Employment and Working Life in Estonia 2009–2010

Series of the Ministry of Social Affairs No 9/2010 eng

sotsiaal ministeerium

Series of the Ministry of Social Affairs No 9/2010 eng

Employment and Working Life in Estonia 2009–2010

Trends

sotsiaal ministeerium

Further information:
Labour Policy Information and Analysis Department
Ministry of Social Affairs of the Republic of Estonia
Gonsiori 29, 15027 Tallinn
info@sm.ee

Editor: Ülle Marksoo
Translator: OÜ Luisa Tõlkebüroo
Cover photo: iStockphoto
Layout: AS Ecoprint

ISSN-L 1736-6127
ISSN 1736-6127 (online)
ISSN 1736-8707 (CD)
ISSN 1736-6119 (print)

Contents

Introduction

The labour market of Estonia was strongly affected by the global economic crisis throughout 2009 and the first half of 2010. The number of employed persons decreased by about 100,000 and the number of unemployed persons increased to 137,000, constituting 19.8% of the labour force in merely two years. The record-breaking indicators of unemployment could be seen among women and men, different age groups and nationalities and in all regions of Estonia. Unemployment had increased for seven quarters in a row and affected a substantial part of the population of Estonia. The first signs of recovery of the economy and a slight decrease in the number of unemployed persons could be seen in the second quarter of 2010. However, there is no hope for a rapid improvement of the situation since economic growth will initially be achieved by increase of productivity rather than creating new jobs. Unemployment may therefore stay at high levels during the next few following years.

This collection of trends characterises the momentous changes that took place in the labour market of Estonia during 2009 and the first part of 2010. Data of the Labour Force Survey and other surveys of the Statistics Estonia, database of the Statistical Office of the European Communities (Eurostat), data of the Estonian Unemployment Insurance Fund, the Labour Inspectorate, the Social Insurance Board and the Health Insurance Fund of Estonia are used as sources of data.

The collection includes six chapters. The first chapter provides a comparison of the labour market indicators of Estonia with the respective indicators of other Members States of the European Union in order to get an overview of the effect of the economic crisis on the labour markets of different countries. We see that the labour market indicators of Estonia as well as other Baltic Countries have grown worse at a notably faster pace than in the majority of the other EU Member States from 2009 until the second quarter of 2010. Unfortunately, we have to acknowledge that employment in Estonia has decreased and unemployment in Estonia has increased the most compared to the European Union in the said period. Latvia, Lithuania, Spain and Ireland have suffered from the economic crisis similarly to Estonia.

The second chapter of the collection describes the employment statuses of persons and the changes thereof in the observed period in detail. The chapter covers employment, changes in employment by sectors and occupations, remuneration, unemployment and inactivity. Changes in the duration of working time are also related to decrease of employment. The third chapter provides an analysis of the amount of working time and the change thereof in the conditions of the economic crisis. It appears that the proportion of salaried workers who were forced to work part-time increased during the recession and therefore, the average working time of salaried workers decreased.

The fourth chapter characterises the risk groups of the labour market such as long-term unemployed persons, young unemployed persons, older persons and non-Estonians. The risk factor of the latter group is not speaking Estonian, which hinders the chances of getting a suitable job. As a result of the crisis, the risk groups have suffered the most; their condition on the labour market has deteriorated substantially as a result of the recession. It is therefore important to pay special attention to these groups when designing the measures of labour market policy. The condition of young and long-term unemployed persons is the worst. The unemployment rate of young persons has increased to 39% and long-term unemployment is continuing to increase even as unemployment is decreasing.

The fifth chapter gives an overview of the registered unemployed persons, users of employment services, receivers of unemployment allowances and unemployment insurance benefits and expenses on the labour market policy based on the data of the Estonian Unemployment Insurance Fund. It appears from that analysis that the dynamics of the number of registered unemployed persons has

been similar with the general trends of unemployment. The maximum level was achieved in March 2010 when the number of registered unemployed persons reached as high as 101,590; afterwards, registered unemployment started decreasing similarly to general unemployment. Another reason for concern apart from the high level of unemployment is the lengthening of the duration of job-seeking, which will become the biggest issue for the next few years.

The sixth chapter of the collection describes the effect of the economic crisis to the working environment. The chapter provides an overview of occupational accidents, health disorders related to work, permanent incapacity for work, expenses related to illness of employees and supervision of the working environment. The analysis is based on annual data of the Labour Inspectorate, the Estonian Health Insurance Fund and the Social Insurance Board as well as data from the Estonian Labour Force Survey and Eurostat.

The target group of this collection of trends of employment and working life in Estonia includes, above all, persons who come across labour matters in their daily work as well as all persons who have deeper interest about the developments in the field of labour. We hope that the abundant statistical material is helpful for policymakers in making the right choices. The developments of the labour market in previous years are characterised by the collections of trends "Employment and Working Life in Estonia 2007" and "Employment and Working Life in Estonia 2008–2009" published in the Series of the Ministry of Social Affairs in 2008 and 2009.

In the name of the authors, Ülle Marksoo
Editor

1. Development of the Estonian labour market in comparison with other countries of the European Union

Ülle Marksoo

All of the labour markets of Member States of the European Union (EU) were affected by the global economic and financial crisis in 2009. The following section describes the effect of the economic crisis on the different Member States by using the data from Eurostat[1] about employment and unemployment. We are comparing the indicators of the second quarter of 2009 with the indicators of the second quarter of 2010 in order to get a better overview of the changes. We will point out which countries have done well in handling the economic crisis and which countries have not, as well as the situation in Estonia compared to other countries.

The economy of the EU was showing signs of recovery since the middle of 2009, yet, notwithstanding, employment decreased for the whole following year. The number of employees had therefore constantly decreased for almost two years. Employment had decreased by an additional 6 million by the second quarter of 2010, reaching 221 million persons compared to the peak of employment, i.e. the second quarter of 2008 when the number of employed persons was as high as 227 million.[2] The situation differs from country to country: the economy has recovered faster in some countries and employment has started to increase again. Figure 1.1 provides an overview of the changes in employment in EU Member States.

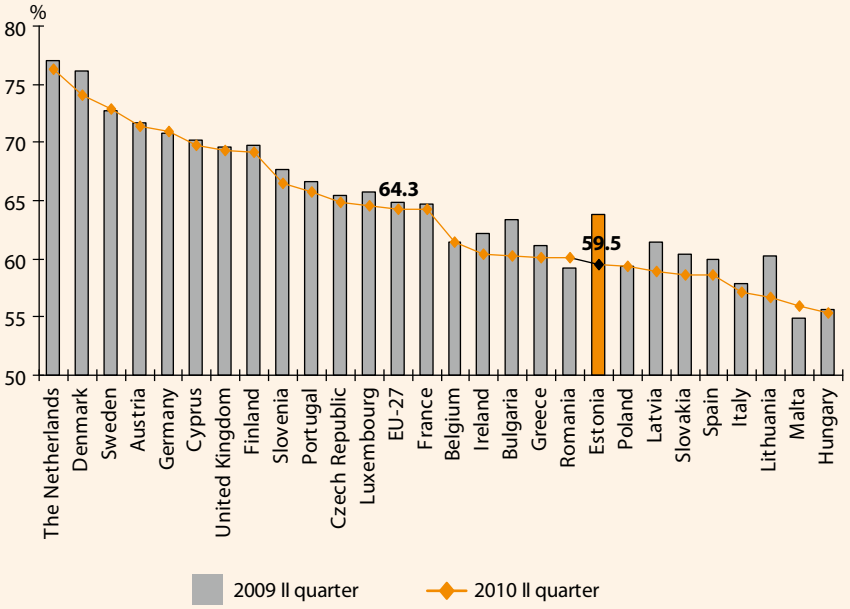
Decrease of employment has slowed compared to the previous year (second quarter of 2008 *vs.* second quarter of 2009). The employment rate decreased by 0.5 percentage points to 64.3% in the EU as a whole whereas the employment rate decreased by 1.2 percentage points in the previous year. Figure 1.1 indicates that the employment rate increased only in Malta, Romania, Sweden and Germany in the observed period. Notwithstanding the general decrease of employment, the employment rate was over 70% in the Netherlands (76%), Denmark, Sweden, Austria and Germany in the second quarter of 2010. The lowest employment rate was in Hungary (55.3%) and Malta. The highest decrease of employment in the European Union took place in Estonia (from 63.8% to 59.5%), Lithuania and Bulgaria. Estonia fell from rank 14 to rank 19 in the comparison of employment rates of 27 countries compared to the previous year.

The employment of men decreased more than the employment of women similarly to last year, but at a significantly slower pace. The main reason was still the loss of jobs for men in the construction sector and manufacturing. The gap between employment of women and men decreased to 11.8 percentage points. In countries where the employment of men decreased rapidly, the total employment also decreased rapidly. While the total employment rate of men in EU decreased by 0.7 percentage points per year (from 70.9% to 70.2%), the decrease in Estonia was again the biggest: 5.8 percentage points (from 64.4% to 58.6%); decrease was big in Lithuania and Bulgaria as well.

Differences of the employment of women are substantially bigger than those of men, ranging from 37.5% in Malta to 71.5% in the Netherlands. The employment rate was over 70% in Denmark and Sweden as well. Employment was lower than 50%

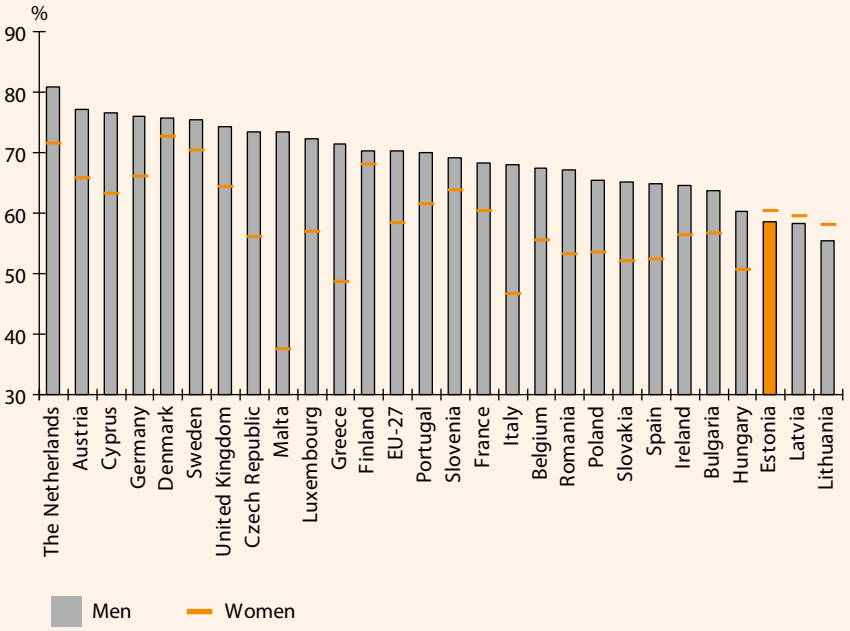
[1] Eurostat – Statistical Office of the European Communities.
[2] EU Employment Situation and Social Outlook, Monthly Monitor, September 2010.

Figure 1.1. **Employment rate[3] in EU Member States, second quarters of 2009 and 2010**



Source: Eurostat[4]

Figure 1.2. **Employment rates of men and women, second quarter of 2010**



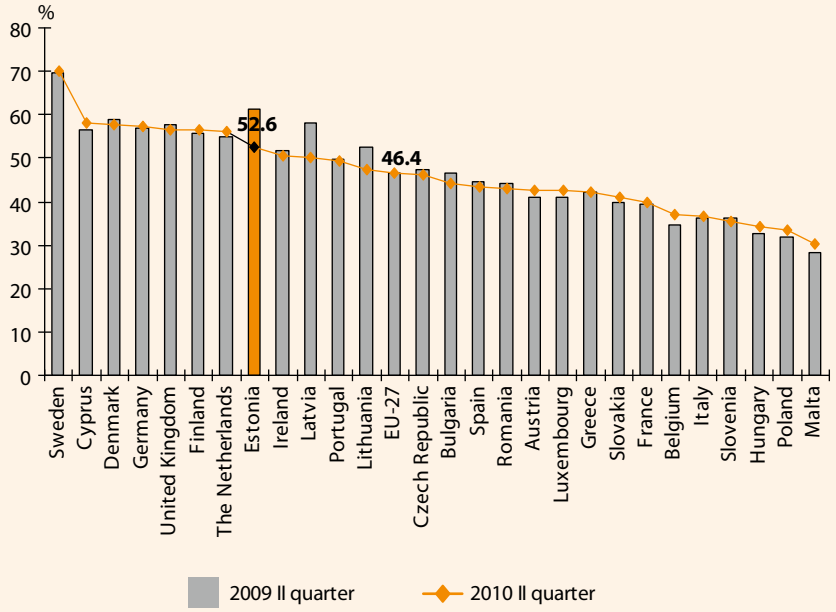
Source: Eurostat

in Italy and Greece in addition to Malta. The employment rate of women decreased by 0.3 percentage points in total in the EU Member States; the increase of employment was positive in only six states. Estonia was at rank 11 in the second quarter of 2010 with an employment rate of 60.3%, exceeding the average level of the EU (58.4%). The situation in the Baltic Countries is rather peculiar due to rapid decrease of the employment of men – the employment rate of women has been higher than the employment rate of men since the end of 2009.

[3] Employment rate – proportion of employed persons in the population aged 15–64.

[4] Eurostat data taken from the following public database: http://epp.eurostat.ec.europa.eu/portal/page/portal/employment_unemployment_lfs/data/database.

Figure 1.3. **Employment rates of persons aged 55–64, second quarters of 2009 and 2010**



Source: Eurostat

The biggest differences in employment can be noticed in the Southern European countries where the employment of women has been traditionally low. The gap in employment amounted to as much as 36 percentage points in Malta and over 20 percentage points in Italy and Greece.

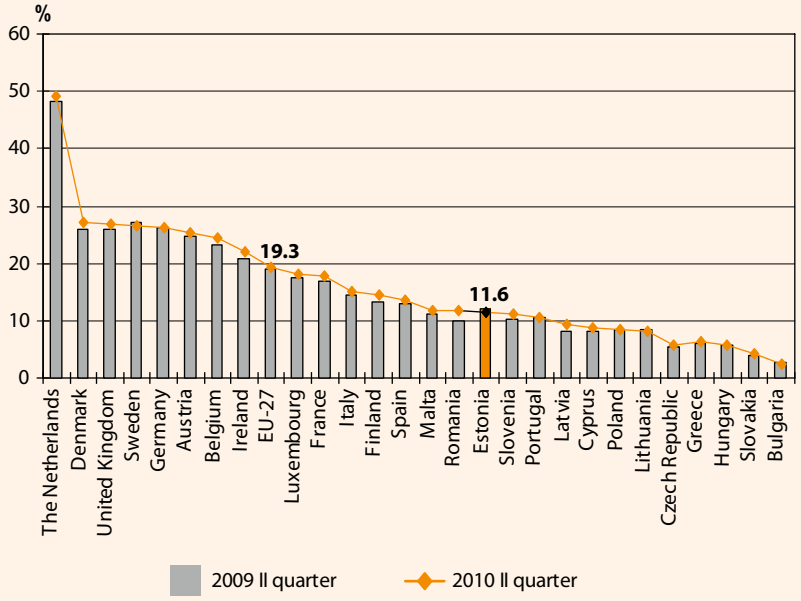
Employment of persons aged 55–64 in the second quarter of 2010 was the same as in the previous year – 46.4%. It can therefore be said that the recession has least affected the employment of older persons. An increase in employment was observed in 14 countries (Figure 1.3). The biggest proportion of working older persons is in Sweden (70.1%); in the rest of the countries, the employment of older persons is below 60% and even below 50% in most countries.

