Economics Department
Economic Policy Office

LABOUR MARKET REVIEW

Diana Tur
Natalja Viilmann
Andres Saarniit

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MAIN DEVELOPMENTS IN 2006

The extremely fast economic growth in 2006 had also a great impact on labour market indicators. The increasing demand for labour spurred the employment growth to 6.4% from 2.0% in the previous year. Higher employment brought along a decrease in unemployment and an abrupt fall in the number of the inactive. That is, 26,700 people entered the labour market from among the inactive.

A strong relation between economic growth and employment dynamics was also noticeable in the second half of the year when along with a slight slowdown in economic growth (from 11.7% in the first half of 2006 to 11.1% in the second half) also the employment growth rate fell (from 6.8% in the first half to 6.1%; see Figure 1 and Table 1).

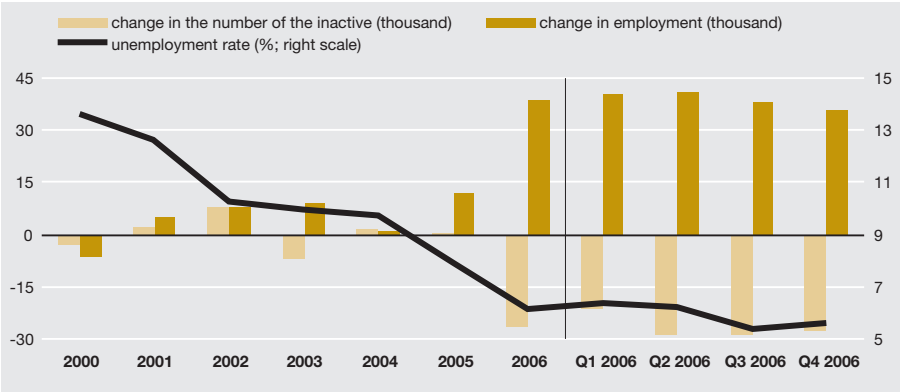


Figure 1. Main labour market indicators

In 2006, opening the labour markets of the EU Member States to Estonian citizens continued but the resulting outflow of labour appeared to be lower than initially estimated. Thus, several obstacles to Estonian citizens to start employment in another EU Member State disappeared. In relation to that, the impact of labour outflow on local enterprises and wage formation has strengthened.

The above processes – the increasing demand for and decreasing supply of labour, and the integration of the labour market with the EU – were reflected in faster wage growth which accounted for 16.2% in 2006 and even amounted to 17.5% in the fourth quarter. Wage growth picked up mainly in the private sector, being somewhat slower in the public sector.

Comparing the increase in wages and productivity, it can be said that in 2006 average wages grew considerably faster than productivity. Under other equal conditions, this should refer to a decrease in the competitiveness of Estonian enterprises. Nevertheless, profits rose even faster than wages.

Table 1. Main labour market indicators

	Change y-o-y (%)							Change y-o-y (thousand)						
	2004	2005	2006					2004	2005	2006				
Population (as at 1 January)	**-0.37**	**-0.26**	**-0.17**					**-5.0**	**-3.6**	**-2.3**				
Employment status (15 to 74 years old)	**2004**	**2005**	**2006**	**Q1 2006**	**Q2 2006**	**Q3 2006**	**Q4 2006**	**2004**	**2005**	**2006**	**Q1 2006**	**Q2 2006**	**Q3 2006**	**Q4 2006**
Workforce	-0.2	0.1	4.1	3.3	4.5	4.4	4.3	-1.4	0.5	27.2	21.7	29.7	29.0	28.3
employed	0.2	2.0	6.4	6.8	6.7	6.2	5.9	1.2	11.9	38.9	40.2	40.9	38.2	36.1
manufacturing	5.1	-0.9	-2.2	5.3	-5.3	-7.0	-0.8	6.8	-1.4	-3.1	7.0	-7.8	-10.1	-1.1
unemployed	-3.9	-17.9	-22.4	-29.7	-20.7	-19.6	-17.0	-2.6	-11.4	-11.7	-18.5	-11.2	-9.0	-7.9
less than 6 months	-17.2	-12.3	-15.6	-22.8	-5.1	-3.6	-27.5	-4.4	-2.6	-2.9	-4.7	-0.9	-0.6	-5.3
6 to 11 months	-9.8	-38.0	-7.0	-32.6	-10.8	80.6	-16.7	-1.0	-3.5	-0.4	-2.8	-0.8	2.5	-0.6
12 months or more	9.2	-16.0	-30.1	-33.3	-33.0	-41.6	-8.1	2.8	-5.3	-8.4	-11	-9.5	-10.9	-1.9
24 months or more	7.0	-15.3	-37.4	-29.9	-40.5	-56.4	-24.1	1.4	-3.3	-6.8	-6.0	-7.9	-9.7	-3.9
Inactive	0.3	0.1	-6.9	-5.4	-7.6	-7.3	-7.2	1.3	0.3	-26.7	-21.3	-29.1	-28.6	-27.8
Total	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.5	0.5	0.5	0.5	0.5
	Level (%)							**Change (percentage points)**						
Participation rate	62.9	62.9	65.5	64.7	66.0	65.40	65.70	-0.1	0.0	2.6	2.1	2.8	2.7	2.7
Employment rate	56.8	57.9	61.6	60.5	62.0	61.90	62	0.1	1.1	3.7	3.8	3.9	3.6	3.4
Unemployment rate	9.7	7.9	5.9	6.4	6.2	5.40	5.60	-0.3	-1.8	-2.0	-3.1	-1.9	-1.6	-1.4
Wages	**2004**	**2005**	**2006**	**Q1 2006**	**Q2 2006**	**Q3 2006**	**Q4 2006**	**2004**	**2005**	**2006**	**Q1 2006**	**Q2 2006**	**Q3 2006**	**Q4 2006**
	Level (EEK)							**Change (%)**						
Average gross monthly wages	7,287	8,073	9,350.5	8,591	9,531	9,068	10,212	8.4	10.8	16.2	15.7	15.0	16.5	17.5
manufacturing	6,696	7,526	8,823.3	8,048	8,824	8,826	9,595	8.4	12.4	17.6	15.8	15.7	18.0	20.6
Average net monthly wages	5,675	6,411	7,524	6,952	7,659	7,310	8,175*	9.6	13.0	17.4	17.2	16.3	17.7	18.2
Minimum wages	2,480	2,690	3,000	3,000	3,000	3,000	3,000	14.8	8.5	11.5	11.5	11.5	11.5	11.5

* authors' estimates

A more vigorous wage growth could be observed only in the second half of the year. Thus, given the fast growth it has been easy for firms to raise prices and thereby maintain their profitability. At the same time, this conclusion might be somewhat premature since there are controversies between different statistical data.

LABOUR DEMAND AND SUPPLY

Labour force participation and economic inactivity

The number of the inactive and the labour participation rate changed drastically in 2006. When in 2005 the rate of labour participation in the age group of 15 to 74 accounted for 62.9%, in 2006 it hiked to 65.5%. Compared with the previous year, 27,200 persons more entered the labour market.

The decrease in the number of the inactive was an all-time record, namely 6.9%. Across regions the most inactive were added to the labour market in Tartu County and Ida-Viru County (7,000 and 6,000, respectively). Over three thirds of employment growth could be ascribed to the former inactive.

