknüpfen und an der Planung und Realisierung die auf regionaler Ebene Beteiligten einzubeziehen, stärkere Geltung zu verschaffen." (EU-Kommission 2007)

Theoretische Erklärungsansätze regionaler Entwicklungen und Ungleichgewichte

Im Wirtschaftsraum Osteuropa hatten Regionen unter planwirtschaftlichen Bedingungen eine primäre Bedeutung als administrative Planungsräume. Mit der europäischen Integration, den vollzogenen Transformationsprozessen und vor allem mit der Globalisierung haben die Regionen eine positive Aufwertung erlangt. So betont der Philosoph Hermann Lübbe zu Recht: "Je unauflöslicher wir in der zusammenwachsenden Welt miteinander global verbunden sind, umso entschiedener beanspruchen wir Selbstbestimmung im jeweils eigenen Haus, in der jeweiligen Region." (Lübbe 2007) Wie bereits betont, waren und sind die einzelnen Regionen auf die europäische Integration sowie die Globalisierung unterschiedlich vorbereitet. Jede Volkswirtschaft ist mehr oder weniger durch das Vorhandensein regionaler Disparitäten charakterisiert. Wie reagiert die Regionalökonomie auf diese Prozesse? Basierend auf den neoklassischen Gleichgewichtsmodellen war zunächst die zu Zeiten der Bildung des gemeinsamen Marktes (50er/60er Jahre) vorherrschende ökonomische Theorie der Auffassung, dass mit einer erweiterten und vertieften europäischen Wirtschaftsintegration zwangsläufig eine Konvergenz, d.h. eine Verringerung des Entwicklungsabstandes zwischen stärker und schwächer entwickelten Regionen einhergeht. Dies war wohl auch der Grund dafür, dass der Gründungsvertrag zur EWG (1957) so gut wie keine regionalpolitischen Kompetenzen oder Instrumente für die Gemeinschaftsebene vorsah (Ausnahme regionalpolitisch motivierte Beihilfen). Erst später – gestützt durch zwei neue Theorieansätze ("Neue Ökonomische Geographie" und "Theorie des endogenen Wachstums") – wurde sichtbar, "dass wirtschaftliche Integrationsprozesse durchaus auch zu einer Vergrößerung von regionalen Disparitäten führen können". (Lammers 2007) Diese neueren Ansätze (P. Krugman) gehen im Gegensatz zur Neoklassik nicht mehr davon aus, das "*free trade*" sowie die zunehmenden Verflechtungen durch Handel und Investitionen automatisch zu einer Konvergenz der regionalen Wirtschaftsräume

führen. Das Grundmodell der "Neuen Ökonomischen Geographie" (Krugman 1991) will zeigen, unter welchen Bedingungen es zu divergenten Strukturen zwischen Regionen kommt, die in wirtschaftliche Integrationsprozesse eingebunden sind. Allerdings lässt sich nicht zwangsläufig folgern, dass wirtschaftliche Integration zur Zunahme räumlicher Disparitäten führen muss. Nach P. Krugman ist dies im konkreten Fall abhängig von der Höhe der möglichen economies of scale, den Transportkosten sowie dem Anteil von Industriegütern an der Wertschöpfung in der jeweiligen Region. In einer späteren Phase des europäischen Integrationsprozesses (2000–2007) nahmen regionale Spezialisierungen als Bedingung und Folge von Clusterbildungen in Produktion und Forschung zu (Biotechnologie-, Automobil- oder Chemiecluster). Die europäische Integration verbunden mit der Osterweiterung der EU bewirkte innerhalb Mittelosteuropas sektorale und regionale Reallokationen von Ressourcen – unterstützt durch die Zuflüsse von ausländischen Direktinvestitionen seit Beginn der Transformationsprozesse. Zahlreiche Studien zeigten, dass die Einbindung in die europäische Integration und die Globalisierung Gewinner- und Verliererregionen in den Transformationsökonomien hervorbringt (vgl. Bsp. Ungarns). (Kocic 2004)

Der zweite Erklärungsansatz (Theorie des endogenen Wachstums) will vor allem erklären, warum ein Wirtschaftsraum wächst. Hier wird der Wachstumsprozess mehrerer Regionen analysiert und gefragt, ob es zu Spill-Over-Effekten zwischen den Regionen kommt. Angleichungsprozesse werden dabei dann beschleunigt, wenn Faktorwanderungen u.a. in Verbindung mit Direktinvestitionen, Verlagerungsprozessen (Outsourcing und Offshoring) sowie passiven Lohnveredelungsgeschäften stattfinden. Dieser Theorieansatz verdeutlicht, dass räumlich begrenztes Wissen, Know-How, Lernerfahrungen (z.B. in Knowledge-based Clustern, vgl. Dublin/Irland) Divergenzen statt Konvergenzen zwischen den Regionen einer Volkswirtschaft begünstigen kann.