The biggest decrease of employment of older persons was once again experienced by the Baltic Countries. Estonia has fallen to rank 8 with 52.5% and Latvia has fallen to rank 10 while just a year ago, Estonia was ranked second and Latvia was ranked third concerning employment of older persons. It can generally be seen that in Nordic countries both women and men keep working to a high age while in the Southern countries people stop working much earlier. An exception to this is Cyprus, which has risen to the second rank after Sweden. Malta, however, has the lowest employment rate of older persons – only 30.2% of older persons are working.

Part-time working in EU Member States varies to a very large extent. The Netherlands, where nearly half of the employed persons (49%) are working part-time is still ranked first. There are over a quarter of part-time employed persons in Denmark, the United Kingdom, Sweden, Germany and Austria. Part-time work is less common in Southern Europe and, above all, Eastern European countries. The proportion of part-time work has increased in many countries during the economic crisis due to decrease of demand on the labour market. 19.3% of employed persons in the EU worked part-time in the second quarter of 2010, which is 0.6 percentage points more than in the previous year. The proportion of part-time work increased in 20 Member States. 11.6% of employed persons were part-time employed persons in Estonia (15.1% of women, 7.6% of men). Estonia was ranked third after Malta and Romania among the other new Member States with this indicator. The proportion of part-time work was lowest in Bulgaria (2.4%) (see Figure 1.4).

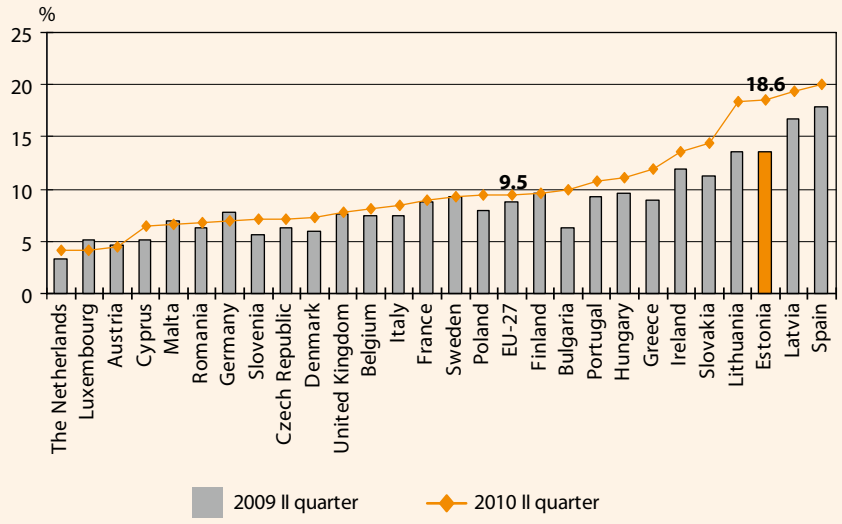
Women work part-time a lot more often than men, 32% and 8.6% respectively. In the Netherlands, even 76% of women and 25.8% of men are working part-time. In Austria, the United Kingdom,

Figure 1.4. **Proportion of part-time employed persons among employed persons, second quarters of 2009 and 2010**



Source: Eurostat

Figure 1.5. **Unemployment rate in EU Member States, second quarters of 2009 and 2010**



Source: Eurostat

Sweden, Germany and Belgium, over 40% of women are working part-time. Less than 10% of men are working part-time in most countries. Apart from the Netherlands, there are also more men working part time in Denmark (15.3%) and Sweden (14.1%).

The decrease of employment has brought about continued increase of unemployment. A total of 22.9 million persons were unemployed in the EU in the second quarter of 2010. The number of persons seeking work increased by 1.8 million; over half a million of them in Spain. The unemployment rate in the EU[5] increased from 8.8% to 9.5%. The growth of unemployment had slowed down or even decreased in most of the countries of the EU compared to the beginning of 2009, but in some countries, such as Estonia, Latvia, Lithuania, Spain, Greece, Bulgaria and Slovakia, unemployment also substantially increased at the beginning of 2010.

[5] Unemployment rate – proportion of unemployed persons in the labour force.

Unemployment increased the most in Estonia among the EU Members States; Estonia had risen to the third rank in terms of unemployment rate with 18.6% after Spain and Latvia (Figure 1.5). Estonia exceeded the average of the EU (9.5%) with this indicator almost twice. The unemployment rate was the lowest in the Netherlands, Luxembourg and Austria, where less than 5% of the workforce was unemployed. Decrease of unemployment could be seen in only four countries: Luxembourg, Austria, Germany and Malta.

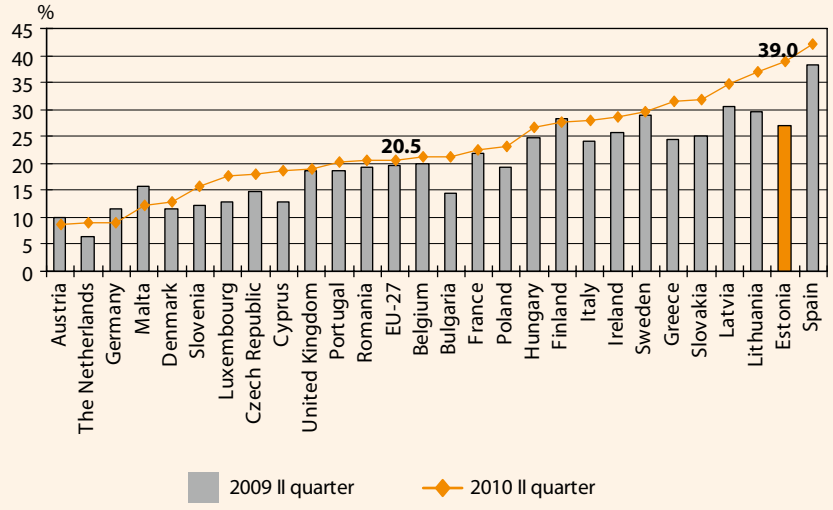
Unemployment of young persons also increased at a slower pace than in the previous year in the EU similarly to general unemployment. The unemployment rate of young persons increased by 0.9 percentage points and reached 20.5% in the EU Member States. This was mainly caused by the increase of unemployment of young men (Figure 1.6).

The highest unemployment rate of young persons is in Spain (42.1%) and in the Baltic Countries. The fastest increase was once again in Estonia where the unemployment rate of young persons increased from 27% to 39% within a year and, as a result, Estonia rose to the second rank after Spain with this indicator. The unemployment rate of young men is higher than the unemployment rate of young women in the EU, 21.5% and 19.7%, respectively. In Spain, Lithuania and Estonia, the unemployment rate of young men even exceeds 40%. The unemployment rate of young women is the highest in Spain (40.4%), Greece (39.7%) and Estonia (36.8%). The lowest unemployment rate of young persons is in the Netherlands where both the unemployment rates of young men and women are below 8%.

Although the economic indicators have started to improve in 2010, the unemployment rate is estimated to remain high for the next few years. An increase in the duration of job-seeking and, as a result, an increase of long-term unemployment[6] can be predicted due to lack of new jobs. The following Figure 1.7 characterises the changes of the long-term unemployment rate[7] from the first quarter of 2009 to the first quarter of 2010.

While the long-term unemployment rate in the EU stayed at the rate of 2008 in the beginning of 2009, many of the short-term unemployed persons have become long-term unemployed persons and the long-term unemployment rate has increased to 3.7%. The fastest increase took place in the Baltic Countries, Ireland and Spain, where long-term unemployment increased more than twice. These are the same countries that are ranked highest in the list of general unemployment. Slovakia has

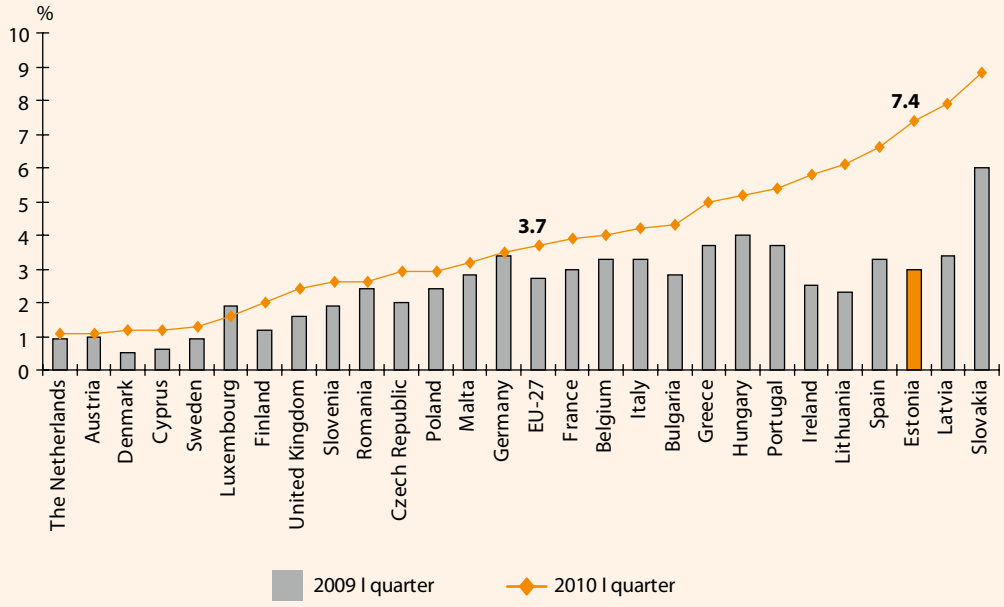
Figure 1.6. **Unemployment rate of persons aged 15–24 in EU Member States, second quarters of 2009 and 2010**



Source: Eurostat

[6] Long-term unemployment – job-seeking for a year or longer.
[7] Long-term unemployment rate – proportion of long-term unemployed persons in the labour force.

Figure 1.7. **Long-term unemployment rate in the EU Member States, first quarters of 2009 and 2010**



Source: Eurostat

had the highest long-term unemployment rate for years (8.8%), with 58% of unemployed persons being long-term unemployed persons. The respective indicator was even 74% a year ago; the decrease was related to an increase of short-term unemployment. Slovakia is followed by Latvia (7.9%) and Estonia (7.4%). The long-term unemployment rate among men is the highest in Latvia and Estonia; among women, the long-term unemployment rate is the highest in Slovakia, Spain and Portugal. The long-term unemployment rate has increased in all countries except Luxembourg. Only 1.1–1.3% of the labour force consists of long-term unemployed persons in the Netherlands, Austria, Denmark, Cyprus and Sweden. These five countries are likewise the highest-ranked states in terms of employment in the EU.

In conclusion

In conclusion, we saw that the labour market indicators of Estonia have deteriorated substantially more compared to those of the other EU Member States for the second year in a row. Estonia has seen the largest decrease of employment, including the largest decrease of employment of men and older persons. Our unemployment rates and long-term unemployment rates have reached the third rank in the EU, while the unemployment rate of young persons has even reached the second rank. The pace of increase of unemployment is the fastest in Estonia compared to the EU. Countries that have suffered more due to the economic crisis similarly to Estonia are Latvia, Lithuania, Ireland and Spain.

2. Situation of the Estonian labour market in 2009 and in the first half of 2010

Ülle Marksoo, Märt Masso

2.1. General trends

The effects of the global economic crisis to the labour market of Estonia that became apparent in the second part of 2008 were also present throughout 2009 and in 2010. According to the data provided by the Labour Force Survey of the Statistics Estonia, the Estonian population in the age bracket 15–74 in 2009 included 595,800 employed, 95,100 unemployed and 348,000 inactive persons[8]. The average number of employed persons in 2009 decreased by 9.2%, that is, by 60,700 employed persons compared to the previous year. The number of unemployed persons increased by 56,700, that is, by two and a half times in the same period. The employment rate decreased from 69.5% to 63.2% whereas the unemployment rate increased from 5.5% to 13.8% compared to 2008.

The trends of the previous year continued in the beginning of 2010. The number of employed persons decreased by about 100,000 while the number of unemployed persons increased to a record-breaking 137,000 compared to the middle of 2008.

Table 2.1. **Changes in the main indicators of the labour market and in the employment status of the population from 2008 to the first half of 2010**

	2008	2009	2010 I quarter	2010 II quarter
Growth of GDP, %	–5.1	–13.9	–2.6	3.1
Increase of employment, %	0.2	–9.2	–7.0	0.9
Population aged 15–74	1,042.8	1,038.8	1,034.8	1,034.8
Employed persons, thousands	656.5	595.8	553.6	558.8
men	330.9	288.1	255.8	261.7
women	325.6	307.7	297.8	297.2
Unemployed persons, thousands	38.4	95.1	136.9	127.7
men	20.2	58.5	86.0	76.3
women	18.1	36.5	50.9	51.5
Inactive persons, thousands	347.9	348.0	344.3	348.2
men	136.7	139.7	142.9	146.8
women	211.2	208.3	201.4	201.4
Activity rate[9] (aged 15–64), %	73.6	73.6	73.6	73.2
Employment rate[10] (aged 15–64), %	69.5	63.2	58.6	59.2
Unemployment rate[11] (aged 15–74), %	5.5	13.8	19.8	18.6

Source: Statistics Estonia, Estonian Labour Force Survey

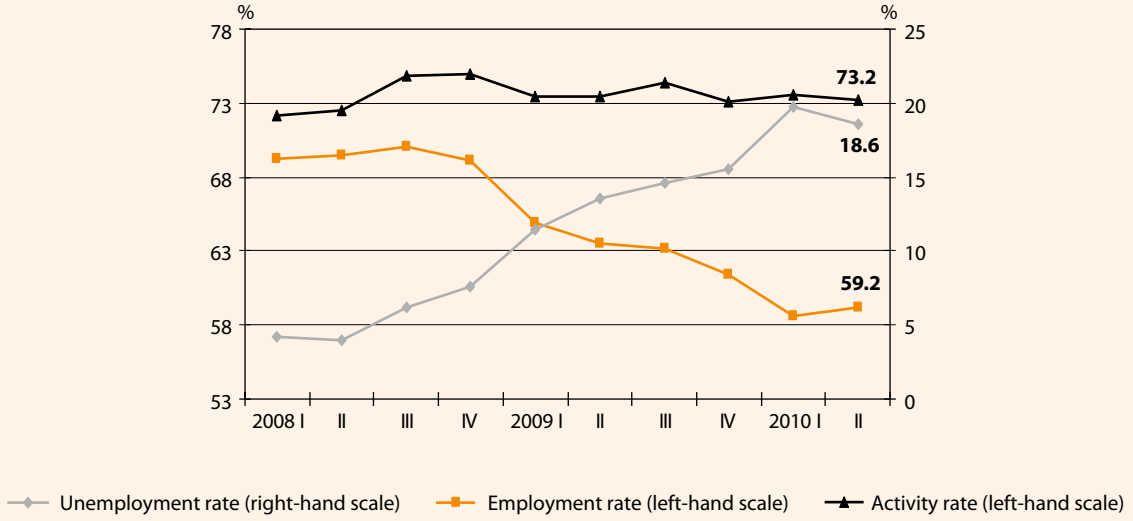
[8] Inactive – persons who are neither employed nor seeking a job (students, pensioners, persons on parental leave, persons incapacitated for work, discouraged persons, etc.).
[9] Activity rate – proportion of the labour force (employed and unemployed persons) in the population of 15–64 years of age.
[10] Employment rate – proportion of employed persons in the population of 15–64 years of age.
[11] Unemployment rate – proportion of unemployed persons in the labour force.