The labour force increased in all age groups (see Figure 2). People in the prime working age (aged 25 to 49) formed the majority of entrants to the labour market. Their number grew faster in the first three quarters of the year (by 8,600, 12,200 and 16,800 people, respectively, year-on-year), whereas in the fourth quarter the growth rate decreased a little (13,200). While in the first quarter the number of the young (aged 15 to 24) in the labour force increased by 6,800 and decreased by 300 in the second quarter year-on-year, then in the third and fourth quarters the number rose by 1,900 and 7,400 respectively. The activity of the elderly (aged 50 to 74) increased too.

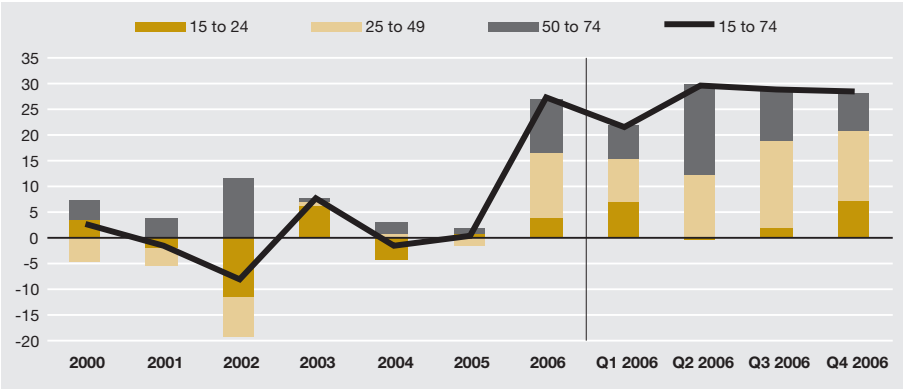


Figure 2. Contribution to employment growth by age groups (thousand people)

The labour participation or the activity rate reflects the percentage of workforce in an age group and population of a region. Apart from the economic situation the number of participants in the

labour force also depends on population changes. The population increases or decreases and this process is subject to births, deaths and the inflow and outflow of labour. When in 2004–2005 the youth participation rate decreased, in 2006 it started to increase, rising to 35.5% from 34% in the previous year. This indicator rose quite steadily throughout the year and most probably will rise further. The survey of the Federation of Estonian Student Unions, which covered 4,532 students from the Estonian institutions of higher education and was published at the end of last year, showed that 59% of the students were employed full-time. In comparison, less than one third were employed in 2003. 88% of the working students stated that they could not continue studies without working. The favourable economic situation increased the opportunities of finding a suitable job. According to the survey, ever younger and younger students are being employed and the working conditions are becoming more flexible.

In order to relieve labour shortage at least partly, a continuous rise in the activity of the elderly (aged 50 to 74) is necessary. Compared with the previous year, it has risen by 2.6 percentage points. This has resulted from the gradual rise in women's pension age and wages and in the number of vacancies. Owing to the growing demand for labour, the labour participation rate of people in their prime working age increased as well.

Apart from age, people's behaviour on the labour market is also affected by their mobility in the regional context. Mobility can be defined as readiness to go to work far from home or to change the place of residence if the journey to work is long or travelling to work from the distance is hindered for some reason. However, the elderly are less active in changing the job. Although the differences between regions have reduced during the last years, the development of the Estonian labour market was still quite uneven across regions in 2006. In larger centres, like Tallinn, Tartu and Pärnu where the majority of foreign investment is accumulated, development remained stable; in smaller regions, the labour market indicators differed substantially (see Figure 3).

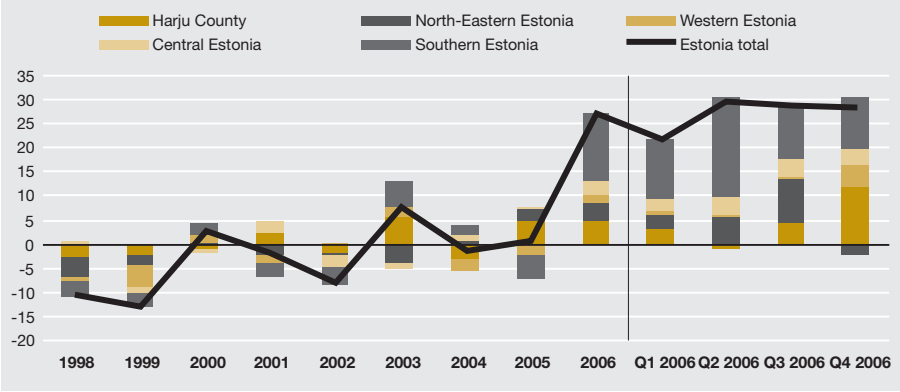


Figure 3. Contribution to employment growth by regions (thousand people)

Through times the activity rate has been the highest in Harju County and Tallinn (almost 69–70%) and the lowest in Võru County (about 50–51%). In 2006, higher activity was noted among the population of Southern Estonia and Ida-Viru County.

Based on the data of Statistics Estonia on the distance between the main job location and the person's place of residence, two thirds of the newly employed found work within 20 kilometres from their place of residence, whereas one third (11,700 persons) were ready to cover longer distances.

Labour outflow from Estonia most probably picked up in 2006. Since labour mobility within the European Union is not subject to registration (especially in the case of short-term jobs), we have to rely on estimates due to the lack of reliable statistics. On one hand, labour outflow appeared to be smaller than expected in some especially "black" scenarios. For example, Finnish trade unions stated in the press that they expected every third Estonian to strive to work in Finland (at that time trade unions tried to justify the need for establishing restrictions on opening the labour market). On the other hand, labour outflow was still an essential factor in the employment structure, wage negotiations as well as in the flow of income earned. According to the labour survey of the International Labour Organisation (ILO), the number of employees in the third quarter of 2006 included almost 11,000 Estonian residents employed abroad (5,000 more than in 2005), which is likely to be underestimated owing to the nature of the survey.

Some EU states have established special regulations. For example, in Ireland a few benefits are related to registering permanent residency. In Finland, firms can only employ taxpayers, i.e. people registered in the Finnish Labour Market Board, for long-term work (over 6 months). Consequently, in relation to reorganising the Population Register the Estonian Ministry of Internal Affairs entered 8,506 persons of Estonian origin who have registered themselves as permanent residents of Finland into the Finnish Population Register.

At the same time, the majority of people who have gone to work in Finland have no intention of staying there for a very long time. In case wage differences decrease or they cannot find a suitable job, they do not rule out returning to Estonia.

Employment

Employment grew by 6.4% (38,900 people) in 2006 (see Figure 4). The growth was fast already in the first half of the year, slowing down a little in the third and fourth quarters. When in the first and second quarters the employment growth picked up to as much as 6.7–6.8%, in the third and fourth quarters it slowed down to 6.2% and 5.9%, respectively. Nevertheless, during the last three quarters the total number of employees remained almost unchanged at 650,000, escaping the usual seasonal fluctuations.