Fazit: Aus den neueren theoretischen Erklärungsansätzen folgt, dass wirtschaftliche Integration sowohl Divergenz- als auch Konvergenzprozesse auslösen. Nicht alle Regionen innerhalb der "neuen" und "alten" EU-Mitgliedsländer profitieren gleichermaßen von der europäischen Integration, der Osterweiterung der EU und der Globalisierung der Produktion. Viel hängt davon ab, wie eine einzelne Region mit Produktionsfaktoren ausgestattet ist. Damit bietet die neue Wachstumstheorie eine Grundlage, um die Wettbewerbsfähigkeit von Regionen zu erklären. Schließlich gewinnt gerade in Verbindung mit der Bildung von regionalen Clustern die Untersuchung von Agglomerationsvorteilen einzelner Regionen zunehmendes Gewicht für die regionalökonomische Forschung. (Alecke, Untiedt 2003)

Clusterbildungen – Bedingungen zur Erhöhung der regionalen Wettbewerbsfähigkeit

Die Wirtschaftspolitik hat in den letzten Jahren national wie international die Clusterbildung erfolgreich genutzt, um die Wettbewerbsfähigkeit ausgewählter Regionen zu verbessern (vgl. z.B. Clusterinitiative im Freistaat Bayern). Was charakterisiert Cluster und warum erweisen sie sich sowohl aus unternehmerischer

wie auch regionalpolitischer Sicht als enorm wichtig? Modernes "Clustering" ist sowohl bei der inhaltlichen Ausgestaltung nationaler Regionalpolitiken als auch im globalen Kontext "*State of the art*". (Porter 1998)

Hierbei darf natürlich nicht überzogen werden. Nicht jede Agglomeration, nicht jeder Zustrom von Direktinvestitionen führt gleich zu einem Cluster. Zunächst ist zu fragen, ob die wesentlichen konstitutiven Elemente für ein "echtes" Cluster auch tatsächlich vorhanden sind, bevor Entscheidungen über eine regionalpolitische Förderung getroffen werden. Cluster sind in der Tat etwas "Besonderes" und bedürfen daher einer besonderen Beachtung durch die Wirtschafts- und Regionalpolitik – gerade in den neuen EU-Mitgliedsländern, weil dieser Ansatz dort bisher nicht intensiv verfolgt wurde.

Die theoretischen Erklärungsansätze für die Clusterbildung resultieren aus der Konfiguration von Wertschöpfungsketten (Porter 1991/1998; Krugman 1998; Krätke 2001; Zschiedrich 2006) sowie der Fokussierung auf die räumliche Konzentration (Rehfeld 1999). Während im Zentrum des internationalen Managements bei der Clusteruntersuchung die Analyse der international verflochtenen Wertschöpfungsketten steht (z.B. in der Autoindustrie Mittelosteuropas, vgl. Zschiedrich 2006/2007), rückt die wirtschaftsgeografische Betrachtung die räumliche Zusammenballung von verschiedenen Finalproduzenten, Zuliefererunternehmen, Institutionen, Dienstleistern, Ausbildungsstätten, Forschungsinstituten sowie Finanzeinrichtungen klar in den Mittelpunkt. Die begriffliche Einordnung zur Clusterthematik ist also sehr breit gefächert. So können für die Erörterung von Clustern bzw. des Clusteransatzes die Definitionen in verschiedenen Wissenschaftsbereichen herangezogen werden. Im Kern der wirtschaftswissenschaftlichen Herangehensweise kann konstatiert werden: Cluster sind Zusammenballungen von Unternehmen eines bestimmten Wirtschaftsbereiches in einer Region, die eine höhere Produktivität und mehr Innovation generieren als räumlich weiter aufgefächerte Strukturen. Der Clusterbegriff in dieser Form stellt auf ein regionales Profil ab, in dem das Cluster ein wesentlicher Teil ist. Das Zusammenspiel der unternehmerischen und regionalen Ebenen stellt an sich keine erstmalige Thematik dar. Im Kern des Clusteransatzes steht aber eine neue Qualität regional verankerter Wettbewerbsvorteile und Wachstumsimpulse. Zu betonen ist hier die Verknüpfung von Marktbeziehungen mit nicht-marktförmiger Zusammenarbeit, die zu einer regionalen Clusterung von Wachstumsressourcen führt, aus der sui generis neue Vorteile erwachsen. Für die Beantwortung der Frage, welche Charakteristika Cluster kennzeichnen und warum Unternehmen in derartigen regionalen Branchenhäufungen überwiegend erfolgreicher sind, können spezifische Erklärungsgerüste aufgezeigt werden.

Zu berücksichtigen sind dabei vor allem die veränderten weltwirtschaftlichen Strukturen. Diese beziehen sich im Kern auf die vertiefte internationale Arbeitsteilung und die zunehmende Relevanz von Informationen und Wissen als Erfolgsfaktoren in der unternehmerischen Leistungserbringung. Darauf aufbauend kann die Erläuterung von Clusterbildung durch die Betrachtung von zunehmenden Skalenerträgen (*economies of scale*) und Verbundsvorteilen (*economies of scope*) gezielt aufgezeichnet werden. Ausgangspunkt sind hier die Vorteile, welche bei der