Somewhat more positive signs were indicated in the second quarter when signs of upturn of the economy could be noticed after a long period and the economic growth was positive again at 3.1%. The number of employed persons increased by 5,000 and the number of unemployed persons decreased by 9,000 after a decrease in employment that lasted for a year and a half. A part of this result must be credited to seasonal work that made it possible for many persons to at least temporarily get a job.

The quarterly trends of employment and unemployment are illustrated on Figure 2.1.

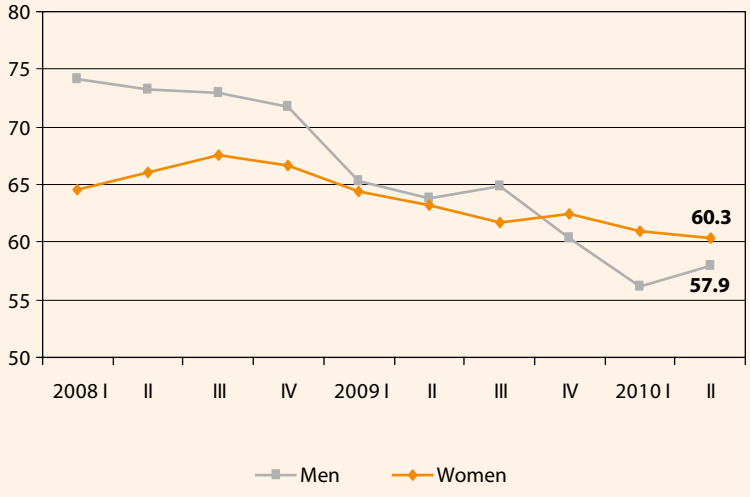
The economic crisis has most affected the sectors where men generally work (construction, manufacturing); therefore, the employment of men has decreased at a substantially faster pace than the employment of women. There have been more employed women than employed men since the fourth quarter of 2008. The employment rate of men has fallen below the employment rate of women since the end of 2009, which is rather unusual compared to the other Members States of the EU. A similar situation exists only in Latvia and Lithuania where the employment rate of men is lower than that of women due to the recession. The employment

Figure 2.1. **Dynamics of the employment rate, activity rate and unemployment rate from 2008 to first half of 2010 (quarterly, %)**



Source: Statistics Estonia, Estonian Labour Force Survey

Figure 2.2. **Dynamics of the employment rate of men and women from 2008 to first half of 2010 (quarterly, %)**



Source: Statistics Estonia, Estonian Labour Force Survey

rate of men decreased from 74% to 56% and the employment rate of women decreased from 65% to 61% in two years (first quarter of 2008 *vs.* first quarter of 2010).

The number of employed persons increased in the second quarter of 2010 mainly because of persons in the best working age: about 10,000 persons younger than 50 years of age were employed. Employment among persons older than 50 years of age decreased somewhat. Employment has started to quickly decrease among older persons as well in the first half of 2010 while the employment of older persons was relatively stable at the beginning of the economic crisis and the number of employed persons even increased. The number of employed persons in the age bracket of 55–64 years of age has decreased by about 10,000 persons while the population of that age bracket has increased by 5,000 compared to the beginning of 2009. Compared to the second quarter of 2008, the number of employed decreased the most among persons below 25 years of age – 38% in two years.

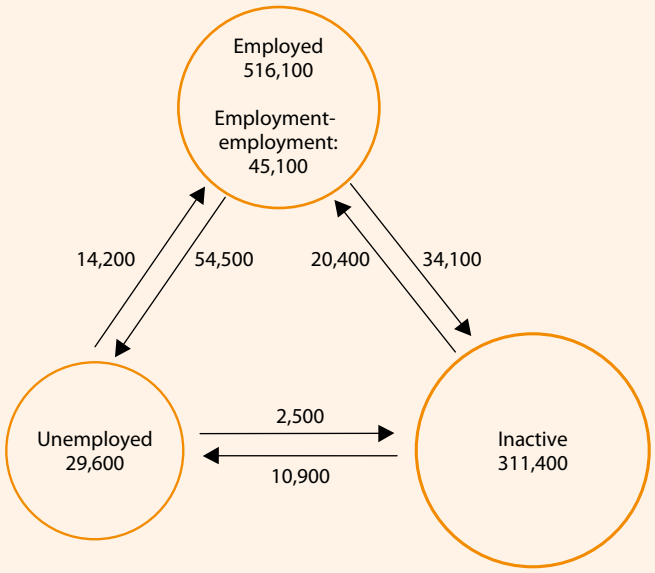
Employment changed very differently, depending on the region. The number of employed persons and the employment rate decreased in all counties except Võru County where employment somewhat increased (from 56% to 58%) in the period of 2008–2009. While Võru County was the county with the lowest employment rate in 2008, it surpassed Põlva County, Jõgeva County and Ida-Viru County a year later in terms of employment and at the beginning of 2010, it already surpassed seven counties. In the first half of 2010, the average employment rate of Estonia decreased by another 4.3 percentage points, falling below 60% (58.9%). The employment rate was above 60% in only two counties, Harju County and Tartu County (65.2% and 60.2%, respectively). The only county where employment increased in the first half of 2010 was Lääne-Viru County. Employment was the lowest in Põlva County, where less than half (47.9%) of the population aged 15–64 were employed. In conclusion, the counties where employment was around 70% or above were affected the most by decrease of employment from 2008 to the second half of 2010. Hiiu County, which had the highest employment rate, lost the most during the crisis: the employment rate in Hiiu County even decreased by 21.6 percentage points (from 77.6% to 56%). Järva County, Pärnu County and Tallinn must also be pointed out in addition to Hiiu County as their employment rate decreased by 12–14 percentage points.

2.2. Movement of labour force between employment statuses

Movement of persons of working age between three employment statuses – employment, unemployment and inactivity – will be analysed next. In order to receive data about the number of movements, the employment statuses of persons will be compared in the Labour Force Survey as of the moment of the survey with the status in the same month last year.[12] Generally, during a period of economic growth, movement from employment to employment is more common and movement from employment to unemployment is less common. During a recession, the number of persons changing jobs decreases and movement to unemployment increases. The analysis of changes of statuses indicates that the current economic crisis has strongly affected the mobility of the labour force. There have never been as many movements between employment statuses during the last ten years as there were from 2008 to 2009. Although there were significantly less changes of jobs than in the previous years, there have never been so many persons moving from employment to unemployment as in the years 2008 to 2009: three times more compared to the previous year and even six times more compared to the movements of 2006 to 2007. The number of movement of persons from employment to inactivity is likewise the biggest in ten years. The main reason for this would be the increase in the number of births; therefore, more women are staying on pregnancy leave, maternity

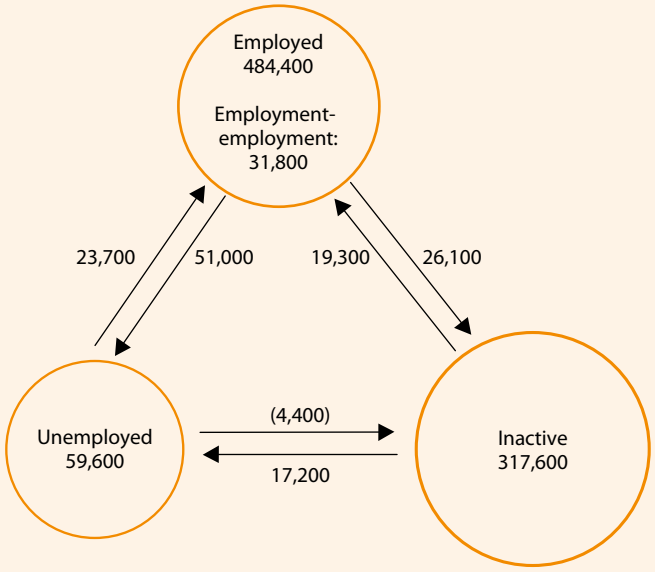
[12] Movement is defined as change of status compared to the same month of the previous year. Average movement per year = sum (January-January, February-February, …)/12.

Figure 2.3. **Movement of labour force between employment statuses, 2008-2009**



Source: Statistics Estonia, Estonian Labour Force Survey

Figure 2.4. **Movement of labour force between employment statuses in the second quarter of 2009 compared to the second quarter of 2010**



Source: Statistics Estonia, Estonian Labour Force Survey

leave and parental leave. Figures 2.3 and 2.4 indicate the changes of employment in 2008–2009 and in the second quarter of 2009 compared to the second quarter of 2010.

Figure 2.3 indicates that about 516,000 persons stayed employed and on the same job both in 2009 as well as in 2008. 45,100 persons had changed jobs. During the year, 14,200 persons came to employment from among the unemployed and 20,400 persons from among the inactive. However, outflow from employment was higher (88,600) and exceeded the inflow to employment more than twice. The movement from inactivity to unemployment has also increased in the last few years, which indicates that persons have become more active on the labour market. This may be caused by difficulties in coping that are caused by the loss of job of a family member or the need to work while studying. In turn, this forces persons to search for a job.

The movement from employment to employment exceeded the movement from employment to unemployment multiple times until the first quarter of 2009. However, the number of persons moving from employment to unemployment was significantly higher starting from the second quarter of 2009. Unemployment in Estonia increased to an all-time high in the first quarter of 2010, which is also indicated by the analysis of the changes in the labour market statuses. A record-breaking number of persons moved from employment to unemployment in the first quarter of 2010 – over 67,000. In the second quarter, on the other hand, slight changes towards improvement of the situation could be indicated (Figure 2.4). The number of persons moving from employment to unemployment and inactivity has decreased compared to the second quarter of 2009, but the number of persons in the unemployed status has increased, which refers to an increase of long-term unemployment. Generally, less movement from employment to employment and from employment to unemployment took place whereas more movement from unemployment to employment took place in the second quarter of 2010.

2.3. Employment

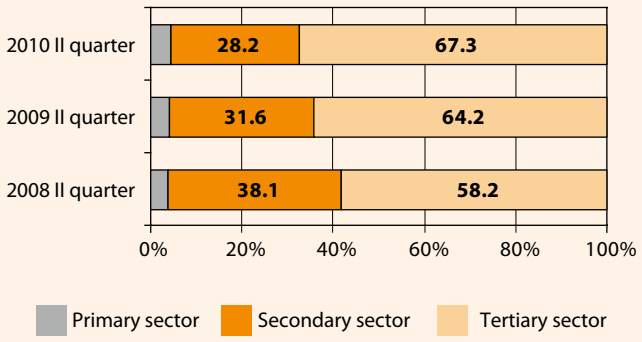
Economic activities

The structure of economic activities has changed due to the economic crisis.

The number of employed persons decreased in all economic sectors in 2009 compared to 2008[13], but the proportion of the secondary sector decreased by 3.7 percentage points and the proportion of the tertiary sector increased by 3.6 percentage points.

In terms of economic activities, employment decreased the most in manufacturing (47,000), construction (44,000) and trade (about 11,000). At the same time, employment increased in some economic activities: activities related to real estate, public administration, health and social work activities, etc. The number of employed persons as a whole had decreased to an all-time lowest level in the first half of 2010. On the other hand, the employment structure is nearing the average structure of the EU.

Figure 2.5. **Change in the number of employed persons by economic sectors from the second quarter of 2008 to the first half of 2010**



Source: Statistics Estonia, Estonian Labour Force Survey

Table 2.2. **Employed persons by economic activities, 2008 – first half of 2010 (in thousands)**

	2008	2009	2009				2010	
			Q1	Q2	Q3	Q4	Q1	Q2
Total	656.5	595.8	612.1	592.6	598.1	580.5	553.6	558.8
Agriculture, forestry and fishing	25.3	24.0	22.5	24.9	25.5	23.2	23.3	25.1
Mining and quarrying	6.0	6.4	5.4	7.5	6.7	6.1	5.9	6.7
Manufacturing	135.0	113.8	113.1	116.3	116.1	109.9	96.1	100.7
Electricity, gas, steam, water supply; sewerage; waste management	10.5	10.1	11.0	8.5	8.8	12.2	10.7	9.2
Construction	81.0	58.3	63.5	55.0	59.2	55.6	40.6	41.2

[13] Primary sector – agriculture, hunting, forestry, fishing; secondary sector – mining and quarrying, manufacturing, electricity, gas and water supply; tertiary sector – trade, service, etc.

	2008	2009	2009				2010	
			Q1	Q2	Q3	Q4	Q1	Q2
Wholesale and retail trade; repair of motor vehicles and motorcycles	92.5	83.2	91.9	74.4	80.7	85.7	81.7	74.5
Transportation and storage	49.9	49.7	52.3	52.3	46.2	48.0	47.5	45.4
Accommodation and food service activities	23.6	20.1	17.6	23.2	22.9	16.9	16.9	20.7
Information and communication	15.3	14.3	12.2	11.7	17.8	15.4	12.6	12.7
Financial and insurance activities	10.4	11.4	12.9	13.9	8.6	10.2	9.6	8.3
Real estate activities	10.2	9.2	6.6	8.7	13.5	8.0	8.3	11.5
Professional, scientific and technical activities	20.5	20.5	19.9	20.9	21.0	20.2	24.3	21.9
Administrative and supportive activities	17.3	16.8	15.6	14.5	20.2	16.7	18.8	20.2
Public administration and defence; compulsory social insurance	38.4	36.7	39.2	34.0	36.6	36.9	39.8	39.6
Education	59.9	62.5	70.8	64.4	54.4	60.5	60.7	57.9
Human health and social work activities	31.1	33.0	33.0	34.9	33.2	30.9	35.5	37.7
Arts, entertainment and recreation	14.8	14.2	12.9	16.2	15.2	12.4	10.9	13.8
Other activities	14.8	11.5	11.8	11.3	11.3	11.6	10.6	11.7

Source: Statistics Estonia, Estonian Labour Force Survey

Occupations

The number of blue-collar jobs decreased more than the number of white-collar jobs[14] in 2009 similarly to 2008, by 54,200 and 6,500 respectively. This is to indicate that mainly persons working in blue-collar jobs were still made redundant whereas the number of skilled workers and craftsmen decreased the most (Table 2.3). The employment of professionals has continuously increased among persons working in white-collar jobs, and the number of officials has also somewhat increased. The number of higher officials and managers has decreased. In total, the proportion of white-collar jobs in employment has increased year by year.

While the percentage of persons in white-collar jobs out of employed persons was 44% in 2008, it has already reached 51% in the first half of 2010. The increase could be noticed among both women and men. The majority of women are working in white-collar jobs (59%) whereas the majority of men are working in blue-collar jobs (61%).