Some changes pointing to higher labour market flexibility occurred in the employment structure. The percentage of people working part-time (on their own accord) rose, whereas that of the underemployed fell. Employment outside usual working hours also increased – 63,700 more people than

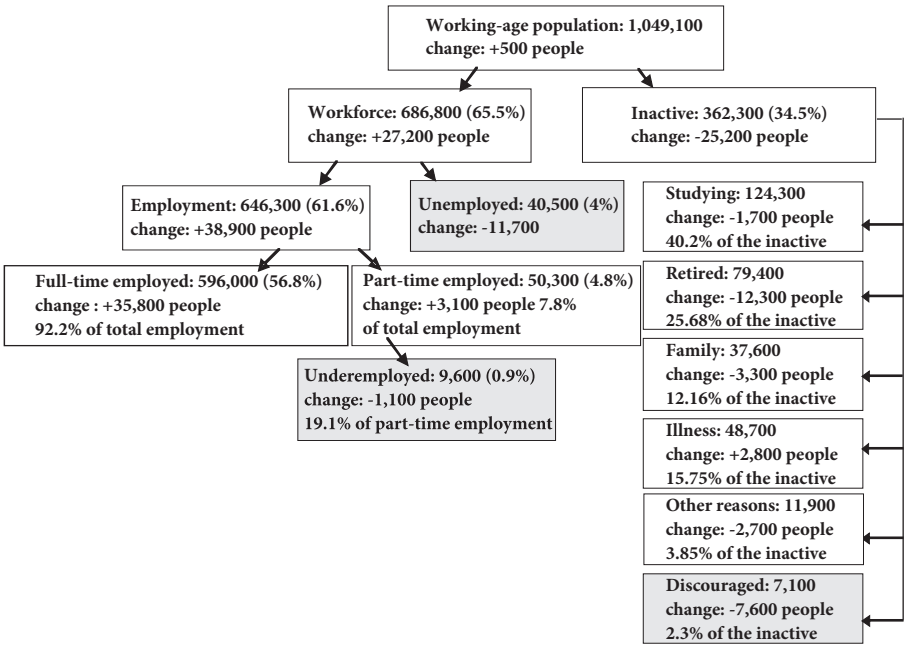


Figure 4. Estonian labour market in 2006 and change compared to 2005 (% of the working population, i.e. 15 to 74 year-olds)

in 2005 worked often or sometimes in the evening or at night (i.e. after 6 PM); 35,200 more people worked on Saturdays and Sundays, and 1,900 more people worked at home compared with the previous year. Since many people of pension age and students added to the labour market from among the inactive, this trend might continue with the spread of flexible forms of working.

By sectors, employment increased the most in the services sector, growing by 7.8% (28,600 people) year-on-year and accounting for 74% of total employment growth. Employment grew in almost all fields of activity in that sector. The highest increase occurred in wholesale and retail trade (by 8,100 people) and in transport, storage and communications (by 6,900 new employees). The slowest growth was witnessed in the field of hotels and restaurants where the number of employees even decreased in the second half-year. The public sector received almost 14,000 new employees last year and the share of that sector in total employment rose from 24.5% in 2005 to 25.2%. This resulted mainly from higher employment in health care and social welfare where 4,500 new employees were added year-on-year.

Employment in the secondary sector (involving manufacturing, construction, mining and quarrying, and electricity, gas and water supply) grew more modestly: by 5.0%, i.e. by 10,200 people.

Growth was boosted by the growing number of construction workers – 14,100 people (29%) were added there. The number of employees in construction increased steadily throughout the year, and the upward trend was even accelerating. Since employment statistics cover employees both in Estonia and abroad (partly), this development may have resulted from the continuous growth in the number of construction projects in Estonia and the increase in the number of construction workers abroad. In manufacturing, employment decreased by 2.2%. In other words, the 12.8% growth of the value added in manufacturing was achieved with a smaller number of employees, which means that productivity increased significantly.

Employment decreased slightly further in the primary sector. Year-on-year, the total change was close to zero (weakly negative), whereas in the last quarter the number of employees even increased (see Figure 5).

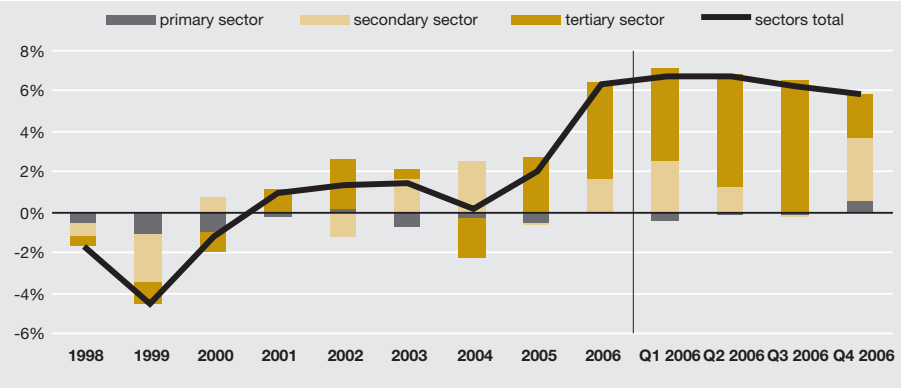


Figure 5. Employment growth and contribution by sectors

By regions, the employment growth was positive in 2006 in all five regions. Employment increased the most in Southern Estonia (on average by 13,900 people). Like the labour participation rate, the employment rate varies a lot across regions: it has been the highest of all times in Tallinn (67.5% in 2006) and the lowest in Western Estonia (56.3%) and the North-Eastern Estonia (56.7%).

The employment rate among people aged 15 to 74 rose on average from 57.9% to 61.6%. Interestingly enough, growth was more extensive in regions which usually experience low employment rates: in Ida-Viru County (over 5 percentage points) and in Southern Estonia (4.5 percentage points). In Southern Estonia employment increased in different age groups, whereas in Ida-Viru County it rose considerably only among the elderly (10.3 percentage points) and the young (8.9 percentage points). In Western Estonia the youth employment rate decreased but the employment rate increased quite fast among people in their prime working age.

One of the objectives of the EU Lisbon Strategy was to raise the employment rate of people aged 15 to 64 to 67% by the year 2005 and to 70% by the year 2010. Estonia met the target for 2005 in 2006 when the respective figure stood at 67.7%.

Contrary to 2005 when employment was boosted by the rise in the number of white-collar workers[1], whereas the number of blue-collar workers[2] decreased, employment rose more steadily in 2006 and the number of blue-collar workers increased even more. This is in line with the rise in the number of sales staff and skilled construction workers. In Northern Estonia the number of white-collar and blue-collar workers increased almost equally (by 7,400 and 6,300, respectively). In Southern Estonia the number of white-collar workers surged by as much as 8,600 people, whereas the number of blue-collar workers grew by only 4,100). In Central and North-Eastern Estonia the situation was different: while the number of blue-collar workers increased by 10,000 people in total, that of white-collar workers decreased a little.

Vacancies

Although the statistics on vacancies of the Labour Market Board are not representative and thus do not extend to the entire Estonian economy (according to Statistics Estonia only 1% of employees who have found a job during the period under analysis have found it through the Estonian Labour Market Board), the present analysis makes use of such statistics as one possible indicator of labour demand (see Figure 6).

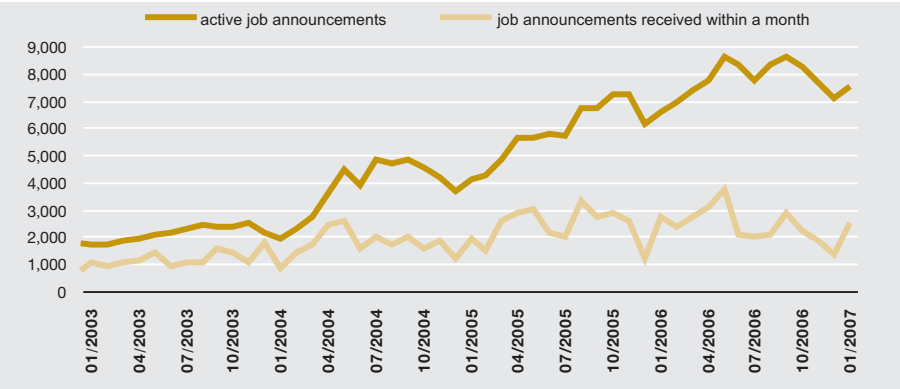


Figure 6. Job announcements submitted to the Labour Market Board

[1] White-collar workers: lawmakers, senior officials and executives; specialists and technicians; officials.