mehrfachen und zeitverzögerten Nutzung von Produktionsfaktoren sowie der Generierung von Skalenvorteilen entstehen. Zu nennen sind hier unternehmensübergreifende Produktionsverbünde sowie Forschungseinrichtungen und das lokal verwurzelte implizite Wissen in Netzwerken. Dahinter steht die Vorstellung, dass aus dem eigenen Wissenspool des Clusters mehrere Unternehmen in unterschiedlichster Anwendungsform entlang der Wertschöpfungskette profitieren können. Als ausschlaggebend für clusterspezifische Interaktions- und Kooperationsmöglichkeiten und im besonderen für die Konzentration der Unternehmen auf spezielle Teile der Wertschöpfungskette muss daher der Aspekt der Nähe angesehen werden. Herauszustellen ist, dass auf der einen Seite Unternehmen Cluster als standortspezifische Wettbewerbsvorteile sowohl nutzen als auch gleichzeitig durch ihr Engagement Vorteile generieren. Auf der anderen Seite erschaffen sich bestimmte Regionen als Aggregate dieser einzelwirtschaftlichen Aktivitäten einen wirtschaftlichen Wachstumsvorsprung gegenüber anderen Regionen. Sie sind somit wettbewerbsfähiger.

Die Formierung von regionalen Industrieclustern kann auf zwei Ebenen diskutiert werden. Zum einen kann die Clusterbildung entlang der Wertschöpfungskette und zum anderen auf der gleichen Wertschöpfungsstufe ansetzen. Vor allem bei Prozessen auf der gleichen Wertschöpfungsstufe handelt es sich dabei gleichermaßen um Kooperation als auch um Wettbewerbsprozesse. In Folge einer solchen Clusterbildung treten Spill-Over-Effekte auf. Diese zumeist positiven Effekte bewirken eine Beschleunigung des Entwicklungstempos, da die sich selbst verstärkenden Wissensaustauschs- und Wissensanhäufungsprozesse der Verbesserung der Produkte und Dienstleistungen der Unternehmen eines Clusters zu Gute kommen. Generell kann gesagt werden, dass sich die Wettbewerbsfähigkeit somit entlang der Wertschöpfungskette fortpflanzt bzw. auf der gleichen Wertschöpfungsstufe verstärkt und sich im Cluster konzentriert.

Fassen wir die wichtigsten Merkmale zusammen, die ein Cluster charakterisieren, so zeichnet sich folgendes ab:

Erstens: In Clustern findet ein intensiver Austausch von Wissen, Gütern, Informationen, Dienstleistungen und Lernerfahrungen statt. Sie zeichnen sich aus durch eine hohe räumliche Konzentration (vgl. Biotechnologiecluster im Raum München, Holzwirtschafts- und Filmwirtschaftscluster Brandenburg, Mikroelektronikcluster Dresden, Elektronikcluster Szekesfehervar in Ungarn, Autozuliefercluster Graz, Autoindustriecluster in Bratislava oder in Györ etc.). Räumliche Nähe ist dabei sowohl für das Funktionieren von arbeitsteiligen Leistungserstellungsprozessen (z.B. in der Elektronik, Halbleiter- und Autoindustrie) etwa innerhalb von Just in Time Netzwerken großer Automobilfirmen (u.a. Toyota in Japan, Audi in Deutschland) besonders wichtig. Räumliche Konzentration erweist sich immer von Vorteil, wenn starkes Vertrauen zwischen den Kunden erforderlich ist (z.B. gemeinsame Forschungsvorhaben oder gemeinsame Entwicklungen zwischen Nutzer und Anbieter/ Kunde und Produzent). Hier soll z.B. auf positive Erfahrungen in der japanischen Industrie verwiesen werden: "*High-value production in Japan depends not only on a good quality worforce but also on a strong local network of specialist cubsontrac-*

tors to provide parts and services. In turn, Japan-based industrial customers with exacting standards force manufactures to make constant improvements. In the automotive, consumer electronics and precision machinery industries, such networks of companies feeding ideas to and from each other are perhaps more concentrated in Japan than anywhere else in the world… If our clients have a problem (with the design of a new part) it is very helpful that they have such a short distance to come to talk to us about it. In this way ("Clustering") new products can be rapidly improved." (Financial Times 2005)

Zweitens: Ein weiteres Merkmal mit besonderer regional- und industriepolitischer Relevanz sind die durch Clusterbildungen erreichbaren Spillover- und Synergieeffekte. Es sind gerade diese Effekte, welche moderne Cluster insbesondere für die Regionalpolitik so interessant machen, weil es darum geht, "Ausstrahlungseffekte" in den wirtschaftlich noch zurückliegenden Regionen zu erzielen (Zulieferer-kooperationen, Wertschöpfungspartnerschaften, Gemeinschaftsunternehmen auch mit Firmen aus schwächeren Regionen). Ein positives Beispiel sind dafür die zahlreichen Gemeinschaftsunternehmen in der tschechischen Automobilzulieferer-industrie, die im Rahmen der Kooperation zwischen Volkswagen und Skoda in den letzten 15 Jahren gegründet wurden. Während in der Vergangenheit Cluster vor allem lokale, regionale oder nationale Märkte "bedienten", müssen heute moderne Cluster auch im internationalen d.h. grenzüberschreitenden Kontext identifizierbar sein und in einer entsprechenden Kombination von EU- und nationalen Förderungen mit substantiellen Mitteln ausgestattet werden. Beispielgebend hierfür ist das EU-Großprojekt "Global Cluster", wo 20 Partnereinrichtungen aus 12 EU-Ländern (darunter Estland, Polen, Slowakei, Slowenien, Ungarn) eingebunden sind. Ziel ist dabei die Vermittlung von internationalen Geschäftskontakten und die Anbahnung von Geschäftsbeziehungen im Rahmen von Kooperationsbörsen. Hervorhebenswert ist, dass die Aktivitäten in den Grenzregionen zwischen den alten und neuen EU-Mitgliedsländern stattfinden (z.B. im slowakischen Nitra). Das Projekt "Global Cluster" trägt direkt zur Clusterbildung in solchen Branchen wie z.B. Nahrungs-mittelindustrie, Umwelt, erneuerbare Energien und Maschinenbau bei (Ost-West-Contact 2007).