Table 2.3 indicates that employment in the second quarter of 2010 increased mainly due to the increase in the numbers of unskilled workers, service and sales personnel and skilled workers in agriculture and fishing. It may be concluded that these jobs were likely to be temporary seasonal jobs.

Table 2.3. **Employed persons by group of occupation, 2008 – first half of 2010 (in thousands)**

	2008	2009	2009				2010	
			Q1	Q2	Q3	Q4	Q1	Q2
Major groups of occupation, total	656.5	595.8	612.1	592.6	598.1	580.5	553.6	558.8
Legislators, higher officials and managers	79.5	72.0	78.7	70.2	69.4	69.8	65.7	59.3
Professionals	90.3	95.5	98.0	98.6	92.5	93.1	109.3	112.6
Technicians and associate professionals	84.9	83.1	92.7	75.5	81.1	82.9	74.1	72.4

[14] White collar occupations: legislators, higher officials and managers; professionals; technicians and associate professionals; clerks. Blue-collar occupations: service workers and shop and market sales workers; skilled workers in agriculture and fishing; craft and related trade workers; plant and machine operators and assemblers; elementary occupations; armed forces.

	2008	2009	2009				2010	
			Q1	Q2	Q3	Q4	Q1	Q2
Clerks	35.0	32.6	35.0	30.6	28.7	36.1	37.2	33.3
Service workers and shop and market sales workers	83.3	75.1	73.3	70.9	77.5	78.6	69.0	72.1
Skilled workers in agriculture and fishing	12.0	8.8	8.0	6.8	10.1	10.1	7.8	9.5
Craft and related trade workers	110.6	84.3	91.7	84.5	84.7	76.2	63.9	58.7
Plant and machine operators and assemblers	93.5	85.0	77.9	92.8	89.5	79.6	73.0	79.0
Elementary occupations	64.3	56.6	54.4	59.7	62.1	50.4	50.5	59.0
Armed forces	..*	..	..	..	..	..	..	..

* Data not reliable due to small sample size

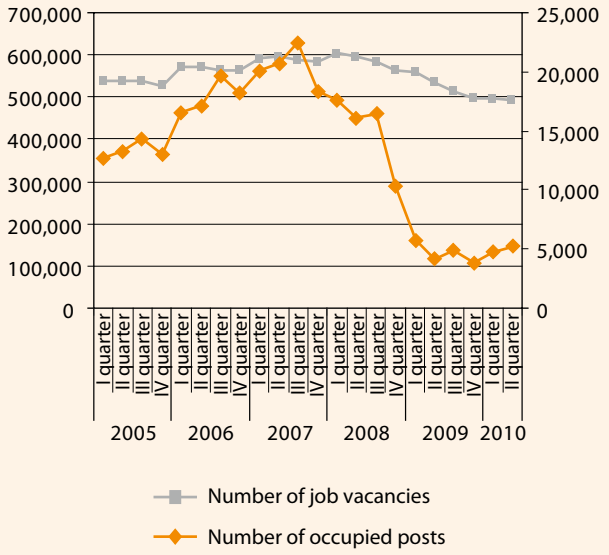
Source: Statistics Estonia, Estonian Labour Force Survey

2.4. Job vacancies, occupied posts, engaged and left employees

The following section describes how the economic crisis has shaped the number of occupied posts and job vacancies in companies, institutions and organisations. Data of the Statistics Estonia about occupied posts is about paid positions where the employed person is either working on the basis of an employment contract, contract of service or the Public Service Act. Data concerning job vacancies is about recently created or job vacancies or positions that will be vacant due to an employed person leaving employment, where the company, institution or organisation is actively searching for a suitable candidate outside of the respective company, institution or organisation and where the position is intended to be filled as soon as possible or within a certain period of time.

Companies, institutions and organisations have significantly reduced the number of both occupied posts and job vacancies during the recession in order to adjust to the changed demand and the perspectives of the development of the economy (see Figure 2.6).

Figure 2.6. **Occupied posts and job vacancies from 2005 to first half of 2010**



Source: Statistics Estonia, survey "Job vacancies and labour turnover", database of wages and salaries and labour costs

The trend visible on the figure indicates that the highest level of occupied posts was reached in the first quarter of 2008 when 604,212 positions in total were filled in companies, institutions and organisations. As a general trend, the number of occupied posts has decreased since the first quarter of 2008 down to 491,916 occupied posts in the second quarter of 2010.

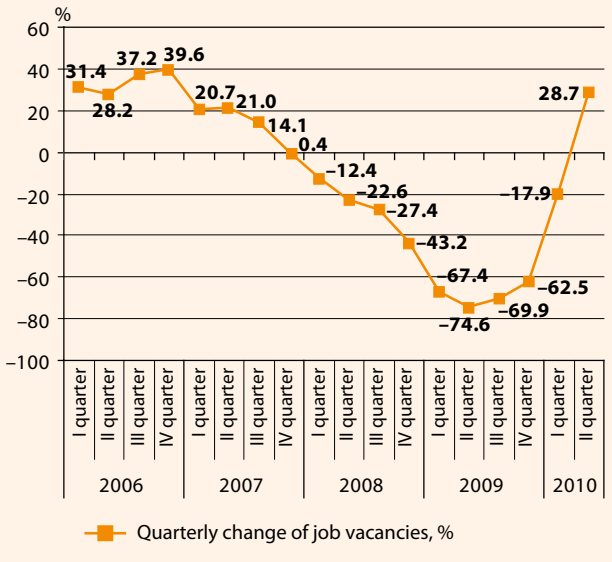
The number of job vacancies has suffered a more dramatic downfall during the recession. Companies, institutions and organisations were planning to cope with the increased demand by using more labour force during the years of rapid economic growth. Therefore the number of job va-

cancies increased to 22,532 in the second quarter of 2007. During the decrease of economic growth and during the economic crisis, however, companies, institutions and organisations reacted to the decrease of demand by reducing the number of jobs, thereby also significantly decreasing the number of job vacancies. The number of job vacancies decreased to 3,890 in the fourth quarter of 2009.

Figure 2.7. **Changes in occupied posts and the rate of job vacancies from 2006 to the first half of 2010**

Source: Statistics Estonia, survey "Job vacancies and labour turnover", database of wages and salaries and labour costs

Figure 2.8. **Changes in job vacancies from 2006 to the first half of 2010**



Source: Statistics Estonia, survey "Job vacancies and labour turnover", database of wages and salaries and labour costs

The dynamics of job vacancies are also described by the rate of job vacancies that shows the proportion of job vacancies in the total number of positions (the sum of occupied posts and job vacancies). The rate of job vacancies takes into account the circumstance that occupied posts and job vacancies varied year by year (see Figure 2.7).

While the number of job vacancies in the third quarter of 2007 was 22,532 out of 612,634, forming 3.7% of all positions, the number of all positions had decreased to 538,669 and the number of job vacancies to 4,920 (0.8% of all positions) by the second quarter of 2009. The rate of job vacancies has been roughly 1% in 2009 and during the first two quarters of 2010, but starting from the fourth quarter of 2009, the number of job vacancies and the rate of job vacancies have gradually increased. There were 5,244 job vacancies in companies, institutions and organisations in the second quarter of 2010, forming 1.1% of all positions.

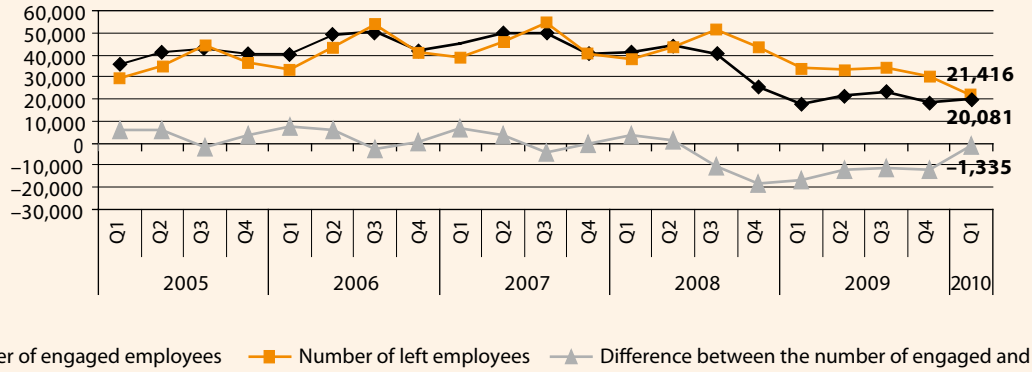
Relative changes of filled and job vacancies are also indicated on Figures 2.7 and 2.8 in order to describe by what percentage the number of positions has changed in a certain quarter of a certain year compared to the same quarter of the previous year. It appears from the figure that the number of occupied posts increased (quarterly) until the second quarter of 2008. In the next quarters, the number of occupied posts is decreasing due to the effects of the economic crisis. The decrease of occupied posts reached the highest point in the third quarter of 2009 when the number occupied posts decreased by 12.2% compared to the third quarter of 2008. However, the pace of decrease of the number of positions has slowed during the last three quarters. The number of occupied posts in the second quarter of 2010 decreased by 8% compared to the second quarter of 2009.

The number of job vacancies increased (quarterly) until the fourth quarter of 2007, followed by a trend of downfall. The distinct highest point of the trend of downfall was the second quarter of 2009 when there were 74.6% less job vacancies compared to the second quarter of 2008. It appears that companies, institutions and organisations thoroughly reviewed their structure and composition of employed persons in this quarter in order to adjust to the

situation of the economy and development prospects. The pace of downfall slowed in the first quarter of 2010 and in the second quarter, the downfall was replaced by growth. The number of job vacancies increased by 28.7% in the second quarter of this year compared to the second quarter of the previous year whereas there were 17.9% fewer job vacancies in the second quarter of this year than in the second quarter of the previous year.

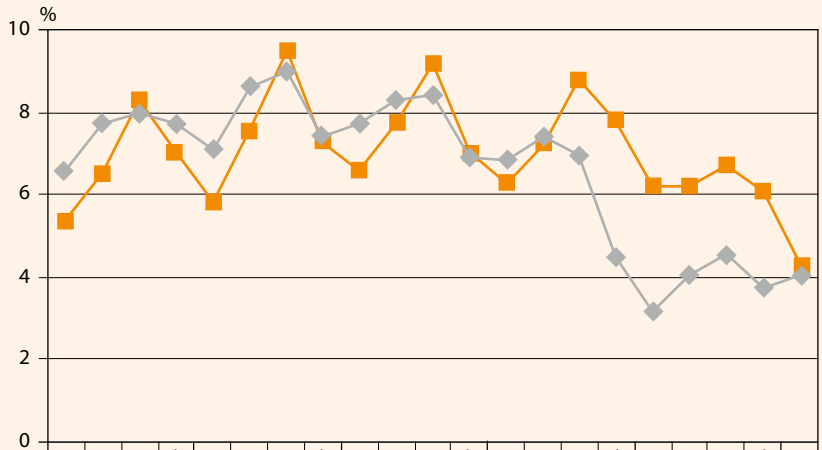
It is important to see how the number of persons hired by companies, institutions and organisations and persons who left work has changed, taking into account the decrease of positions. It appears from the positions created and filled that the number of persons who left work has exceeded the number of persons hired since the second quarter of 2008 (see Figure 2.9). The gap between the number of persons who left work and persons hired decreased in the first quarter of 2010. While the number of persons who left work exceeded the number of engaged employees by 11,764 persons in the last quarter of 2009, the gap decreased to 1,335 persons in the first quarter of 2010. The decrease in the difference between the engaged employees and persons who left work is mainly caused by the decrease of the

Figure 2.9. **Engaged and left employees from 2005 to first quarter of 2010**



Source: Statistics Estonia, survey "Job vacancies and labour turnover", database of wages and salaries and labour costs

Figure 2.10. **Rate of engaged employees and rate of left employees from 2005 to the first quarter of 2010**



	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
	2005				2006				2007				2008				2009				2010
Rate of engaged employees	6.6	7.7	8.0	7.7	7.1	8.6	9.0	7.4	7.7	8.3	8.4	6.9	6.8	7.4	7.0	4.5	3.2	4.0	4.6	3.7	4.0
Rate of left employees	5.4	6.5	8.3	7.0	5.8	7.6	9.5	7.3	6.6	7.7	9.2	7.0	6.3	7.2	8.8	7.8	6.2	6.2	6.7	6.1	4.3

Source: Statistics Estonia, survey "Job vacancies and labour turnover", database of wages and salaries and labour costs

number of persons who left work as the number of persons hired has been relatively stable during the last six quarters.

The relation between hired persons and persons who left work to the positions is illustrated by Figure 2.10.

It appears from the trends that the rate of engaged employees and the rate of left employees were roughly equal until the second quarter of 2008, after which the rate of left employees started increasing significantly and the rate of engaged employees started decreasing. The biggest gap between the rates was in the fourth quarter of 2008 when the rate of left employees exceeded the rate of engaged employees by 3.3 percentage points. However, the gap has significantly decreased by the first quarter of this year: the rate of left employees only differs by 0.3 percentage points from the rate of engaged employees. The biggest gap between the rate of left employees and the rate of engaged employees in that quarter was in construction (2.6 percentage points) and in mining and quarrying (2.2 percentage points). On the other hand, the rate of engaged employees exceeded the rate of left employees in agriculture and fishing by 1.9 percentage points and in manufacturing by 0.8 percentage points. This trend likewise points to the stabilisation of the economic environment and the labour market.

In conclusion, it appears from the statistics of the occupied posts and job vacancies that the number of positions decreased at the beginning of the economic crisis, including the number of job vacancies in companies, institutions and organisations. The decrease of the number of positions was caused by decreased demand for products and services and by a smaller clarity and reliability regarding the future of economic development, resulting in a decrease of demand for labour force in companies, institutions and organisations. However, moderate signs of optimism regarding stabilisation of the situation of the labour market can be detected from the statistics of the last quarters. The pace of decrease of the number of occupied posts has slowed and the number of job vacancies has increased in the last three quarters. Likewise, the gap between the rate of engaged employees and the rate of left employees has substantially decreased by the first quarter of the year. The trends of such behaviour by companies, institutions and organisations will probably bring about an increase in employment and smaller unemployment.

2.5. Remuneration

The following section describes the changes that have taken place in the average gross monthly wages of employed persons during the economic developments of the past few years based on the survey of wages and salaries by the Statistics Estonia. The statistics of wages and salaries of the Statistics Estonia reflects the remuneration of salaried workers, i.e. these employed persons who have entered into employment contracts or are working on the basis of the Public Service Act or a contract of service. The analysis of working time (see Chapter 3) indicates that the working time of salaried workers differs in the case of both employed persons and years. In order to compare the average gross monthly wages of employed persons regardless of the length of the working weeks of different employed persons, the Statistics Estonia converts the gross wages as to reflect full-time workers.

Whereas the beginning and middle of the decade was characterised by a fast economic growth and a fast increase of the average gross monthly wages of employed persons, the increase of the average gross monthly wages also slowed when the economic activities slowed down in 2008. The recession deepened in 2009 and the effect thereof to remuneration increased – the remuneration of salaried workers decreased substantially (see Table 2.4).