[2] Blue-collar workers: service and sales staff; skilled workers in agriculture and fishing; skilled workers and craftsmen; operators of equipment and machinery; unskilled workers; military personnel.

The number of announcements on vacant jobs submitted during one month has been rather volatile across months and in the last couple of years it has fluctuated around the level of 2,000 positions. The number of valid vacancy announcements submitted to the Labour Market Board during the period was considerably larger in 2006, exceeding the figure for 2005 by 33.2%. The growth in the number of valid announcements might mean that employers do not find suitable workforce and demand-side pressures have strengthened. This might arise either from supply constraints (insufficient qualification of present job-seekers, outflow of labour to other countries etc.) or too fast growth in demand.

Unemployment

Unemployment has been declining steadily in Estonia since 2001 but in the last two years the process has been especially rapid. In 2006, unemployment decreased by 2 percentage points to 5.9%, falling even to 5.5% in the second half of the year. The number of the unemployed declined on average by 22.4%, i.e. by 12,000 people during the year.

Year-on-year, the number of the **long-term unemployed** fell even faster than that of the short-term unemployed, and as a result their share in the unemployed decreased from 53.4% in 2005 to 48.1% (see Figure 7). This was partly caused by the fact that some of the inactive who returned to the labour market moved into the group of the short-time unemployed. In the fourth quarter, the decline in the number of the long-term unemployed slowed down and the number even increased quarter-on-quarter. Whether it was the first sign of the slightly declining demand-side pressures or an incidental fluctuation, should become clear from the figures for the following periods.

In 2006, unemployment declined in all **age groups**. The downward trend was especially rapid among the young: from 15.9% in 2005 to 12%. The unemployment rate of people in their prime working age stood at 5.6% and that of the elderly at 4.2%.

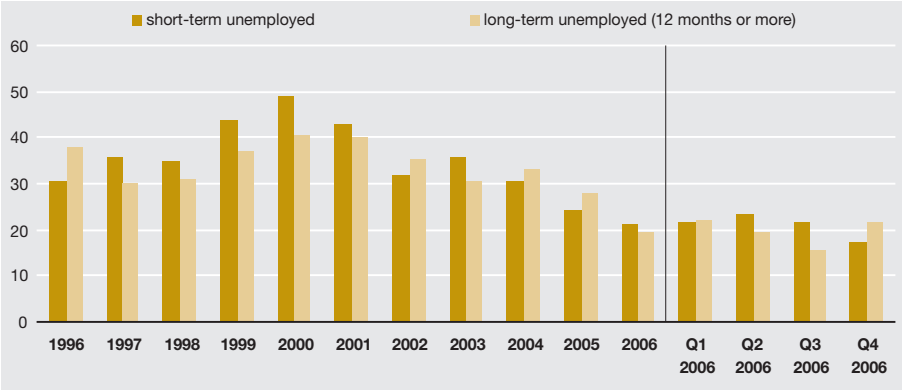


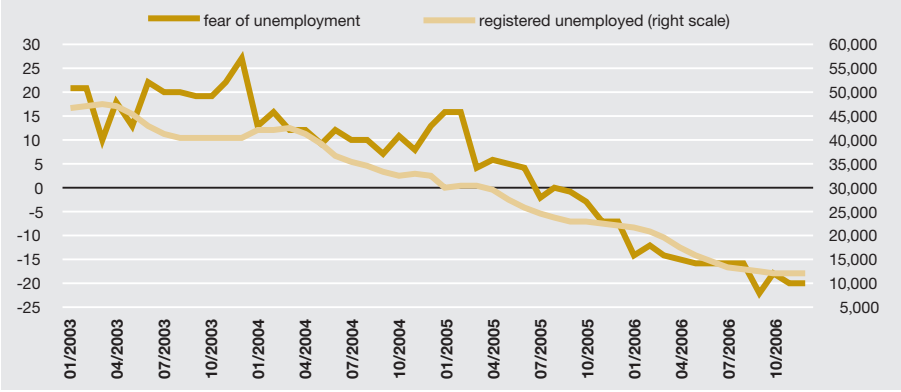
Figure 7. Number of short-term and long-term unemployed (thousand people)

The unemployment rate of **non-Estonians** decreased faster than that of Estonians. The number of the unemployed among Estonians declined by 4,300, whereas among non-Estonians it fell by 7,400.

The analysis of unemployment across **regions** shows that changes are especially positive on the labour market of Ida-Viru County where the unemployment rate declined by over 4 percentage points (from 16.2% to 12.1%). This is facilitated by the development of the Port of Sillamäe and more dynamic utilisation of the resources of Ida-Viru County. Transit and tourism are still the most promising sectors of the region but the services sector is also expected to pick up soon. Despite the decline in unemployment, Ida-Viru County still remains the region with the highest unemployment rate where insufficient language skills and the discrepancy between the quality of and requirements to labour constitute the greatest structural problems. The lowest unemployment rates were recorded in Western and Northern Estonia (4.0% and 4.3%, respectively).

According to the consumer barometer of the Estonian Institute of Economic Research, households estimated the **likelihood of becoming unemployed** to be lower compared to 2005 (see Figure 8). It means that people are increasingly more optimistic about the future, which in the long run might influence their consumption preferences.

Figure 8. Fear of unemployment according to the consumer barometer of the Estonian Institute of Economic Research and registered unemployment (thousand people)



According to the special survey published by the Eurobarometer, the population of Estonia differs from other Europeans for the fact that they are less concerned about unemployment than other citizens of Europe (in Estonia 12% are afraid of unemployment, whereas the EU average is 36%). The risks of immigration are also considered lower (in Estonia 1%; in the EU 14%). While many Europeans believe that the life of today's children is rather more difficult in the future than it is now (the most pessimistic are people in Germany, Sweden and France), then Estonian citizens (together with Finland, Ireland, Portugal, Lithuania and Latvia) are more positive and see the future of today's youth rather easier.

LABOUR COSTS AND PRICE PRESSURES

Average wages

Gross monthly wages increased by an average of 16.2% in 2006. The average wage growth accelerated further in the third and fourth quarters of 2006. The average gross monthly wages increased by 16.5% in the third and by 17.5% in the fourth quarter, year-on-year. The real growth of gross wages was above 12% (that of net wages exceeded even 13%), which means that the purchasing power of salaried employees increased robustly. The difference in the growth of net and gross wages still arises from reducing the personal income tax rate and raising the non-taxable income threshold (see Figure 9).

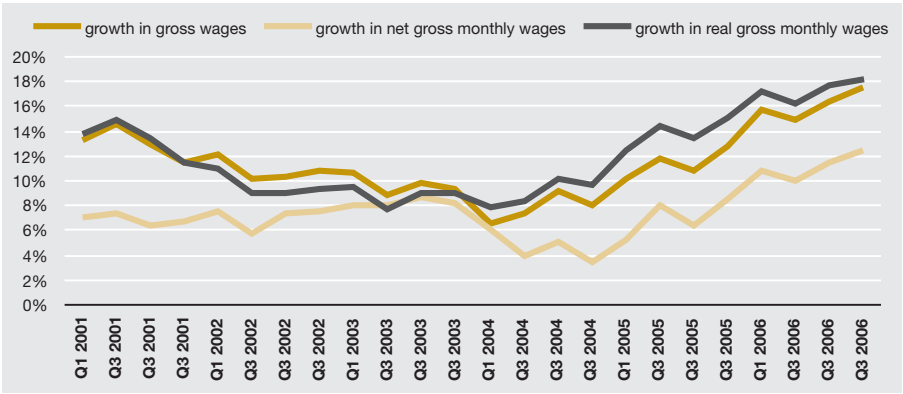


Figure 9. Developments in average wages

In 2007, the income tax rate was reduced further (by one percentage point to 22%); the non-taxable income threshold remained unchanged. In case gross wages increase further (by 17% or more) as expected in forecasts, the effective income tax rate will also rise as much under other equal conditions (by an average of 0.8 percentage points with a 17.5% rise in gross wages in the fourth quarter of 2006). This means that the reduction of the income tax rate this year might not bring along a relatively faster growth in net wages compared to the growth in gross wages, and the growth rates of gross and net wages might be considerably more in line.