Der Clusteransatz ist insgesamt in den neuen EU-Ländern noch relativ jung – im Gegensatz zu den westlichen Industrieländern (USA, Japan, Schweiz, Deutschland, Österreich u.a.). Die nachfolgende Übersicht (tabelle 1) vermittelt ein Bild über die Herausbildung von Clustern in den verschiedenen Regionen innerhalb der MOE-Wirtschaften (untergliedert nach Wirtschaftsbereichen).

Tabelle 1. Überblick über Clusterbildungen in MOE

Regionen	Land	Regionen	Land
Agricultural Cluster		**Industry Cluster**	
Yugoiztochen	Bulgaria	Severen Tsentralen	Bulgaria
Jihozápad	Czech Republic	Yuzhen Tsentralen	Bulgaria
Jihovýchod	Czech Republic	Severovýchod	Czech Republic
Dél-Dunántúl	Hungary	Střední Morava	Czech Republic
Dél-Alföld	Hungary	Moravskoslezko	Czech Republic
Lithuania		Estonia	
Lubelskie	Poland	Közép- Dunántúl	Hungary
Małopolskie	Poland	Nyugat- Dunántúl	Hungary
Podkarpackie	Poland	Dolnoslaskie	Poland
Podlaskie	Poland	Śląskie	Poland
Świętokryskie	Poland	Nord-Vest	Romania
Nort-Est	Romania	Centru	Romania
Sud / Sud-Vest	Romania	Slovenia	
		Západné Slovensko	Slovakia
Basic Service Cluster		**Business Servce Cluster**	
Severozapaden	Bulgaria	Kujawsko-Pomorskie	Bulgaria
Severoiztochen	Bulgaria	Lódzkie	Czech Republic
Střední Cechy	Czech Republic	Wielkopolskie	Czech Republic
Steverozápad	Czech Republic		
Észak-Magyarország	Hungary		
Észak-Alföld	Hungary		
Latvia			
Lubuskie	Poland		
Opolskie	Poland		
Pomorskie	Poland		
Warminsko-Mazurskie	Poland		
Zachodniopomorskie	Poland		
Sud-Est / Vest	Romania		
Stredné / Východné Slovensko	Slovakia		

Quelle: Römisch, Ward 2005: 41–42.

Regionale Disparitäten – Resultat ungleicher Verteilung ausländischer Direktinvestitionen

Regionale Industriecluster und ausländische Direktinvestitionen haben für das Wirtschaftswachstum in den mittelosteuropäische eine große Bedeutung. Allerdings – und dies ist kein Phänomen in den neuen EU-Mitgliedsländern allein – haben sie bisher wenig zum **Abbau** regionaler Ungleichgewichte beigetragen, ja diese eher sogar noch vergrößert: "*All in all it can be argued that there no signs that FDI contributed to reducing the income and productivity gaps within the countries. FDI tend to cement the development gap between stronger and lagging regions*." (Koko, Gustavson 2004)

Dies zeigt sich darin, dass mehr als 90% der Bevölkerung der neuen EU-Länder in Regionen leben, wo das BIP pro Kopf unter 75% des Durchschnitts der EU-25 (2005) liegt. Was die ungleiche Verteilung der FDI innerhalb der MOE-Wirtschaften betrifft, kommt der Dritte Bericht der EU-Kommission zur wirtschaftlichen und sozialen Kohäsion u.a. zu folgenden Erkenntnissen: "*FDI tends to go disproportionately to the stronger rather than the weaker parts of EU. Within western countries FDI is generally concentrated in and around large cities, especially national capitals, with very little going to lagging regions. The same general pattern is evident in the accession countries. In 2001, over two-thirds of inward FDI into Hungary went to the Budapest region, over 60% of inflows into the Czech Republic to the Prague region and a similar proportion of inflows into Slovakia to Bratislava (63%). In Poland, on the other hand, where there are a number of large cities apart from Warsaw, FDI inflows are less concentrated. Nevertheless, the capital city region (Mazowieckie) accounted for around a quarter of total inflows in 1998 and two other regions (Lódzkie and Wielkopolskie), both of which contain large cities (Lodz and Poznan), for another quarter.*" (EU-Commission 2004)

Die Tabellen 2 und 3 veranschaulichen die Aufteilung der FDI nach Regionen in der CR, Ungarn, Polen und der Slowakei, wobei erkennbar ist, dass in Polen die Verteilung etwas ausgewogener erscheint infolge einer größeren Zahl von Ballungszentren.