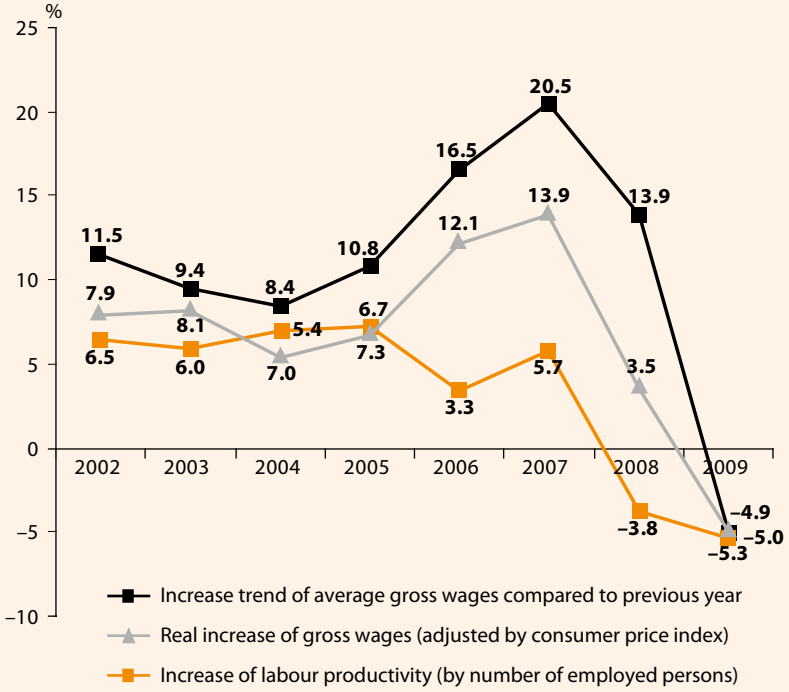
While the average gross monthly wage was 12,912 kroons and the gross hourly wage was 77.52 kroons in 2008, the gross monthly wage decreased to 12,262 kroons and the gross hourly wage decreased to 75.11 kroons in 2009. Hence the average gross monthly wage increased by 13.9% and the gross hourly wage by 15.3% in 2008 compared

Table 2.4. **Average gross monthly wages from 2002 to first half of 2010 (kroons)**

	2002	2003	2004	2005	2006	2007	2008	2009	2010 I half
Year	6,144	6,723	7,287	8,073	9,407	11,336	12,912	12,264	..
I quarter	5,721	6,333	6,748	7,427	8,591	10,322	12,337	12,147	11,865
II quarter	6,353	6,915	7,417	8,291	9,531	11,549	13,306	12,716	12,869
III quarter	5,853	6,431	7,021	7,786	9,068	10,899	12,512	11,770	..
IV quarter	6,512	7,127	7,704	8,690	10,212	12,270	13,117	12,259	..

Source: Statistics Estonia, database of salary statistics

Figure 2.11. **Changes in gross monthly wages, 2002–2009**



Source: Statistics Estonia, database of salary statistics

to the previous year, followed by a decrease of 5% in average gross monthly wage and 3.1% in gross hourly wage in 2009.

The long-term trends of relative changes of gross monthly wages are illustrated by Figure 2.11.

In the conditions of the economic growth that characterised the beginning and the middle of the decade, the nominal wages of employed persons increased over 2.3 times from 2001 to 2008. The pace of increase of wages rose significantly in years 2006 and 2007 when the labour shortage increased notably and the overheating of the economy was soon to achieve the maximum level. Gross monthly wages respectively increased by 16.5% and 20.5% in these years compared to the previous years.

The pace of increase in nominal wages slowed down in 2008 and, taking into account the inflation, the year was characterised by the decade's lowest increase in gross wages adjusted by consumer price index. The consumer price index increased by 10.4% in 2008 and hence the real wages in 2008 only increased by 3.5% compared to the previous year. Although the pace of increase of wages decreased somewhat in the said year, the increase of added value of the economy slowed down even faster and the continuously high increase of wages substantially affected the situation of the economy.

In the year 2009 which was characterised by the decrease of GDP by 13.9% and the decrease of salaried workers by 9.7%, the average gross monthly wages decreased by 5%. The decrease of wages in that year

indicates that apart from reducing the number of jobs and employed persons and the shortening of working time, economic entities also adapted to the changes in the economic situation by reducing wages. On the other hand, the fact that the GDP decreased more than average gross monthly wages indicates that the decrease of jobs has had a bigger role in the reduction of labour costs than decrease of wages. Such a tendency forces companies, institutions and organisations to find alternative means to increase labour productivity when exiting the economic crisis (for example, measures related to work organisation, product innovation) instead of low labour costs.

The average nominal wage increased in the second quarter of 2010 after a decrease of wages that lasted for five quarters. While the gross monthly wages decreased by 5.9% in the third quarter of 2009 compared to the same quarter of the previous year and 6.5% in the next quarter, the quarterly decrease of wages slowed down to 2.3% in the first quarter of 2010 and the gross monthly wages increased by 1.2% in the second quarter compared to the same quarter of 2009. The average gross monthly wage was 12,716 kroons in the second quarter of 2009, but already 12,869 kroons in 2010. It must be considered when observing such trends of nominal wages that the real wages in case of which the increase of consumer prices has been taken into account decreased by 1.9% and the hourly wage decreased by 1.7% in that quarter, although the pace of decrease of these indicators has slowed down.

Such a change of trends was motivated by the gradual recovery of economic activity; a continuous moderate increase of the average gross monthly wages is also to be expected during the next few quarters. The Ministry of Finance is also predicting a decrease of wages of a mere 0.6% during 2010 as a whole and an increase of up to 2.6% of the average gross monthly wages in 2011 in its 2010 summer prognosis.

It also appears from Figure 2.11 that the difference between the increase of labour force productivity and increase of gross monthly wages increased significantly when the economy was overheating in 2006 and 2007. While the economic growth slowed in 2008 and the labour force productivity decreased to 3.8%, the real increase of gross monthly wages was still 3.5%. In the next year, the gap between the decrease of labour force productivity and the real gross monthly wages decreased to 0.4 percentage points. The decrease of the gap between the changes of labour force productivity and gross monthly wages refers to the fact that the labour market has substantially adjusted, resulting in reduced pressure for an increase of wages from employed persons – therefore, the labour costs of economic entities have been balanced. Trends such as that should probably be one of the fundamentals for exiting the crisis and providing a sustainable economic development.

When analysing the changes of average gross monthly wages by economic activities, it appears that the gross average wages decreased the most in activities related to electricity, gas and water supply (13%), forestry (7.9%), health and social work activities (7.5%), agriculture (6.9%) and construction (6.8%) in 2009 compared to 2008. However, in the yearly comparison, gross monthly wages increased in mining and quarrying (7%). While the wages decreased in nearly all sectors in the last quarter of 2009 (the only exceptions being the activities of water supply, sewerage, waste management where the monthly wages increased by 2.9% and the professional, scientific and technical activities where the monthly wages increased by 1.7%), the remuneration increased somewhat in mining and quarrying, in the activities of electricity, gas, steam and air conditioning supply and the activities of water supply, sewerage and waste management in the first quarter of 2010 as a result of an increase of economic activities. In the second quarter, the average gross monthly wage increased and remuneration increased the most in manufacturing (19.4%), mining and quarrying (12.6%) and in the activities of water supply, sewerage and waste management (10.2%). However, slowing down of the decrease of remuneration was not common for all activities. The average gross monthly wages decreased the most in professional, scientific and technical activities (17.5%) and in education (6.2%) in the second quarter of 2010 compared to the same quarter of the previous year.

Increased tensions in employment relations during the recession are also characterised by the increased frequency of problems with receiving wages in addition to the decrease of gross month-

ly wages. It appears from the statistics describing the work of the labour dispute committees of the Labour Inspectorate that while employed persons submitted a total of 6,316 claims to the labour dispute committees of which 2,032 were about unpaid wages or final settlement in 2008, employed persons presented 12,166 claims of which 6,088 were about unpaid wages or final settlement in 2009. During the first two quarters of 2010, employed persons submitted 3,707 claims to the Labour Inspectorate of which 1,963 were about unpaid wages or final settlement. The data points to the fact that problems related to remuneration have become significantly more frequent during the recession, creating tensions in the employment relationships of employed persons and employers even though the petitions and claims submitted to the labour dispute committees of the Labour Inspectorate do not describe the problems of all employed persons related to remuneration.

In conclusion, the increase of the average gross monthly wages slowed down by 2009 due to the worsening of the economy of the country and the situation of the labour market. While the average gross monthly wages increased by 13.9% in 2008 compared to 2007, coming up to 12,912 kroons, the gross monthly wages already decreased in the first quarter of 2009 compared to the first quarter of the previous year (1.4%). Decrease of wages lasted for five quarters during the recession, i.e. until the second quarter of 2010. While the gross monthly wages decreased by 5% in 2009 compared to 2008, the gross monthly wages increased by 1.2% in the second quarter of 2010 compared to the same quarter of the previous year.

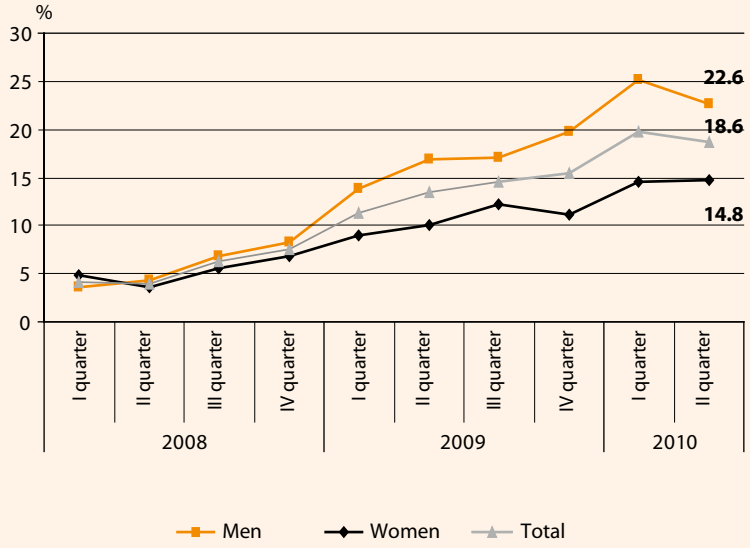
The second quarter of 2010 inspires optimism that the economy is facing an upturn after the recession once again, bringing about the stop of decrease of gross monthly wages and even the change to a slight increase. A good sign of the upturn of the economy is the fact that the increase of wages is being led by activities related to the secondary sector such as manufacturing, which is mainly oriented for export markets. In the conditions of the decrease of wages, the gap between the change of labour force productivity and the change of gross monthly wages also decreased. The gap decreased to 0.4% in 2009. Decrease of the gap refers to the adjustment that has taken place in the economy and on the labour market, which decreases the pressure to increase wages, balances the labour costs of economic entities and therefore forms the basis to turn the recession into economic growth.

2.6. Unemployment

A serious consequence that accompanied the economic crisis was the rapidly growing unemployment. The increase of unemployment that started in the third quarter of 2008 continued throughout 2009 and reached the peak level in the first quarter of 2010 when the number of unemployed persons was as high as 137,000 and the unemployment rate was 19.8%. Only in the second quarter could an increase in the number of job offers and a decrease of unemployment be indicated. The number of unemployed persons increased by 100,000 and the unemployment rate increased from 4% to 18.6% in merely two years – from the second quarter of 2008 until the second quarter of 2010 (Figure 2.12).

Young men who had previously been employed in the construction sector and manufacturing suffered the most due to the recession throughout the observed period. The unemployment of women increased at a substantially slower pace. The unemployment of men has generally been higher in Estonia than the unemployment of women, unlike most of the EU Member States. In absolute figures, the unemployment of persons aged 25–49 increased the most whereas the number of persons below 25 years of age and over 50 years of age has increased in roughly the same magnitude. The unemployment rate of young persons is the highest and it decreases along with age. While the unemployment rate has been the lowest among older persons who often give up seeking work when nearing the retirement age, the unemployment of such persons has also substantially increased in 2010. The unemployment rate of persons younger than 50 years somewhat decreased in the second quarter of 2010, but the unemployment rate and the number of unemployed persons for persons over 50 years of age continued increasing in the second quarter of 2010.

Figure 2.12. **Dynamics of the unemployment rate of women and men from 2008 to the first half of 2010 (quarterly, %)**



Source: Statistics Estonia, Estonian Labour Force Survey

Table 2.5. **Unemployment rate by sex and age from 2008 to the first half of 2010**

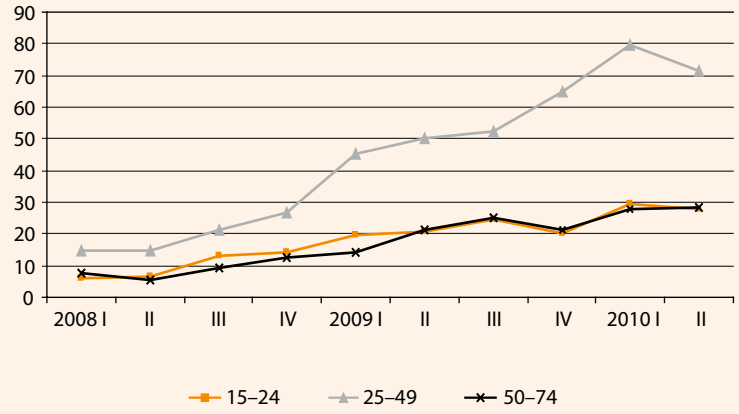
	2008	2009	2009				2010	
			I quarter	II quarter	III quarter	IV quarter	I quarter	II quarter
Unemployed (thousands)								
total	38.4	95.1	79.0	92.2	102.3	106.7	136.9	127.7
men	20.2	58.5	47.6	58.1	60.3	68.2	86.0	76.3
women	18.1	36.5	31.4	34.1	42.0	38.5	50.9	51.5
Unemployment rate, %								
total	5.5	13.8	11.4	13.5	14.6	15.5	19.8	18.6
men	5.8	16.9	13.8	16.9	17.0	19.8	25.2	22.6
women	5.3	10.6	9.0	10.0	12.2	11.2	14.6	14.8
Unemployment rate by age groups, %								
15–24	12.0	27.5	24.5	27.0	29.2	29.6	40.6	39.0
25–49	4.7	13.0	11.2	12.2	12.8	15.7	19.3	17.2
50–74	4.4	10.1	6.9	10.9	12.1	10.4	13.5	14.3

Source: Statistics Estonia, Estonian Labour Force Survey

Unemployment continued to increase in all regions and reached an all-time high level everywhere by the start of 2010. Regional differences between the unemployment rates decreased, but the region with the highest unemployment is still Northeastern Estonia and the region with the lowest unemployment is Western Estonia. While Northern Estonia was a region that boasted a significantly high employment rate and low unemployment, the unemployment increased to match the average of Estonia or exceeded it during the economic crisis. In the first quarter of 2010, the unemployment rate was highest in Northeastern Estonia (27.4%); unemployment was over 21% in Tallinn as well. The unemployment rate was the lowest in Western Estonia (17%). Unemployment as a whole decreased in the second quarter of 2010, but it still increased in Northeastern Estonia and Central Estonia. Regional differences started to increase again.