By regions, wage growth was higher elsewhere in Estonia than in Tallinn and Harju County. When in Tallinn and Harju County the average wage growth totalled 15.8%, it stood at 19.7% in Tartu and Tartu County, at 18% in Viljandi and at 17% in Põlva. Taking into account that the wage differences between Harju County and other regions have been rather large in earlier periods, the faster wage growth in other regions might also refer to a decrease in wage differences. In this context, the situation did not improve in Ida-Viry County where the wage level is the lowest and the wage growth remained below Estonia's average, amounting to 12.8%.

The average wage growth in the second half-year was the fastest in wholesale and retail trade (21.2%) and agriculture (20.8%), especially in fishery (see Table 2). The rapid wage increase in agriculture can be explained by the low wage level and the greater impact of the EU agricultural subsidies. The robust wage growth in the field of fishery arose from getting over the recession of previous years, i.e. the very low base effect since the present wage levels are still low. In trade, both wages and employment increased very vigorously. According to the estimates of the Estonian entrepreneurs, the problem of labour shortage has become even more acute, which means that rapid wage growth is likely to continue.

In manufacturing, wage growth was above the average of all sectors (16.2%), namely 17.6%. Rapid wage growth continued in the construction and real estate sectors, slightly accelerating in the former and slowing down in the latter. It quite expectedly slowed down in health care from 21.3% last year to 14.3%, as the impact of the wage agreement concluded at the end of 2004 subsided.

Table 2. Growth in average gross monthly wages by fields of activity (%)

	2002	2003	2004	2005	2006	Q1 2006	Q2 2006	Q3 2006	Q4 2006
Average	**11.5**	**9.4**	**8.4**	**11.4**	**16.177**	**15.7**	**15.0**	**16.5**	**17.5**
Tradable sector									
Agriculture	18.3	8.9	13.1	18.0	20.8	23.5	22.5	17.4	20.4
Forestry	3.4	13.3	22.9	16.6	9.3	4.7	9.5	10.2	12.0
Fishery	19.4	-4.4	-1.4	4.5	54.2	62.2	43.4	32.7	77.4
Mining and quarrying	9.0	9.3	6.6	0.6	15.4	13.8	16.0	16.3	15.3
Manufacturing	10.0	9.0	8.4	12.8	17.6	15.8	15.6	18.0	20.6
Non-tradable sector									
Electricity. gas and water supply	8.8	9.3	6.0	13.6	7.8	4.4	7.0	8.7	10.8
Construction	12.6	13.5	11.7	14.6	19.1	23.4	13.7	19.0	20.8
Wholesale and retail trade	9.8	14.5	2.6	7.1	21.6	21.2	21.7	22.2	21.1
Hotels and restaurants	-5.8	17.7	8.5	22.1	12.7	5.6	15.8	14.1	15.0
Transport. storage and communications	9.4	4.1	9.3	10.7	13.7	11.7	13.4	13.4	15.9
Financial intermediation	8.2	9.8	3.0	9.8	2.4	5.0	2.9	-0.4	1.5
Real estate. renting and business activities	28.9	-0.4	15.4	6.1	16.1	18.4	16.6	16.1	13.9
Public administration and defence	12.7	8.7	8.2	9.6	13.7	11.2	13.9	12.6	16.6
Education	12.5	9.4	10.3	11.4	10.3	10.6	9.5	11.1	10.3
Health care and social welfare	4.5	15.0	13.9	21.0	14.3	10.9	14.5	14.6	16.9
Other	7.4	8.3	14.3	12.2	12.3	10.7	11.0	11.0	16.2

The extremely rapid wage growth last year shows that the labour market has changed and the cost of human capital has risen for entrepreneurs. The openness of the labour market has increased considerably and employees have more choices, including the opportunity to go to work abroad, which might give rise to additional wage pressures. However, the year-on-year growth of the total wage fund did not exceed that of the total value added produced and a positive gap of 0.2–0.3 percentage points between wage costs and GDP growth could be observed only in the second half of the year.

Like in the previous year, in 2006 wages grew more robustly in the private sector, increasing by 15.3%. In foreign-owned companies wage growth accelerated to 14.8% from the modest 6% level in 2005 (see Figure 10).

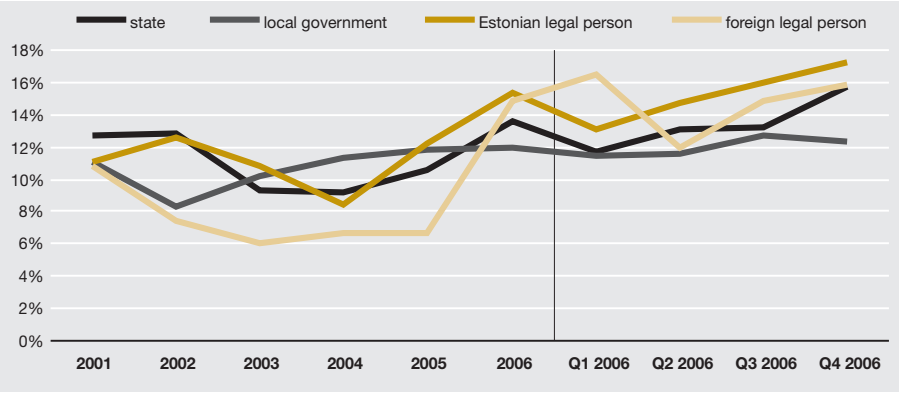


Figure 10. Average wage growth by employer's owner

According to the statistics of companies, the rapid wage growth in the private sector was possible because the value added increased even faster. In part, the dynamics of average wages gives a slightly overestimated picture of the labour cost growth in the corporate sector, as the decrease of working hours achieved per one employee on average (in the second, third and fourth quarters) might indicate some distortion because of the specifics of average wage statistics. Wage growth in the public sector has so far been in line with the increasing tax revenues and the strengthening of wage pressures is quite expected (especially as wage growth is accelerating also in the private sector) and viable provided that tax revenues are growing.

Unit labour costs

The real unit labour cost indicator compares the amount of expenditure per employee (mostly wages and taxes on labour) and labour productivity at current prices. Practically, the share of the value added spent on wages is calculated. Following the definition, the growth rate of unit labour costs is positive when labour costs per salaried employee grow faster than labour productivity in

nominal terms. When real unit labour costs increase, it normally indicates a decrease in the share of employer's profit in the value added (GDP).

Nominal unit labour costs compare labour costs per employee with real productivity, not with productivity calculated at current prices. The aim is to analyse inflationary pressures arising from wage growth, as enterprises have to increase prices of their products in order to retain profitability when wage growth exceeds productivity.