Tabelle 2. Distribution of inwared FDI by region in selected new EU Member States, in % of country totals

Czech Republic		Hungary		Poland		Slovakia	
Praha	49.3	Közép-Magyarország	67.7	Mazowieckie	24.3	Bratislavský	63.2
Strední Cechy	10.7	Közép-Dunántúl	9.4	Śląskie	13.5	Východné Slovensko	18.8
Jihozápad	7.6	Nyugat-Dunántúl	7.5	Wielkopolskie	11.6	Západné Slovensko	10.3
Severozápad	8.2	Észak-Magyarország	6.2	Dolnośląskie	8.4	Stredné Slovensko	7.7
Severovýchod	6.6	Dél-Alföld	4.0	Pomorskie	7.3		
Jihovýchod	8.4	Észak-Alföld	3.5	Łódzkie	5.9		
Strední Morava	5.2	Dél-Dunántúl	1.8	Małopolskie	5.6		
Moravskoslezko	4.0			Kujawsko-Pomorskie	4.1		
				Zachodniopomorskie	3.9		
				Lubelskie	2.8		
				Podkarpackie	2.5		
				Swietokryskie	2.3		
				Warminsko-Mazurskie	2.3		
				Lubuskie	2.2		
				Opolskie	1.8		
				Podlaskie	1.6		

Quelle: EU-Commission … 2004: 111.

Tabelle 3. FDI inflows by regions in Poland

Region (Wojevodschaft)	Number investment projects
Pomorskie	144
Zachodniopomorskie	95
Warminsko-Mazurskie	57
Kujawsko-Pomorskie	111
Podlaskie	36
Lubuskie	63
Wielkopolskie	242
Mazowieckie	801
Łódzkie	160
Dolnośląskie	207
Lubelskie	59
Świętokryskie	54
Opolskie	47
Śląskie	390
Małopolskie	141
Podkarpackie	2.5

Quelle: PAIiIZ 2004.

Die Daten über die regionale Verteilung der FDI innerhalb der MOE-Wirtschaften sind jedoch nicht eindeutig zu interpretieren, denn "*These figures, however, can be misleading since a large proportion of enterprise investment tends to be assigned to the region in which the company headquarters are situated, which is much more likely to be the capital city region than any other.*" (Römisch, Ward 2005)

Dennoch bleibt der Gesamteindruck bestehen, wonach die FDI-inflows diproportional in nur wenige Regionen fließen, meist in solche die an den Grenzen zu den EU-15 Ländern liegen (z.B. Ungarn, Slowakei) oder in solche, die sich um die Hauptstädte gruppieren (z.B. Stredni Cechy um Prag). Besonders markant wird dieses Muster am Beispiel der regionalen Verteilung der FDI in Ungarn: "*Likewise in Hungary over the same period, the inflows of FDI to Nyugat-Dunántúl, the region bordering on Austria, were more than five times as large as those to Dél-Alföld, once again adjusted for the working-age population, whereas those to Közép-Dunántúl were almost three times as large. The more detailed data on Hungary, which take account of the company headquarters problem by using information on the location of investment cited in company accounts, show a similar degree of concentration, with the jobs generated by such investment being located disproportionately along the Austrian border (see Fazekas, Ozsvald 2004). Over the period 1993–2002, it is estimated that foreign-owned enterprises were responsible for an 8% net increase in jobs among the workingage population in high-employment regions concentrated along the western border, whereas the corresponding increase in low-employment regions was less than 2%.*" (Römisch, Ward 2005)

Abbildung 1 verdeutlicht die ungleiche regionale Vereilung in Ungarn und in Tschechien:

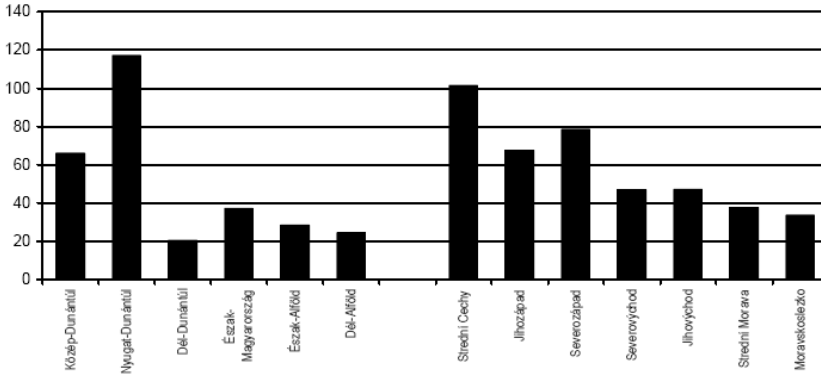

Abbildung 1. FDI per Person (aged 15–64) in CZ and HU. Relative to country average (HU, CZ = 100), 1999–2002 average.