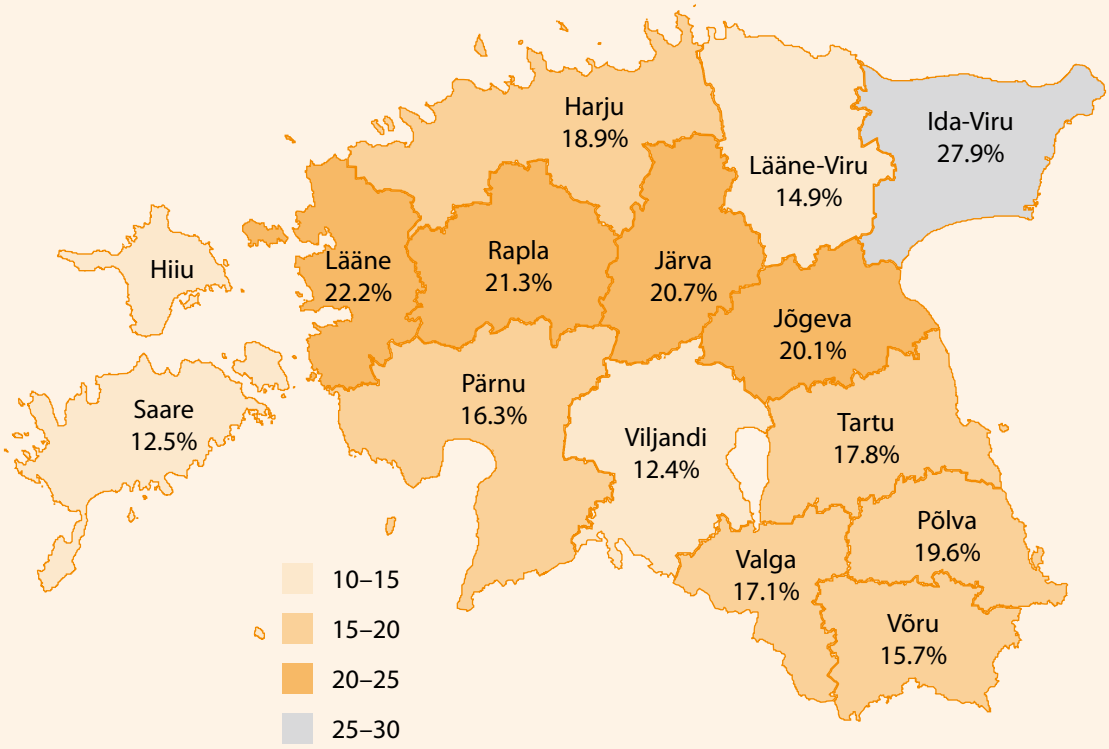
In comparison of counties, Ida-Viru County had the highest unemployment rate (27.9%) in the first half of 2010. Unemployment was over 20% also in Lääne, Rapla, Järva and Jõgeva Counties. Saare, Hiiu, Viljandi and Lääne-Viru Counties had the least unemployed persons; the unemployment rate was below 15%.

Figure 2.13. **Number of unemployed persons by age groups from 2008 to the first half of 2010 (quarterly, in thousands)**



Source: Statistics Estonia, Estonian Labour Force Survey

Figure 2.14. **Unemployment rate by counties, first half of 2010 (%)**

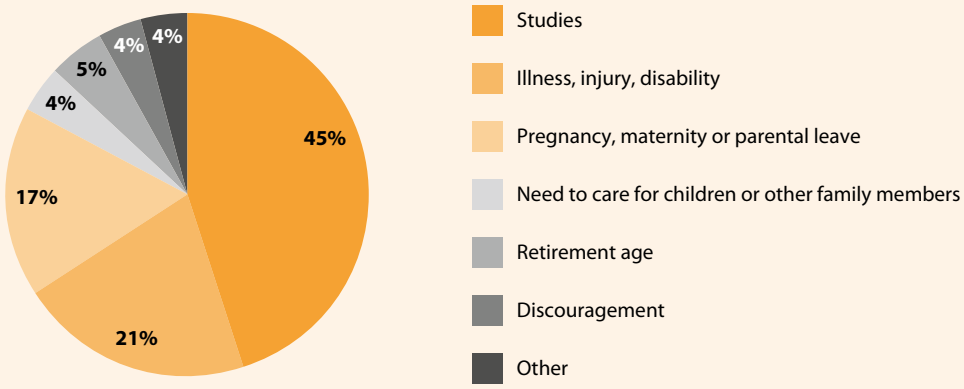


Source: Statistics Estonia, Estonian Labour Force Survey

2.7. Inactivity

For the purposes of the labour market, inactive persons are persons of working age who are neither employed nor looking for a job for some reason. In 2009, there were 204,300 inactive persons in the age group from 16 years to retirement age, which is 5,000 more than in 2008. Inactive persons are a considerable labour force reserve; therefore, it is important to analyse the reasons why persons are exiting the labour market and staying inactive. There are many reasons for not being employed and they mainly depend on the sex and age of a person. Studies, health and parental leave are the

Figure 2.15. **Reasons for inactivity, age from 16 years to retirement age, 2009**



Source: Statistics Estonia, Estonian Labour Force Survey

dominant reasons among persons of working age. Discouragement is distinguished as a separate reason. Discouraged persons are persons who would like to work but have given up looking for a job. The number of discouraged persons was the highest after the previous economic crisis in 2001. Thereafter, discouragement started to decrease and there were merely 5,500 discouraged persons in 2008. Even though the number of discouraged persons increased to 8,700 in 2009, it is over two times smaller than the indicator in 2001. The rapid increase of unemployment in the start of 2010 did not increase the number of discouraged persons substantially: there were approximately 9,300 discouraged persons in the second quarter. There were more discouraged persons among men, alike to unemployed persons.

The main reason for inactivity of persons of working age is still studies (45%) in 2009 compared to 2008, but the proportion thereof has decreased by two percentage points. Approximately 43,000 persons (21%) were not in the labour market due to an illness, injury or disability both in 2008 and 2009. Over 5,000 persons went on pregnancy, maternity or parental leaves due to an increase in the birth rate. It can be assumed that, in the conditions of a long-lasting economic crisis when the chances for young persons to get a job are more difficult, the number of people continuing studies will increase and the proportion of studies as a reason for inactivity will start to increase. The number of persons staying on parental leave is also showing an increase trend.

In conclusion

In conclusion, we saw that the economic crisis affected the labour market of Estonia extremely powerfully in 2009 and at the start of 2010. Employment that started decreasing at the end of 2008 started increasing only in the second quarter of 2010 and mainly thanks to seasonal jobs. The number of unemployed persons increased more than four times in two years and reached an all-time high of 137,000 in the first quarter of 2010. It is estimated that employment will increase and unemployment will decrease only starting from 2011.

3. Working time

Märt Masso

3.1. Amount of working time and overtime

The main indicator for describing the organisation of working time for Estonian salaried workers is the amount of working time, or in other words, the duration of the working week. The following chapter describes how the amount of working time of salaried workers has changed during the economic crisis. It can be assumed that the working time of salaried workers has shortened in a period that includes the decrease of the number of jobs and the increase of unemployment since the amount of work being performed in economic entities has decreased.

3.1.1. Part-time work

First, the spread of part-time work and the motives for using this work format among salaried workers will be described. Part-time work is a shorter working time than the standard for working time imposed by the employer that will be implemented on the agreement of the employed person and the employer. The national standard for working time is generally taken into account: part-time work is working less than 8 hours per day, i.e. 40 hours per week (also see subsection 43 (1) of the Employment Contracts Act). Economic entities wish to use the work format of part-time work when the temporal volume of certain work duties is not big enough as to require a full-time job and worker to perform them. The motive for using part-time work may therefore be a lack of work. Employed persons wish to use part-time work if private life activities such as studies or family-related obligations need more attention and time than it would be possible to give them if working full-time.

The proportion of salaried workers who are working less than 40 hours per week by sex and age is presented in the Table 3.1[15].

It appears from the Table that approximately one-tenth of salaried workers have worked part-time in the last decade. There were 547,300 salaried workers in Estonia in 2009; therefore, there were approximately 78,811 part-time salaried workers. In the period from 2003 to 2008, the decrease of the proportion of part-time workers was the trend, arising from the increase of volumes of products and services and the labour shortage that accompanied it. The economic crisis that started in 2008, on the other hand, has once again increased the amount

Table 3.1. **Proportion of part-time work among salaried workers, 2003–2009 (%)**

	2003	2004	2005	2006	2007	2008	2009
Total	12.6	11.9	11.8	11.7	11.4	10.4	14.4
Men	7.5	7.0	6.3	5.6	5.2	4.6	8.5
Women	17.6	16.5	16.7	17.3	17.2	15.9	19.6
Age groups							
15–24	16.4	15.6	16.8	15.5	15.6	13.3	20.1
25–49	9.4	8.6	9.1	16.2	8.9	8.1	11.5
50–74	18..5	17.7	15.7	15.4	14.8	10.4	18.0

Source: Statistics Estonia, Estonian Labour Force Survey, calculations of the Ministry of Social Affairs

[15] Part-time work will be considered to be working less than 40 hours per week both here and hereafter. Eurostat and the Statistics Estonia calculate part-time working differently from this because countries have different standards for working time imposed by legislation. In order to assess the proportion of part-time salaried workers by countries, part-time work is considered to be less than 35 hours per week.

of part-time workers. The volume of work in companies, institutions and organisations decreased as the economic activities decreased; in order to react to that, the numbers of jobs and employed persons were reduced, the working time of employed persons was reduced and full-time workers were given part-time work. The new Employment Contracts Act that entered into force on 1 July 2009 changed the legislation for implementing part-time work (see § 37 of the Employment Contracts Act (RT I 2009, 36, 234)). Pursuant to the new Act, an employed person can be given part-time work on the agreement of the employed person and the employer or, if the employer decides to reduce remuneration in case of not giving work, the employed person has the right to refuse to perform work proportionally to the reduced remuneration. In earlier legislation, the approval of the Labour Inspectorate was needed to implement part-time work in case of temporary decrease of work volume or orders (also see the Employment Contracts Act (RT I 2008, 59, 330)). Hence the use of part-time work during the recession has been made somewhat simpler by the changed Act.

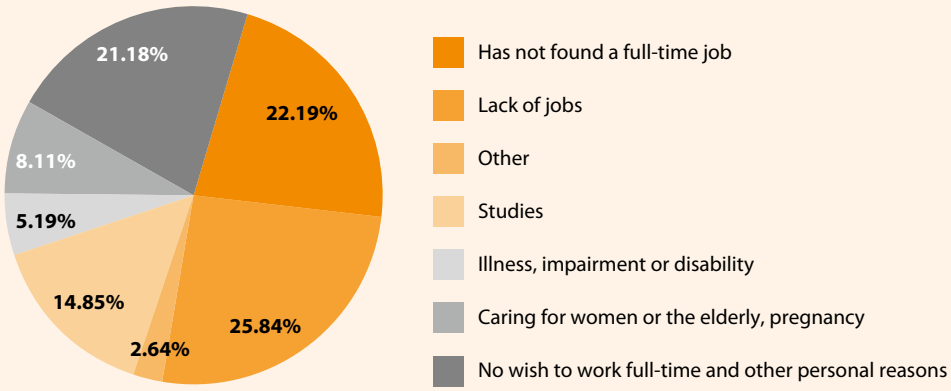
Table 3.1 showed that the proportion of women, young persons and older persons is higher among part-time workers; this can be explained by the often more risky situation on the labour market of these groups as well as the wishes of these workers to work for a shorter time in order to bring together working, family and private life. Based on data by the Estonian Labour Force Survey, 25.8% of part-time salaried workers were working part-time due to lack of work in 2009 (see Figure 3.1). The proportion of such part-time salaried workers was just 16.3% two years earlier, in 2007.

While the proportion of part-time salaried workers who could not find full-time work was 22% in 2009, the proportion was only 16% in 2007. Similar changes become apparent when observing how many part-time workers would like to work with a longer working time. Based on data of the Labour Force Survey of 2009, 20% of part-time salaried workers would like to work with a longer working time (the proportion of such part-time workers was 13% in 2007). It is therefore apparent that during the economic crisis, the reasons for working part-time have become more and more related to the work and the situation of companies, institutions and organisations: it is harder to find a full-time job, the existing jobs are lacking in work and hence there are more part-time workers who would like a longer working time.

Next, the trends of using part-time work among salaried workers by the sectors of activities are described (see Figure 3.2).

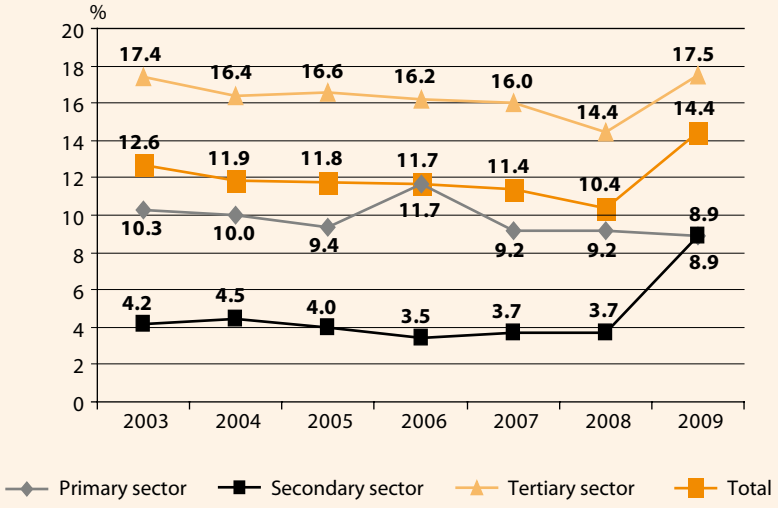
It appears from Figure 3.2 that, as expected, part-time work is more frequently used in the service sector where the organisation of working time mainly depends on management practices and less on, for example, production equipment. The highest proportion of salaried workers (as much as

Figure 3.1. **Reasons for working part time, 2009 (%)**



Source: Statistics Estonia, Estonian Labour Force Survey, calculations of the Ministry of Social Affairs

Figure 3.2. **Proportion of part-time work among salaried workers by the sector of activity, 2003–2009 (EMTAK 2008, %)**



Source: Statistics Estonia, Estonian Labour Force Survey, calculations of the Ministry of Social Affairs

35.6%) are working less than 40 hours per week in the activity of education where the working time is differently regulated and the standard working time is smaller. The proportion of part-time workers has increased most significantly in manufacturing, in the activities of accommodation and catering, real estate related activities and administrative and support service activities within the years. This too points to the fact that there are more workers without a full-time job in activities where the demand has significantly decreased during the economic crisis.

In conclusion, the proportion of part-time workers among salaried workers increased as a result of the recession and the factors arising from the needs and choices of economic entities were dominant when using part-time work. However, based on the comparative data, the spread of part-time work among Estonian salaried workers is below the average level of the European Union. In the comparative data[16], where the proportion of all employed persons who defined themselves to be working part-time was observed, the proportion of part-time workers was 10.5% in Estonia in 2009 while the average of the European Union was 18.8%. Legislation concerning the use of part-time work changed when the new Employment Contracts Act was adopted, increasing the possibilities of the parties to the employment relationship to agree on using this format of working time for economic reasons.