The decrease in **real unit labour costs** continued throughout 2006, though at a slower rate (see Figure 11). The situation varied during the year: when in the first half unit labour cost growth remained negative, then in the third and fourth quarters they grew by 0.8% and 0.2%, respectively. **Nominal unit labour costs** increased by 4–6% in the first three quarters of 2006, accelerating to 8.1% in the fourth quarter. Even though the growth rate of both indicators has accelerated since 2005 (the decline in real unit labour costs decreased), it is still not substantial against the background of longer time series. The acceleration of nominal unit labour cost growth might have triggered the increase in core inflation in Estonia, but without additional analysis it is not possible to present more precise standpoints.

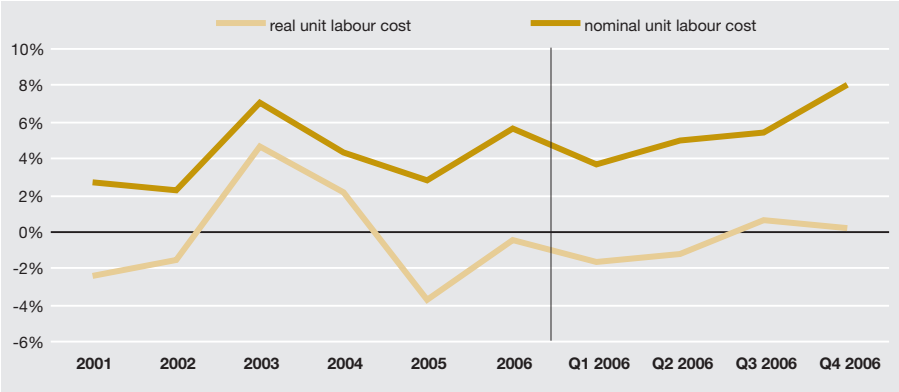


Figure 11. Real and nominal unit labour cost growth

By **sectors**, nominal unit labour costs grew faster than average in 2006 in the fields of activity targeting the domestic market. The indicators of manufacturing, which are important from the aspect of export competitiveness, have grown more modestly.

In 2006, **real unit labour cost growth** increased in financial intermediation and agriculture. In either field, however, it does not appear as if the decrease in profitability has caused problems. The specifics of financial intermediation is that the statistical treatment of the value added is different from that in other fields (it is partly divided between other fields of activity). In agriculture, the

rise in subsidies (from the EU Structural Funds and also from the Estonian funds owing to the co-financing obligation) enabled to increase the wage fund as well as the operating surplus. In other words, earnings in this field were larger than the value added produced. According to the GDP statistics calculated using the income method, the subsidies increased by 28.8% in 2006, and although more exact data on the allocation of resources to agriculture and other fields is lacking, both the wage fund and profits are likely to increase under such growth.

In other fields of activity, real unit labour cost growth was either extremely modest (in transport, storage and communications and related fields) or decreased further (in the fields of manufacturing, energy, construction, hotels and even in the public sector).

Table 3. Unit labour cost growth based on GDP statistics (%)

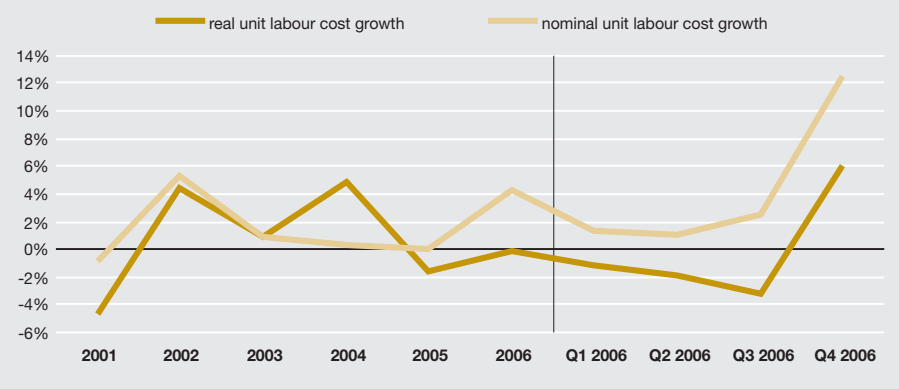
	2001	2002	2003	2004	2005	2006	Q1 2006	Q2 2006	Q3 2006	Q4 2006
Real unit labour cost growth										
Total economy	-2.4	-1.5	4.7	2.2	-3.8	-0.4	-1.7	-1.2	0.8	0.2
Primary sector	9.8	5.6	0.7	-2.0	-7.3	2.0	0.8	-3.8	-6.7	16.9
Secondary sector	-4.0	0.5	7.0	2.4	-3.2	-0.5	0.3	-0.8	-4.6	3.5
Private sector service providers	-1.4	-3.7	6.2	3.7	-2.0	1.7	-1.6	-1.3	7.3	0.5
Public sector	-2.9	-0.9	0.1	1.8	-0.7	-3.5	-1.5	2.5	-2.1	-5.9
Nominal unit labour cost growth										
Total economy	2.7	2.2	7.1	4.4	2.8	5.7	3.7	5.0	5.5	8.1
Primary sector	26.7	-3.0	-3.6	20.9	3.2	1.9	7.5	16.4	-13.6	0.4
Secondary sector	2.1	4.0	10.4	2.0	1.0	6.5	4.5	5.8	2.1	13.6
Private sector service providers	1.7	0.2	3.4	2.9	0.5	13.5	4.8	6.0	12.1	8.1
Public sector	4.1	5.9	10.3	9.0	8.0	-7.3	6.2	10.6	2.7	2.7

Source: Statistics Estonia, authors' calculations

In **manufacturing**, unit labour costs have grown quite modestly through years. Maintaining the competitiveness of manufacturing companies is important for the economy since a great part of its production is exported. Therefore, it is not eligible that the growth in labour costs would exceed the growth in productivity during a longer period. In the last two years, real unit labour costs have even decreased in manufacturing, which means that profitability has increased.

Although in the last quarter of 2006 unit labour costs rose relatively much in manufacturing (see Figure 12), it does not entail sharp changes in the overall situation. It is quite customary to pay larger bonuses for the performance of the entire year in the fourth quarter. In 2006, manufacturing companies also had greater possibilities for doing so. Should such a tendency continue throughout 2007, the profitability of the manufacturing sector might decrease again.

Figure 12. Unit labour cost growth in manufacturing



INSTITUTIONAL DEVELOPMENTS IN THE LABOUR MARKET

Minimum wage in Estonia

On 20 December 2006, the Board of the Confederation of Estonian Trade Unions (EAKL) and the Estonian Employers' Confederation (ETKL) approved of the terms and conditions of the minimum wage agreement. Thus the minimum monthly wage was set at 3,600 kroons (230 euros) from 1 January 2007. The minimum hourly wage was raised to 21.50 kroons. The minimum wage in Estonia accounted for 31.2% of average wages at the beginning of 2007 (34.6% in 2004).

Compared with other countries of the European Union, the minimum wage in Estonia (192 euros in 2006) ranked fourth among the Member States (Bulgaria and Romania excluded). The minimum wage was lower in Slovakia, Lithuania and Latvia (181, 174 and 129 euros, respectively). It was the highest in Luxembourg (1,503 euros) where the number of minimum wage earners is also relatively high (11%). The respective number is the lowest in Spain (0.8%) where the minimum wage amounts to 631 euros.

The larger the share of minimum wage earners, the higher the impact of this institutional instrument. According to Eurostat, 5.7% of the workforce earns minimum wages in Estonia. It is considerably less than in Luxembourg, France, Latvia or Lithuania, where this figure exceeds 11%, but more than in the United Kingdom, Spain, the Netherlands, Slovenia or Ireland where it remains below 3%.

High ratio of the minimum wage and average wages might indicate downward rigidity of wages, which slows down the creation of jobs for workers with very low level of skills in the private sector. In the entire EU, this ratio fluctuates from 30% to 50% across countries. In Estonia, it is rather low, which refers to the relative flexibility of the Estonian labour market.