Im Ergebnis der ungleichen Verteilung der FDI innerhalb der neuen Mitgliedsstaaten ist zu konstatieren, dass durchaus vorhandene Konvergenzen sehr differenziert verlaufen sind: "*The faster growth of incomes per capita in the NMS, however, is unevenly distributed across the regions within the NMS: in practice only few NMS regions, mainly the capital cities, converge quickly towards the EU-27 average income (or, on rare occasions, even surpass that level), while the bulk of the NMS regions is lagging behind. Given the latest trends and the economic prospects of the NMS regions, it seems likely that these gaps across the NMS regions will widen even further.*" (Landesmann, Römisch 2006)

Was die Arbeitsmarktlage anbetrifft, so zeichnen sich analoge regionale Differenzen innerhalb der neuen EU-Länder ab: "*Employment prospects for workers in all educational categories seem to be more favourable in the NMS capital cities or in the regions that are specialized in modern industries, whereas prospects in the agricultural regions and partly also in the old-industry regions are bleaker, given those regions' peripheral location as well as their low attractiveness for domestic and foreign investors. Irrespective of the type of region, however, what is more important for the future prospects on the NMS labour markets is dhe development of the services sector, as shown by the experiences in the Southern and Northern OMS regions. Hence it is expected that, with rising incomes in the NMS regions, a broader range of services will be developed that will generate new employment opportunities for people of all educational attainment levels, but most importantly for those with only basic schooling. At the same time the development of the manufacturing sector in some of the Southern OMS regions also indicates that, despite a general decline of this sector, Western NMS regions that are specialized particularly in modern industries may be on the verge of becoming industrial core regions, with relatively high incomes per capita and good employment prospects.*"

Einige Fakten sollen diese qualitativen Aussagen veranschaulichen:

Die EU-Erweiterung hat sich bisher stärker auf die Disparitäten zwischen den Regionen innerhalb der EU-Länder als zwischen den einzelnen EU-Wirtschaften als Ganzes ausgewirkt: "*Whereas around 73 million people, some 19% of the EU15 population, live in regions where average GDP per head in the years 1999 to 2001 was below 75% of the EU average, according tot he latest estimates, almost as many, some 69 million of the 74.5 million who will become EU citizens in 2004 (92% of the total), live in regions with GDP per head below 75% of the EU25 average in the new Member States.*" (EU-Commission 2004)

1995 hatten 78 der derzeit 268 Regionen in der EU-27 ein Pro-Kopf-BIP von weniger als 75% des EU-27 Durchschnitts ("Rückständige Regionen"). Von diesen 78 Regionen lagen 51 in den neuen EU-Mitgliedsstaaten und 27 in der restlichen Union. Von den 51 Regionen in den neuen Mitlgliedsstaaten hatten 39 ein Pro-Kopf-BIP von weniger als 50% des EU-Durchschnitts. Nur 4 Regionen aus den neuen EU-Mitgliedsländern hatten ein Pro-Kopf-BIP von über 75% des EU-Durchschnitts: Prag, Bratislava, Kypros und Malta.

Allerdings sind auch Aufholprozesse von rückständigen Regionen zu verzeichnen: "Die Lage verbesserte sich bis 2004 deutlich, als es nur noch 70 rückständige Regionen gab, 49 davon in den neuen Mitgliedsstaaten und 21 in der restlichen Union. Bei den drei Regionen der neuen Mitgliedsstaaten und 21 in der restlichen Union. Bei den drei Regionen der neuen Mitgliedsstaaten, in denen das Pro-Kopf-BIP auf über 75% des EU-Durchschnitts angestiegen war, handelte es sich um Slovenia und um zwei Regionen, in denen jeweils die Hauptstadt liegt: Mazowieckie in Polen und Közép-Magyarország in Ungarn. Die Tatsache, dass es trotz des in diesem Zeitraum relativ starken Wachstums in diesen Ländern nicht mehr Regionen waren, ist ein Hinweis auf das niedrige Pro-Kopf-BIP, von dem sie ausgingen. Gleichzeitig ging die Zahl der Regionen mit einem Pro-Kopf-BIP von weniger als 50% des EU-Durchschnitts von 39 auf 32 zurück. Maltas Pro-Kopf-BIP ging 2004 bis auf knapp unter 75% des EU-Durchschnitts zurück." (EU-Kommission 2007)

Zusammenfassend bleibt festzuhalten, dass die erhofften materiellen Effekte der ausländischen Direktinvestitionen in den EU-Beitrittsländern räumlich/regional begrenzt geblieben sind. Überdurchschnittliche Pro-Kopf-BIP Entwicklungen oder Aufholprozesse in puncto Einkommen-, Produktivitäts- und Beschäftigtenentwicklung sind begrenzt geblieben auf einige Clusterregionen vor allem an den EU-Grenzen (hoher Spezialisierungsgrad) und haben dort – bedingt durch die höhere regionale Intensität der FDI – vielfältige positive Effekte für das regionale Wachstum hervorgebracht (vgl. z.B. Ungarische Regionen an den Grenzen zu Deutschland und Österreich). Somit kann gesagt werden, dass die Integration der Regionen in MOE in die westlichen Märkte mit klaren regionalökonomischen Divergenzen einhergeht.

Konsequenzen für die künftige Regionalpolitik (Zeitraum 2008–2013)

In Verbindung der gegenwärtigen Diskussion über eine Reform der EU-Regionalpolitik lautet die entscheidende Ausgangsfrage: Konvergenz und/oder Förderung ausgewählter regionaler Wachstumspole. Mit anderen Worten: Soll die Regionalpolitik in der Periode 2008–2013 ihre Schwerpunktsetzung in Richtung auf Ausgleich zwischen schwächeren und wirtschaftlich stärkeren Regionen setzen oder sollen regionale Cluster gefördert werden? Es kann nicht geleugnet werden, dass dabei ein potenzieller Zielkonflikt zwischen dem Wachstums- und Ausgleichsziel besteht. Wenn der traditionelle Fokus der Regionalpolitik zugunsten des Wachstumsziels verschoben wird, so kann dies die regionalen Disparitäten vergrößern.