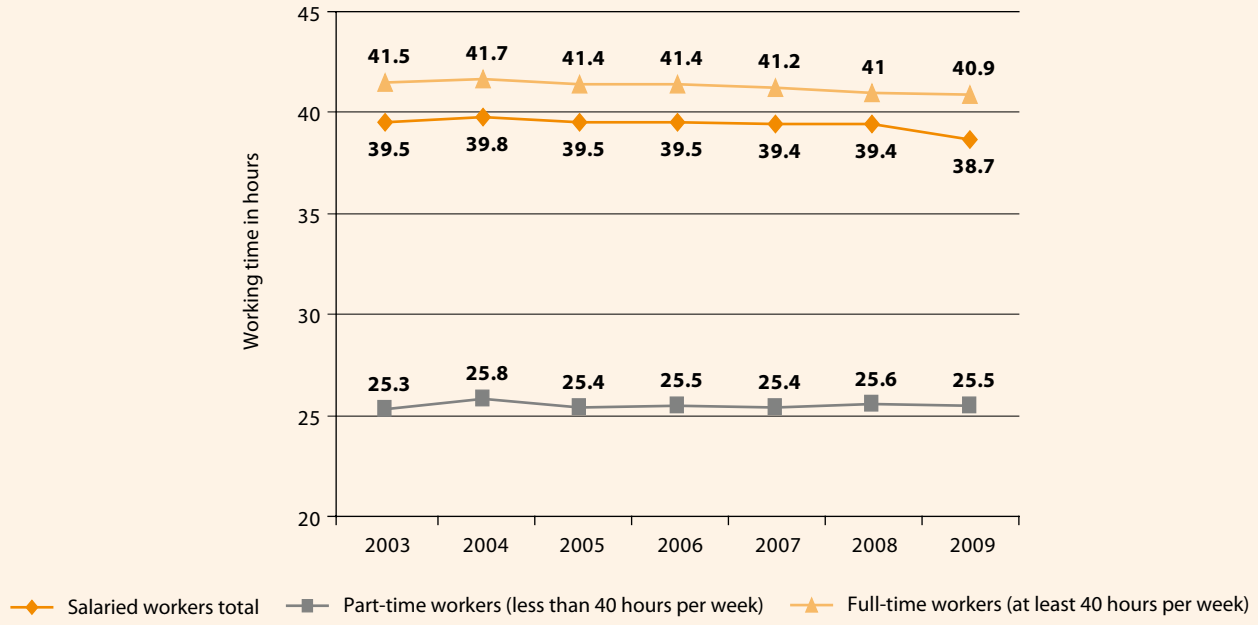
3.1.2. Amount of working time

The working week of Estonian salaried workers will be analysed next. In other words, it will be observed how many hours per week Estonian salaried workers generally work on their principal job. The average working time per week of all salaried workers, part-time salaried workers and full-time salaried workers is indicated on Figure 3.3.

It appears from Figure 3.3 that the working hours of full-time and part-time workers have remained relatively stable in the last five years. Full-time workers work for approximately 41 hours per week, part-time workers work for approximately 25.5 hours. However, it can be noticed that compared to 2008, the length of the average working

[16] Eurostat relies on definition by the workers themselves whether the work being performed on their principal job is part-time or full-time work when assessing the proportion of part-time salaried workers by country since legislation concerning the standard of working time differs from country to country.

Figure 3.3. **Average working time of salaried workers (hours per week)**



Source: Statistics Estonia, Estonian Labour Force Survey, calculations of the Ministry of Social Affairs

Table 3.2. **Average working time of salaried workers, 2003–2009 (hours per week)**

	2003	2004	2005	2006	2007	2008	2009
Total	39.5	39.8	39.5	39.5	39.4	39.4	38.7
Men	40.8	41.2	40.7	40.8	40.8	40.6	39.9
Women	38.2	38.4	38.4	38.3	38.1	38.2	37.6
Age groups							
15–24	38.7	38.9	38.3	38.8	38.4	38.7	37.4
25–49	40.3	40.7	40.2	40.1	40.0	39.9	39.4
50–74	37.9	38.2	38.4	38.5	38.7	38.8	37.8

Source: Statistics Estonia, Estonian Labour Force Survey, calculations of the Ministry of Social Affairs

week of salaried workers decreased somewhat in 2009. Salaried workers worked for 0.6 hours or 36 minutes less in 2009 compared to the previous year. The working time of full-time and part-time salaried workers decreased by 0.1 hours or 6 minutes on average in a year.

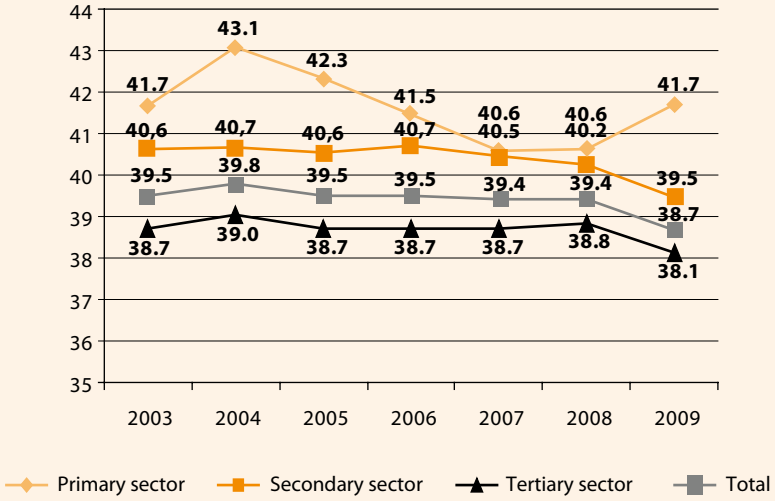
Average working time decreased in 2009 compared to 2008 in the EU Members States as a whole. While the average working week of salaried workers decreased from 39.4 hours to 38.7 hours, the average working week decreased from 36.8 hours to 36.6 hours in the European Union as a whole.

The length of the standard working week is characterised by differences in sex and age (see Table 3.2).

Women tend to normally work less than men, likewise, young persons and older persons work less than the middle age group. Such differences in average working time reflect the more frequent use of part-time work among women, young persons and older persons. The longer working time of men often arises from role expectations and behaviour that values the activities of men in the public sphere, including working life.[17] The average work-

[17] Odih, P. 2007. Gender and Work in Capitalist Economies. Maidenhead: Open University Press.

Figure 3.4. **Average working time of salaried workers by the sector of the activity, 2003–2009 (EMTAK 2008, hours per week)**



Source: Statistics Estonia, Estonian Labour Force Survey, calculations of the Ministry of Social Affairs

Table 3.3. **Regression model of working time**

Variable	Factor	P > t	Lower confidence level of factor	Upper confidence level of factor
Sex (men compared to women)	2.2	0.00	1.8	2.6
Age (compared to persons aged 25–49)				
Persons aged 15–24	–2.1	0.00	–2.9	–1.4
Persons aged 50–74	–1.4	0.00	–1.8	–1.0
Sector (compared to the primary sector)				
Secondary sector	–2.4	0.01	–4.2	–0.6
Tertiary sector	–3.3	0.00	–5.2	–1.4
Occupation (compared to officials and service and sales personnel)				
Legislators, higher officials, managers and professionals	–0.9	0.00	–1.4	–0.4
Midlevel specialists and technicians	–0.8	0.03	–1.4	–0.1
Skilled workers and craftsmen, equipment and machinery operators, unskilled workers	–1.4	0.00	–2.0	–0.8
Size by number of workers (compared to economic entities with 11–49 workers)				
Economic entities with 10 and fewer workers	–1.4	0.00	–2.0	–0.9
Economic entities with 50–199 workers	0.5	0.06	0.0	0.9
Economic entities with 200 and more workers	0.8	0.00	0.3	1.3
Constant (*intercept*)	42.3	0.00	40.4	44.2

Source: Statistics Estonia, Estonian Labour Force Survey, calculations of the Ministry of Social Affairs

ing time is often shorter due to continuing studies among younger salaried workers; for older salaried workers, the working time is shorter due to health problems.

Since organisation of working time differs from activity to activity and the recession has had different impacts on different activities, we will next observe the average working time of salaried workers by the sector of the activity (see Figure 3.4). It appears from the figure that while the secondary and tertiary sectors were characterised by a decrease trend, the average working time in the primary sector increased. Working time decreased the most in the activities of water supply, sewerage, waste management and in the activities of transportation and storage. Working time increased the most in agriculture.

We will also observe a multi-dimensional regression equation of working time in order to characterise the average standard working week of salaried workers. It will describe the differences in average working time, taking into account the different workers and the variables describing their work at the same time. Part correlations, i.e. differences of working time according to one certain variable will be analysed in the regression equation, leaving the other variables constant.

It is apparent from the table describing the regression equation of working time that the average working week of men is longer compared to women even when we take into account the differences of men and women in age, activity of the job, occupation and size of the employer. Taking into account sex, age, activity of the job, occupation and size of the employer, workers aged 25–49 work with a longer average working week compared to persons in the age groups of younger persons and older persons.

For the variables characterising the jobs of salaried workers, it can be observed that, taking into account the differences of workers of different activities by sex, age, occupational and size of the employer, workers of the primary sector work with a longer average working time than the workers of the secondary and tertiary sectors. It also appears that officials and service and sales personnel have the longest working time, taking into account the differences of workers of different activities by sex, age, activity of the job and size of the employer.

Long working days are often accompanied by exhaustion that can cause health problems.[18] In addition, the possibility of workers to mix working and private life decreases with long working days because there is less time for non-work activities. We will therefore observe the number and proportion of full-time salaried workers who are generally working more than 48 hours per week (see Table 3.4).

The proportion of salaried workers who generally had a working week longer than 48 hours per week was 3.3% in 2009. Therefore, approximately 17,000 salaried workers are generally working more than 48 hours per week. In comparison of years, a decreasing trend is apparent and the proportion of salaried workers who are working long working weeks decreased in 2009 compared to the previous year as a result of the recession.

It was mentioned before that significant differences in sex are apparent for duration of working time. In 2009, men who performed full-time salaried work worked 41.3 hours per week on average and women worked 40.5 hours. It is also apparent from Table 3.4 that there are 3.1 percentage points more male salaried workers who work more than 48 hours per week than among female salaried workers. The proportion of workers generally working more than 48 hours per week decreased among men in 2009, which was probably caused by the bigger effect of the economic crisis on the jobs of men, resulting in a higher unemployment of men and significant shrinking of activities dominated by men such as manufacturing and construction.

The average working time of full-time salaried workers also differs by age. It could be seen in Table 3.4 that there are less full-time salaried

Table 3.4. **Proportion of full-time salaried workers who are generally working more than 48 hours per week, 2003–2009 (%)**

	2003	2004	2005	2006	2007	2008	2009
Total	6.2	5.9	5.7	6.1	5.5	4.0	3.3
Men	8.9	9.1	8.4	8.7	8.2	6.0	4.9
Women	3.3	2.6	2.8	3.4	2.6	1.8	1.8
Age groups							
15–24	6.1	6.2	4.9	6.0	4.8	4.2	2.9
25–49	7.0	7.0	6.3	6.9	5.8	4.2	3.8
50–74	4.4	3.3	4.3	4.6	5.1	3.5	2.5

Source: Statistics Estonia, Estonian Labour Force Survey, calculations of the Ministry of Social Affairs

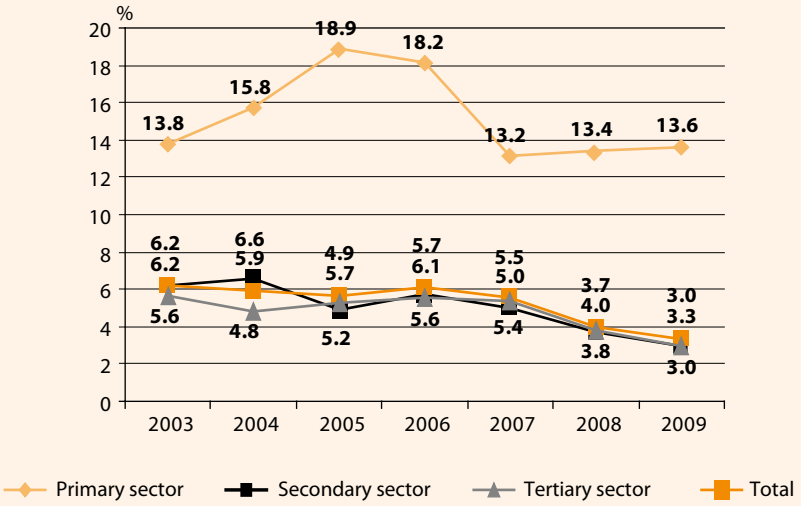
[18] See for example Spurgeon, A. 2003. Work time: Its Impact on Safety and Health. Geneva: ILO.

workers who generally work more than 48 hours per week among older persons (persons over 50 years of age). While the average length of the working week of full-time salaried workers aged 15–49 is 41 hours, the respective number is 40.7 hours for persons aged 50–74.

Figure 3.5 indicates the proportion of salaried workers who generally work over 48 hours per week by the sector of the activity.

The biggest proportion of any sector's salaried workers who are working very long working weeks is in the agricultural sector. The trend of the proportion of salaried workers in the manufacturing and service sectors has formed similarly to the trend of the salaried workers of all activities. The fact that the average working week is longer in the primary sector and a bigger proportion of the workers in the sector are working over 48 hours per week is likely caused by frequent seasonal work that has to be performed within a limited time period.

Figure 3.5. **Proportion of full-time salaried workers who generally work over 48 hours per week by the sector of the activity, 2003–2009 (%)**



Source: Statistics Estonia, Estonian Labour Force Survey, calculations of the Ministry of Social Affairs

3.1.3. Overtime

Related to long working weeks, we will next observe overtime. Overtime means working more than the standard agreed on by the employer and the employee. Companies and institutions are in need of overtime if in addition to the working hours agreed on in the agreement with the employees, a need arises to find working time to perform additional work. Overtime means the working hours that exceed the total number of working hours that have been agreed on for the calculation period in case of changing starting and ending times of work and in case of calculated total working time. The proportion of persons performing paid and unpaid overtime is described in Table 3.5 on the basis of the Labour Force Survey data.

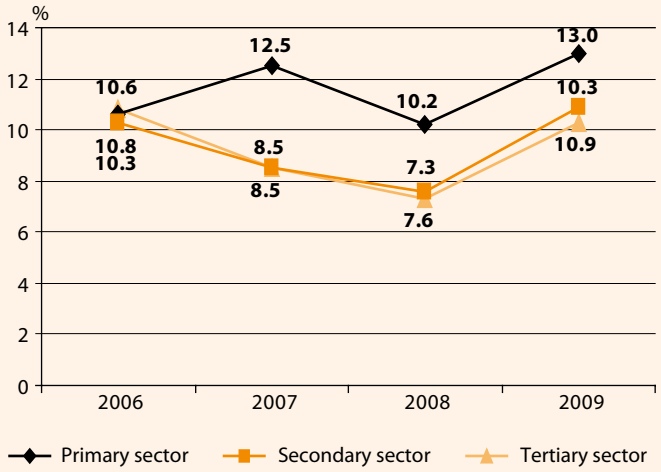
It appears from the table that the proportion of persons performing paid or unpaid overtime decreased by approximately 3% in the years 2006–2008, yet it increased to the level of 2006 again in 2009. Since male workers have more working hours per week, the proportion of persons performing overtime is somewhat bigger among them. One of the reasons for such a change of trend might be the circumstance that the number of salaried workers not performing overtime has decreased at a faster pace than the total number of salaried workers. Workers performing overtime may be more valued and important for economic entities and therefore less employment relationships were ended with

Table 3.5. **Proportion of persons performing paid and unpaid overtime among salaried workers, 2006–2009 (%)**

	2006	2007	2008	2009
Total	10.5	8.7	7.5	10.6
Men	11.4	9.2	7.7	10.3
Women	9.7	8.2	7.3	10.9
Age groups				
15–24	10.6	7.1	7.3	11.8
25–49	10.3	9.0	7.5	10.3
50–74	10.8	8.6	7.6	10.8

Source: Statistics Estonia, Estonian Labour Force Survey of Estonia, calculations of the Ministry of Social Affairs

Figure 3.6. **Proportion of persons performing paid and unpaid overtime among salaried workers by the sector of the activity, 2006–2009 (%)**



Source: Statistics Estonia, Estonian Labour Force Survey, calculations of the Ministry of Social Affairs

these persons in companies, institutions and organisations during the economic crisis.