According to the agreement the **minimum wage of civil servants** is also to rise. The minimum monthly wage now amounts to at least 7,475 kroons for an employee who has higher education, works full-time in the position which requires higher education, receives wages from the state budget and is a member of the Estonian Employees' Unions Confederation (TALO).

Unemployment insurance

Since 2007 the **terms and conditions** of unemployment insurance have become more favourable to employees. The period of years worked to comply with the necessary insurance period was extended. Unemployment insurance is paid to insured persons if they have paid the insurance premiums for at least 12 months during the 36 months prior to registration as unemployed. Until now the 12-month insurance period had to fit within 24 months prior to registration as unemployed. The change means that now also people who have held short-time jobs for several times can apply for unemployment insurance benefits.

The unemployed have to present **less data** than before to apply for benefits since the length of the unemployment insurance period and the amount of benefit is calculated on the basis of the information in the unemployment insurance database. If the unemployment insurance benefit calculated based on the wages of the unemployed is smaller than the unemployment allowance, the unemployment insurance benefit is paid in the amount of the unemployment allowance which is almost 1,000 kroons per month in 2007.

Income tax rate

On 1 January 2007, the income tax rate was reduced from 23% to 22%. The amount of the non-taxable income did not change – it is still 2,000 kroons per month. Income tax is withheld from payments made during the calendar year based on the tax rate valid in the year and month of payment, irrespective of the period for which the payment is made.

Changes in the Social Tax Act

Since 1 January 2007, the monthly rate that serves as the basis for minimum social tax liability is 2,000 kroons. Last year it was 1,400 kroons. Moreover, the list of people in case of whom the employer is not obliged to pay social tax by the monthly rate was extended by employees raising a child under three years of age, or three or more children under 19 years of age, and employees until 21 years of age who are obtaining basic education at Estonian schools or at equal foreign educational institutions, students acquiring general secondary education until 24 years of age, persons without basic education and pass the minimum school-leaving age while receiving vocational training, pupils obtaining vocational education on the basis of basic or secondary education, and students who are permanent residents of Estonia.

The 42.9% increase of the minimum social tax liability concerns more sole proprietors to whom business income is the only source of income, and a certain category of people (e.g. conscripts, unemployment allowance or child care allowance beneficiaries) for whom the social tax is paid by the state.

Table 4. Estonian labour market

		2003	2004	2005	2006	Q1 2006	Q2 2006	Q3 2006	Q4 2006
Population (as at 1 January)	thousand		1351.1	1347.0	1344.7				
Employment status (15 to 74 year-olds)									
Workforce	thousand	660.5	659.1	659.6	686.8	678.4	692.8	686.5	689.4
employed	thousand	594.3	595.5	607.4	646.3	634.7	650	649.6	650.7
unemployed	thousand	66.2	63.6	52.2	40.5	43.7	42.8	37.0	38.6
Inactive	thousand	387.4	388.7	389.0	362.3	370.6	356.3	362.5	359.7
Total	thousand	1,047.8	1,047.8	1,048.6	1,049.1	1,049.1	1,049.1	1,049.1	1,049.1
Labour participation rate	%	63.0	62.9	62.9	65.5	64.7	66.0	65.4	65.7
Employment rate	%	56.7	56.8	57.9	61.6	60.5	62.0	61.9	62.0
Unemployment rate	%	10.0	9.7	7.9	5.9	6.4	6.2	5.4	5.6
Employed by fields of activity									
Agriculture, forestry and fishery	thousand	36.7	35.0	32.2	31.1	32.3	34.4	30.5	31.1
Mining and quarrying	thousand	5.7	8.0	5.9	5.2	5.7	4.2	4.8	6.3
Manufacturing	thousand	134.1	140.9	139.5	136.4	138.0	138.2	133.3	136.0
Electricity, gas and water supply	thousand	10.2	12.0	12.5	12.4	14.1	12.1	12.5	10.7
Construction	thousand	42.9	46.8	48.7	62.8	52.3	61.4	64.3	71.7
Wholesale and retail trade	thousand	80.8	80.0	80.6	88.7	88.3	92.7	88.5	83.6
Hotels and restaurants	thousand	17.4	16.2	22.1	22.3	25.9	25.5	18.7	19.2
Transport, storage and communications	thousand	56.2	51.5	54.6	61.5	61.0	66.2	60.3	58.3
Financial intermediation	thousand	7.6	7.9	6.9	7.3	8.6	7.6	6.1	7.1
Real estate, renting and business activities	thousand	44.4	39.4	46.4	48.1	46.7	43.6	51.8	50.0
Public administration and defence	thousand	34.5	36.9	37.2	39.0	39.8	39.0	38.4	38.3
Education	thousand	56.9	54.5	54.9	58.5	58.9	59.2	56.9	56.0
Health care	thousand	36.4	37.5	35	37.5	33.8	32.1	43.1	40.5
Other	thousand	30.4	28.8	31.1	34.3	29.2	33.9	37.1	35.8
Unemployed by duration of unemployment									
Less than 6 months	thousand	25.6	21.2	18.6	15.7	15.9	16.9	16.1	14.0
6 to 11 months	thousand	10.2	9.2	5.7	5.3	5.8	6.6	5.6	3.0
12 months or more	thousand	30.4	33.2	27.9	19.5	22.0	19.3	15.3	21.7
24 months or more	thousand	20.1	21.5	18.2	11.4	14.1	11.6	7.5	12.3
Inactive by reason of inactivity									
Studies	thousand	119.5	123.1	126.1	124.4	126.7	123.4	125.1	122.4
Illness or disability	thousand	44.9	43.3	47.0	51.3	47.5	47.1	55.9	54.6
Pregnancy, maternity or parental leave	thousand	22.7	27.2	27.1	23.8	23.2	24.1	24.5	23.5
Need to take care of children or other family members	thousand	14.8	13.7	14.0	13.9	15.7	14.4	13.8	11.8
Retirement age	thousand	152.8	149.4	145.4	129.5	134.6	128.7	126.7	128.0
Discouraged people (lost hope to find work)	thousand	18.1	17.7	14.7	7.2	8.4	5.6	7.4	7.4
Other	thousand	14.5	14.4	14.6	12.2	14.6	13.0	9.1	12.0
Workforce by level of education									
First level and less	thousand	71.6	73.2	65.1	75.3	71.3	81.6	77.3	71.3
Second level	thousand	383.7	375.6	367.4	376.4	377.7	377.4	366.1	384.5
Third level	thousand	205.1	210.3	227.0	235.0	229.5	233.8	243.2	233.6
vocational secondary education	thousand	71.0	70.0	67.6	70.5	65.7	75.0	73.1	68.1
higher education	thousand	134.1	140.4	159.5	164.6	163.8	158.9	170.1	165.5

CAN CAPITAL PRODUCTIVITY GROWTH OFFSET THE HIGHER COST OF WORK?

One of the key indicators in analysing labour market development is real unit labour costs. Their decline indicates higher profitability, decreasing price pressures and improving competitiveness.

Even though the decrease or increase in unit costs signals a rise or fall in labour productivity, it does not say anything about the change in capital productivity. Unfortunately, it is impossible to utilise the indicators of capital because of the long time lag. Therefore, the following overview deals with changes in unit labour costs during 2001–2005 against the background of changes in capital stock and productivity.[3]

As pointed out in earlier surveys, real unit labour costs declined during 2001–2005 by almost 1%, although in 2003 and 2004 labour costs increased considerably. All in all, in this period unit labour costs increased in half of the ten key industries and decreased in the rest of them (see Table 3 in the main text). Meanwhile, capital productivity increased by 9 percentage points from 12% to about 21% (see Figure a).