Es ist zu bedenken, ob eine ausschließliche Ausrichtung der Strukturpolitik auf verbesserte internationale Wettbewerbsfähigkeit inkl. gezielter Bildung regionaler Cluster auf den ersten Blick nicht den Bedürfnissen der wirtschaftlich am wenigsten entwickelten Regionen gerecht würde. Dies gilt insbesondere noch für jene Regionen in den neuen EU-Beitrittsländern, wo grundlegende Voraussetzungen für moderne regionale Cluster (u.a. Verkehr, institutionelle Infrastruktur, leistungsstarke Zuliefererunternehmen) häufig erst noch aufgebaut werden müssen.

Bislang wurden drei Förderprioritäten verfolgt. (Lagemann, Schmidt 2007):

a) die Förderung von Regionen mit Entwicklungsrückstand (Ziel 1), d.h. Regionen mit einem BIP pro Kopf von nicht mehr als 75% des EU-Durchschnitts. Mehr als zwei Drittel (im Zeitraum 2000 bis 2006) der Strukturfondsmittel sind zur Realisierung dieses Ziels eingesetzt worden (über 200 Mrd. Euro!).
b) die Revitalisierung von Regionen mit Strukturproblemen (Ziel 2), deren Bevölkerung zu etwa zwei Dritteln in Industrie- und städtischen Gebieten und zu einem Drittel in ländlichen Gebieten wohnt; und die Unterstützung der Bildungs-, Ausbildungs- und Beschäftigungspolitik (Ziel 3).

Die Mittel des Europäischen Regionalfonds (EFRE) kamen bisher in Ziel 1- und Ziel 2-Regionen zum Einsatz, die Mittel aus dem Europäischen Sozialfonds (ESF) darüber hinaus in den Ziel 3-Regionen.

Im Wesentlichen finden diese drei Förderprioritäten in der kommenden Förderperiode 2007 bis 2013 ihre Fortsetzung. Allerdings wird sie eine veränderte Ausgestaltung der EU-Strukturfondsförderung mit sich bringen, die es zu bewerten gilt. Durch die modifizierten Förderrichtlinien wird der Ausgestaltungsspielraum der EU-gestützten Strukturpolitik insgesamt erhöht. Insbesondere die flexiblere Definition der Fördergebiete des Europäischen Regionalfonds (EFRE) ist sinnvoll, da dadurch die Chancen für einen effektiven Mitteleinsatz gesteigert werden.

Auch im Zeitraum 2007–2013 wird der allergrößte Teil (283 Mrd. Euro) zur Erreichung des Konvergenzziels verwendet, während andererseits eine stärkere territoriale Kooperation – auch ein Merkmal von modernen Clusterbildungen – mit 8.72 Mrd. Euro gefördert wird. Dies ist unbedingt zu forcieren, denn Kooperation befördert die Integration der Märkte, beschleunigt Wachstum und Spezialisierung.

Werden diese Aktivitäten jedoch wie bisher nur auf Metropolregionen begrenzt, so wachsen die regionalen Disparitäten, was schließlich dem Konvergenzziel entgegenwirkt. Wo ist der Ausweg aus diesem programmierten Zielkonflikt in der EU-Regionalpolitik? Die Leitlinien der EU-Kommission für die Ausgestaltung der strategischen Rahmensetzung der EU-Strukturfonds weisen in die richtige Richtung, indem ein zweites Standbein der Ausgestaltung angestrebt wird: die Erhöhung der regionalen Wettbewerbsfähigkeit in Anlehnung an die Lissabon-Strategie durch die Förderung regionaler Cluster. Wenn man bedenkt, dass das Ausgleichsziel bislang in der EU-Regionalpolitik gegenüber dem Wachstumsziel den Vorrang hatte und auch beachtet, dass Investoren sich vor allem für wachstumsstarke Clusterregionen interessieren, so muss im Sinne der in diesem Beitrag fixierten Merkmale und Vorzüge von Clustern einfach in der Wirtschafts- und Regionalpolitik mehr getan werden, um über eine Clusterförderung mehr Wachstum und Wettbewerbsfähigkeit zu erreichen. Daher wird die Auffassung vertreten, dass Konvergenz zulasten des gesamtwirtschaftlichen Ergebnisses (höheres Wachstum und Innovation) nicht das Ziel von wirksamen Förderungsprogrammen im Zeitraum 2007–2013 sein kann. Lässt sich der Abbau regionaler Disparitäten nicht schneller und nachhaltiger erreichen, wenn man sich auf die Förderung von Wachstum durch den Aufbau von Clustern konzentriert. Konkret würde dies bedeuten – auch in Auswertung negativer Erfahrungen in den 90er Jahren insbesondere in einigen der neuen Bundesländer, dass vorrangig Wachstumspole in Clusterregionen gefördert werden und nicht die Mittel vorrangig in die rückständigsten Regionen fließen. Die Erkenntnisse der Clusterforschung unterstützen diese Position, denn der Aufbau von Clustern dauert mindestens 20 Jahre – in wirtschaftlich rückständigen Regionen sogar noch länger.

Für diesen Ansatz (vorrangige Förderung der Wachstumspole anstelle einseitiger Mittelzuweisung in wirtschaftlich rückständige Regionen) sprechen folgende Argumente:

Erstens: Eine ausschließliche Umverteilung der Mittel in strukturschwache Regionen gleicht quasi zwar das wirtschaftliche Niveau (Lebensstandard, Einkommen) künstlich an, manifestiert jedoch andererseits auch den wirtschaftlichen Rückstand, indem "echte" wirtschaftliche Angleichungsprozesse verhindert werden.

Zweitens: "Ferner könnte eine Konzentration allein auf die bedürftigsten Regionen unter ökonomischen Aspekten eine gesamtwirtschaftliche Einbuße bedeuten, da dadurch die vorhandenen Ressourcen nicht effizient eingesetzt werden. Dies wäre der Fall, wenn wohlhabende Regionen aufgrund ihrer finanziellen Belastung zur Aufbringung der Transfermittel ein nur geringeres Wachstum erzielen könnten und dadurch das gesamtwirtschaftliche Wachstum insgesamt geringer ausfällt als ohne Transfers. Konvergenz entsteht schließlich durch überdurchschnittliches Wachstum der rückständigen Regionen bei unterdurchschnittlichem Wachstum der wohlhabenden Regionen." (Miehe-Nordmeyer 2007)

Drittens: Das in den Clusterregionen vorhandene höhere wirtschaftliche Wachstum führt dazu (vgl. Automobilcluster in der slowakischen und tschechischen Wirtschaft), dass die wirtschaftlich rückständigen Regionen davon direkt profitieren. Die

Knappheit von Arbeitskräften in den Ballungsräumen erhöht die Nachfrage in anderen Regionen und die begrenzte räumliche Aufnahmefähigkeit von Investitionen führt dazu, dass ehemals rückständige Regionen durch deren preiswertere Ausstattung mit Produktionsfaktoren neuerdings stärker in das Zentrum von Investitionsaktivitäten geraten (vgl. hierzu aktuelle Entwicklungen in Region Nógrád/Ungarn oder in Region Podkarpackie/Polen und auch in Russland, wo Moskau als Region bereits als "übersättigt" gilt und die Investoren ihre Aufmerksamkeit auf andere Regionen richten wie z.B. Nischnij Nowgorod, Krasnojarsk, Omsk, Tomsk u.a.).

Zu Konvergenzprozessen kann es innerhalb der Volkswirtschaften in den neuen EU-Ländern kommen, wenn rückständigen Regionen durch "Spillovereffekte" einen höheren Wachstumspfad mittel- und langfristig einschlagen werden im Vgl. zu den traditionellen Zentren, die keine langfristigen neuen Wachstumsimpulse mehr implizieren.

Ein Erfolg im Umlenken der EU-Regionalpolitik ist dabei direkt davon abhängig, ob und wie es gelingt die nationalen regionalen Förderpolitiken darauf voll einzustellen: "Dass auch bei der nationalen Förderpolitik inzwischen ein Umdenken weg von der "Gießkanne" einer flächendeckenden Förderung zugunsten der Förderung von Wachstumspolen und Clustern eingesetzt hat, zeigt, dass auch beide Optionen verbunden werden könnten, indem eine Konzentration der Fördermittel auf bedürftige Regionen stattfindet, thematisch jedoch eine Fokussierung auf wachstumsrelevante Themen erfolgt." (Miehe-Nordmeyer 2007)

Bleibt abschließend festzuhalten, dass eine stärkere Orientierung auf die Förderung regionaler Cluster jedoch ohne eine ausgleichende Komponente auch nicht funktioniert. Daher geht es um die richtige Balance zwischen ausgleichs- und wachstumsfördernden Zielen in der Regionalpolitik und nicht um ein "Entweder – Oder". Die Kombination der beiden Ziele der künftigen EU-Regionalpolitik hat die verantwortliche Kommissarin für die EU-Regionalpolitik im "Vierten Bericht über den wirtschaftlichen und sozialen Zusammenhalt der EU" wie folgt umrissen: "Es bleibt noch viel zu tun. Die Erweiterung der EU auf 27 Mitgliedstaaten hat die geografischen Unterschiede innerhalb der Union vergrößert, da erheblich mehr unserer Mitbürger in benachteiligten Regionen leben. Die Einebnung dieser Unterschiede ist nur langfristig möglich, und deshalb haben die am wenigsten entwickelten Regionen für die Kohäsionspolitik absoluten Vorrang. Gleichzeitig stehen aber praktisch alle Regionen vor der Notwendigkeit, zur restrukturieren, zu modernisieren und stetig wissensbasierte Innovation zu fördern, um im globalen Wettbewerb bestehen zu können. Die Strategie leitet sich daher aus einer Gesamtschau und der Erkenntnis ab, dass die Wettbewerbsfähigkeit aller Regionen in der EU gestärkt werden muss, damit sie einen Beitrag zur Lissabon-Strategie für Wachstum und Beschäftigung leisten können." (Hübner 2007)

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