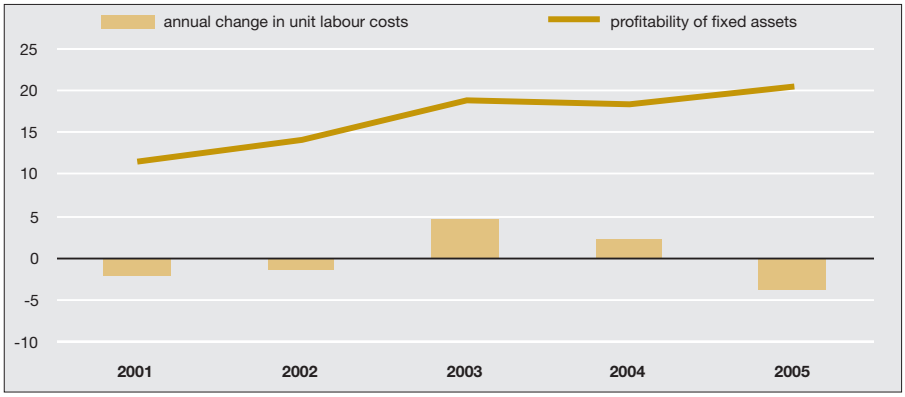


Figure a. Capital profitability and changes in real unit labour costs in 2001–2005 (%)

Assuming that capital productivity remaining at the level of 9% (i.e. the level at the beginning of the present decade) also indicates maintaining competitiveness and meeting investors' interest in profit, the above-mentioned unit labour costs could have grown during the entire period by approximately 5% instead (see the data series "bearable" in Figure b).

[3] In the present overview, unit labour costs or simply labour costs stand for real unit labour cost, i.e. unit labour cost measured in constant prices. Capital is defined as net tangible fixed assets measured in current prices. The source of information is the database of Statistics Estonia based on the sample of larger companies (the so-called EKOMAR database).

The previous statement does not mean that such acceleration in wage growth, which would not impair competitiveness, would have been possible in all sectors and fields of activity. Capital productivity growth was very diverse across fields of activity, being faster in cases of weaker competition and possible transfer of the rise in production costs to sales prices.

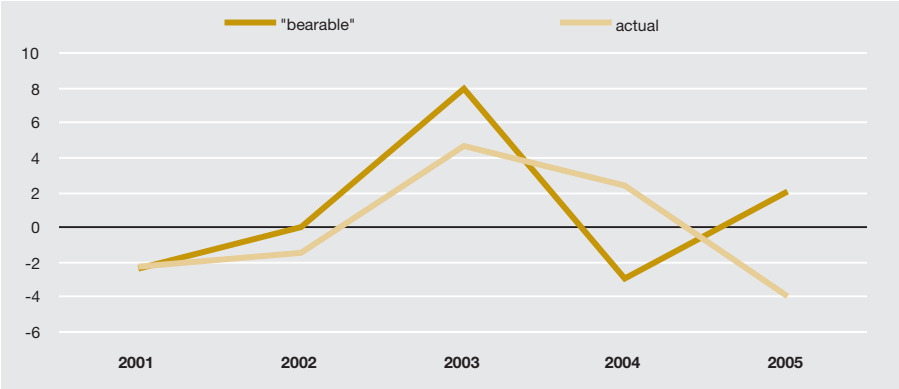


Figure b. Actual and "bearable" changes (i.e. not impairing capital profitability) in real unit labour costs in 2001–2005 (%)

Excluding from the aggregate indicators of the Estonian economy mining and quarrying as well as energy, which enjoy the status of monopolies, the capital productivity indicator for the total economy would have improved by at least 2 percentage points less. The indicators of construction and real estate sectors do not easily conform to the logic of measuring production efficiency through fixed assets as one of the main inputs. For example, in both sectors it is possible to use rented assets; part of the fixed assets should be classified as output etc.[4] Therefore, it is reasonable to exclude besides natural monopolies also the construction and real estate indicators from changes in the profitability of fixed assets. As a result, it appears that the productivity of fixed assets improved more modestly: at the end of 2005 it stood at 21%, exceeding the 2000 figure by only 2 percentage points.

In manufacturing, which holds the largest share in the export sector, capital productivity remained at the same level as in 2000 – nearly 18%, while labour costs increased in almost all years under survey, rising by about 4% in total (see Figure c). Since the exporting manufacturing companies are in the price-taker status, for them offsetting expensive wage pressures is the more complicated.[5]

[4] In the real estate sector, tangible fixed assets should mainly include housing, which in Estonia is owned by resident households, as a rule.
[5] However, based on the turnover, the growth rate of industrial exports remained stable and the production oriented to the domestic market grew at the same rate.

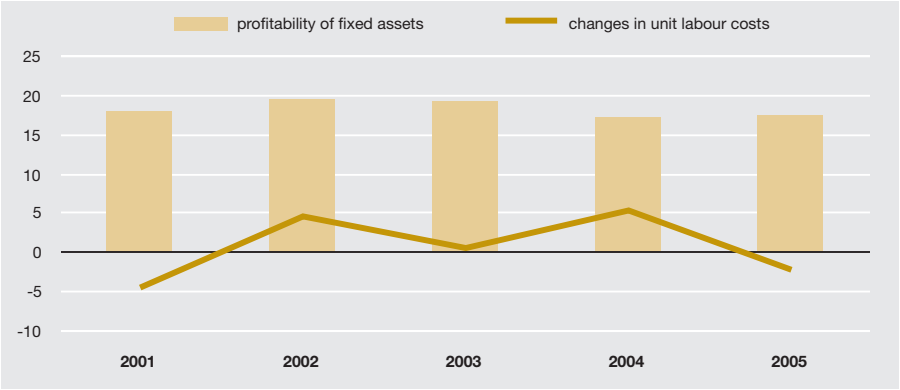


Figure c. Capital profitability and changes in real unit labour costs in manufacturing in 2001–2005 (%)

From the standpoint of competitiveness, unit labour costs and capital productivity improved mostly in line across fields of activity during 2001–2006. Table a shows eight main fields of activity where it makes sense to compare changes in unit labour costs and capital productivity. All in all, capital productivity growth and labour costs declined in half of them in the given period. The opposite situation was seen only in the fields of construction, hotels and restaurants, real estate and in some years also in trade.

Table a. Capital profitability in 2000 and 2005 (%)

	2000	2005
Total economy	12.1	20.6
Mining and quarrying	0.3	16.0
Manufacturing	18.0	17.5
Energy, gas and water supply	-1.0	6.8
Construction	27.0	61.0
Wholesale and retail trade	24.2	50.2
Hotels and restaurants	6.0	12.1
Transport, storage and communications	18.3	14.2
Real estate, renting and business activities	18.2	14.2
Other	12.9	16.2

Most commonly, the rise in capital productivity offset the increase in labour costs, which was seen only in the field of hotels and restaurants. Real unit labour costs grew by almost 16% in this sector and capital productivity rose by more than 5 percentage points during 2001–2005. Hence, in this sector it was possible to simultaneously invest and raise wages and also increase the profitability of investment.

In conclusion, the result is even too predictable. Capital productivity growth might indeed offset the increase in labour costs. Experience from last years has shown that this takes place primarily in fields targeting the domestic market. Hotels and restaurants, which service also tourists, make an exception here. Therefore, the exporting and non-tradable sectors should definitely be distinguished when interpreting the rise in real unit labour costs.