In comparison of activities, the biggest proportion of persons performing overtime was in the primary sector (see Figure 3.6), reaching up to 13%. A similar trend where the proportion of persons performing overtime has increased during the economic crisis can be observed in all sectors. The slowing down of the spread of overtime in secondary and tertiary sectors before the economic crisis (2006–2008) could have been triggered by the fact that in the conditions of labour shortage, workers were more likely to not accept the employer's proposal to work more than agreed. When the economic crisis deepened, persons did not dare refuse overtime anymore in fear of losing their jobs.

In conclusion, the length of the average working week of salaried workers decreased and, respectively, the proportion of salaried workers who worked for long working weeks decreased during the economic crisis. In the near future, the duration of working time will be affected by the use of part-time work arising from lack of work, which may decrease as the economic activity recovers and therefore the average working time may be lengthened. This may also lengthen the working time of full-time workers if they are used more as the economic conditions improve. A shortage of workers with certain skills and knowledge may arise notwithstanding the high unemployment as the economic activity increases, which may in turn increase the pressure to lengthen the working time of these workers.

3.2. Timing of working time: working at an unusual time

In order to characterise the organisation or working time of salaried workers, we will also observe the timing of working time, i.e. at what time the workers are working. In terms of employment relationships, it is important to analyse working at an unusual times, that is, at evenings, nights and weekends. Parties to the employment relationships can have different interests and needs to organise work to be performed at an unusual time. The employer may, for example, divide work into several shifts, of which one will be an evening, night or weekend shift in order to obtain the maximum load from machinery and other equipment. Workers may wish to work at unusual times to combine working life with private life, such as studies. However, health problems may become undesirable side effects of working at evenings and nights and working at evenings, nights and weekends may limit the organisation of life, such as the possibility to use services, take part in cultural events and communicate with friends and persons closest to the worker.

The proportion of salaried workers who are working at evenings, nights and weekends is presented in Table 3.6.

In 2009, 17.3% of salaried workers worked in the evening on at least half of working days whereas in the previous year, the respective percentage was 16%. 18.7% of salaried workers worked in the evenings sometimes (less than on half of the total number of working days) in 2009 (19.6% in 2008). Therefore the proportion of persons working in the evening somewhat increased within a year, above all on the account of persons often working in the evening. Compared to other EU Member States, there are slightly more persons working in the evening in Estonia. While 36% of salaried workers worked in the evening in Estonia, the total average of EU Member States was 34.3% (Eurostat).

In 2009, 6.6% of salaried workers worked often at night (at least on half of total working days) and 6% of salaried workers in 2008. 7.2% of salaried

Table 3.6. **Proportion of working at an unusual time, 2003–2009 (%)**

		2003	2004	2005	2006	2007	2008	2009
Working in the evening (from 18:00 to 00:00)	**Total**	34.5	35.5	33.7	39.0	35.8	35.6	36.0
	Men	37.6	38.8	36.4	43.5	37.7	37.2	39.0
	Women	31.6	32.5	31.2	34.9	34.1	34.1	33.4
	Persons aged 15–24	42.5	39.2	43.2	39.5	38.6	44.9	45.5
	Persons aged 25–49	35.5	35.9	33.8	40.0	36.1	34.8	35.1
	Persons aged 50–74	29.2	33.4	29.8	36.9	34.0	33.6	34.8
Working at night (after 00:00 at night)	**Total**	15.4	14.5	13.0	14.6	11.5	11.7	13.7
	Men	18.6	16.3	14.8	17.6	13.1	13.3	17.1
	Women	12.3	12.8	11.3	11.7	10.0	10.1	10.8
	Persons aged 15–24	16.1	13.2	16.4	11.3	10.3	14.2	16.8
	Persons aged 25–49	16.1	14.6	12.7	14.7	11.3	11.3	13.0
	Persons aged 50–74	13.5	14.8	12.2	15.4	12.5	11.3	14.1
Working at weekends	**Total**	41.0	38.7	35.0	38.5	36.5	35.1	35.0
	Men	43.5	39.8	48.0	41.2	36.7	34.0	35.4
	Women	38.6	37.7	37.4	36.0	36.4	36.2	34.7
	Persons aged 15–24	47.8	43.6	48.0	42.0	41.0	44.4	48.9
	Persons aged 25–49	41.6	38.3	37.5	38.8	36.5	33.9	33.2
	Persons aged 50–74	37.1	37.9	35.0	36.7	34.8	33.9	34.0

Source: Statistics Estonia, Estonian Labour Force Survey, calculations of the Ministry of Social Affairs

workers worked sometimes at night in 2009 and 5.7% of salaried workers in 2008. It appears that within a year, the proportion of salaried workers working at night has somewhat increased; the number of workers working at night both often and sometimes has increased. There are somewhat fewer salaried workers working at night compared to the average of EU Member States. While 13.7% of salaried workers worked at night in Estonia in 2009, the total average of EU Member States was 14.9%.

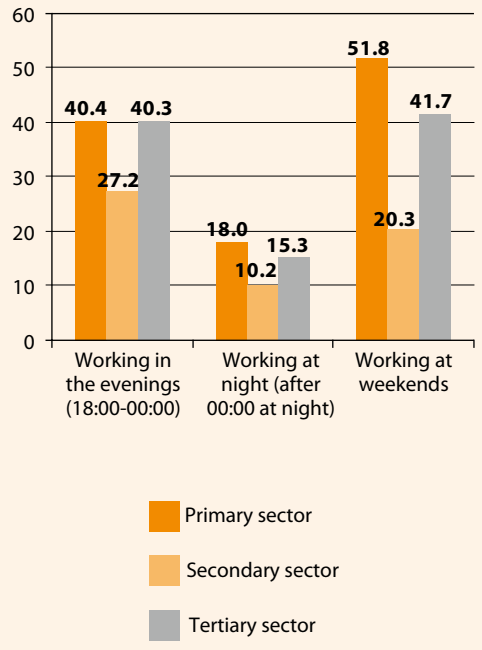
It appears when analysing working at weekends by days that 16.7% of salaried workers worked on at least two Saturdays in a single month in 2009 while the proportion was 15.9% in 2008. 17.2% of salaried workers worked on at least one Saturday in a single month in 2009 while the proportion was 18.3% in 2008. It therefore appears that whereas the proportion of persons who work on Saturdays did not significantly change within a year, the proportion of workers who work more often on Saturdays increased (on account of the workers who work less frequently on Saturdays). Estonia has a somewhat smaller proportion of salaried workers who work on Saturdays compared to the European Union: 33.9% of Estonian salaried workers worked on Saturdays in 2009 while the average in the European Union was 41.1% of salaried workers.

11.9% of salaried workers worked often on Sundays (that is, on at least two Sundays in a single month) in 2009 (10.7% in 2008). 13% of salaried workers worked on Sundays sometimes (that is, on one Sunday in a single month) in 2009 (12.4% in 2008). Therefore, the proportion of workers working on Sundays has decreased within a year. There are no significant differences in Estonia in the proportion of salaried workers who work on Sundays compared to the total average of the EU Member States: 25% of Estonian salaried workers and 23.7% of salaried workers of all the EU Member States worked on Sundays in 2009.

It also appears from Table 3.6 that men work more in the evening and at night than women. Salaried workers belonging to the younger age group are likewise working more in the evening and at night; it is probably a way for them to combine private life, that is, studies, with working life.

Next, we will observe the use of work at an unusual time among salaried workers working in different activities (see Figure 3.7).

Figure 3.7. **Proportion of working at an unusual time by activities, 2009 (%)**



Source: Statistics Estonia, Estonian Labour Force Survey, calculations of the Ministry of Social Affairs

It appears from Figure 3.7 that unusual organisation of work is more often used in the primary and the tertiary sector. The bigger proportion of using unusual working times in the tertiary sector, that is, the service sector, arises from the frequent provision of (personal) services in the evenings and at weekends to persons who are working at usual times. In the primary sector, that is, agriculture, fishing and forestry, unusual working time is used more due to a need to perform seasonal work within a certain time period and therefore work is also done in the evenings, at night and at weekends.

It appeared from the table characterising the spread of working at an unusual time that the proportion trends of salaried workers have moved up and down unevenly. This makes it difficult to distinguish the trends. Working at an unusual time may also be affected by change in the decision balance of the parties to the employment relationship as a result of the economic crisis. Workers cannot choose a

job and organisation of working time as often and as freely; therefore, more work is performed at an unusual time in economic entities that wish to use such organisation of work with the purpose of using their machinery, equipment, premises, etc., more effectively. On the other hand, we have seen the shrinking of the economy and decrease of the amount of work during the economic crisis; this reduces the number of these economic entities and jobs where there is a need to organise work at an unusual time.

In 2009 and the following years, the spread of working at an unusual time may also be affected by the Employment Contracts Act that entered into force on 1 July 2009. In this Act, the legislation of working in the evening (18:00–22:00), including the demand that the additional remuneration for a working hour may not be less than 10%, has been removed. Such deregulation gives more freedom of agreement to the parties to the employment relationship and may further increase the use of working in the evening. The legislation of working at night (from 22:00-06:00) has also been changed with the new Employment Contracts Act. The minimum additional remuneration has been increased from 1.2 times of remuneration to 1.25 times of remuneration pursuant to the new legislation. The conditions of use of night work were also changed by transposing Directive 2003/88/EC concerning working time,[19] taking into account the need to ensure occupational health and safety when using this format of organisation of work (also see § 45 of the Employment Contracts Act (RT I 2009, 36, 234). These changes do not necessarily hinder the use of night work but instead ensure the use of this format of work in cases and in a way that is more thoughtful for the health of workers.

In conclusion

It appears from the analysis of working time that the proportion of salaried workers who are working part-time has increased during the economic crisis and, among the reasons of working part time, reasons that are related to work have become more frequent: it is more difficult to find full-time jobs and there is a lack of work at the existing job. In the light of the increase of part-time work, the average working time of salaried workers has also decreased: by approximately 36 minutes. However, the working time of full-time salaried workers only decreased by 6 minutes. Even though the number of salaried workers who are working over 48 hours per week somewhat decreased in 2009, the proportion of salaried workers performing overtime increased in the year. The proportion of salaried workers performing overtime may have increased due to the faster decrease of salaried workers who are not performing overtime since workers performing overtime may be more valued and important in companies and institutions and employment relationships have been terminated with them less frequently during the economic crisis. Within a year, the proportion of workers performing work at unusual times increased somewhat, above all on account of workers performing work in the evenings.

[19] Directive 2003/88/EC of the European Parliament and of the Council concerning certain aspects of the organisation of working time.

4. Risk groups on the labour market

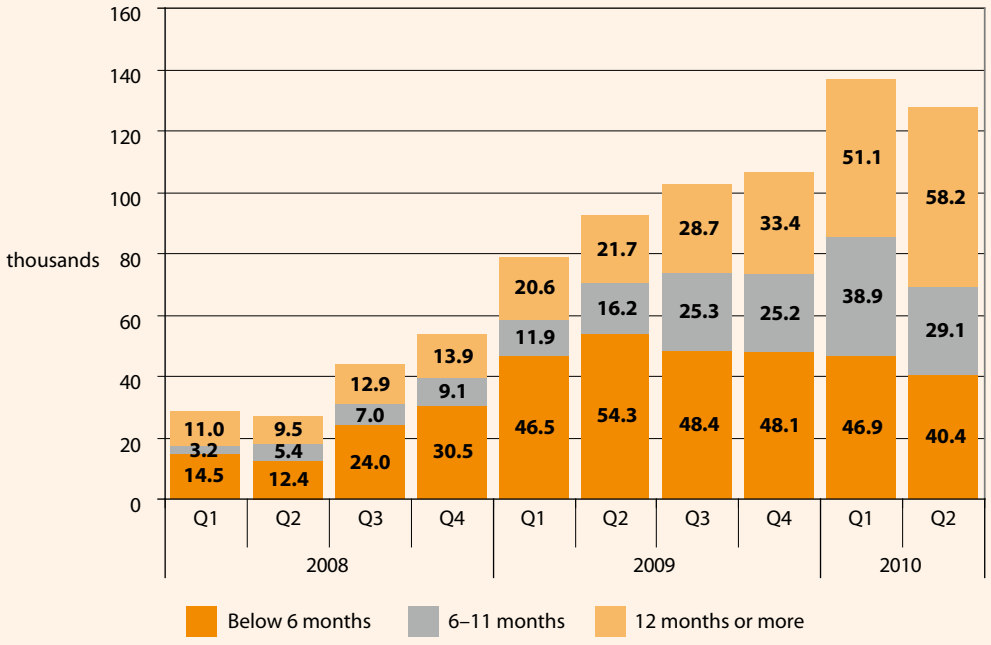
Liina Malk

In this chapter, the social groups who have a higher risk of becoming unemployed and who are more likely to have trouble returning to the labour market after becoming unemployed will be described. The groups being observed are long-term unemployed persons[20] who have been seeking a job for a year or longer; young persons aged 15–24 who are starting an active labour life; older persons aged 55–64 who are likely to have trouble finding a new job after losing their jobs, and non-Estonians who are having trouble on the labour market due to insufficient skill in Estonian. All of the four risk groups may have smaller or larger problems when entering, adjusting to and staying in the labour market that the policymakers should take into account when developing the measures of the labour market. It is therefore important to know the size, structure and dynamics of these risk groups. Describing these aspects is the main focus of this chapter.

4.1. Long-term unemployed persons

Long-term unemployment[21] has a negative effect on the professional skills, work habits and also the self-esteem of persons, thus reducing their competitiveness. Therefore, the longer a person is away from the labour market, the harder it is for him or her to return, the more likely he or she is to have difficulties in coping and the general risk of poverty increases. Long-term unemployment is therefore a

Figure 4.1. **Number of unemployed persons by the duration of unemployment, 2008–2010 (quarterly, thousands)**



Source: Statistics Estonia, Estonian Labour Force Survey

[20] In-depth topic pages about long-term unemployment and unemployment of young persons and non-Estonians are located at the web site of the Ministry of Social Affairs, http://www.sm.ee/meie/valjaanded/toimetised.html (Series of the Ministry of Social Affairs No 4-6/2010).

[21] Long-term unemployment – the search for work lasts for 12 months and longer.

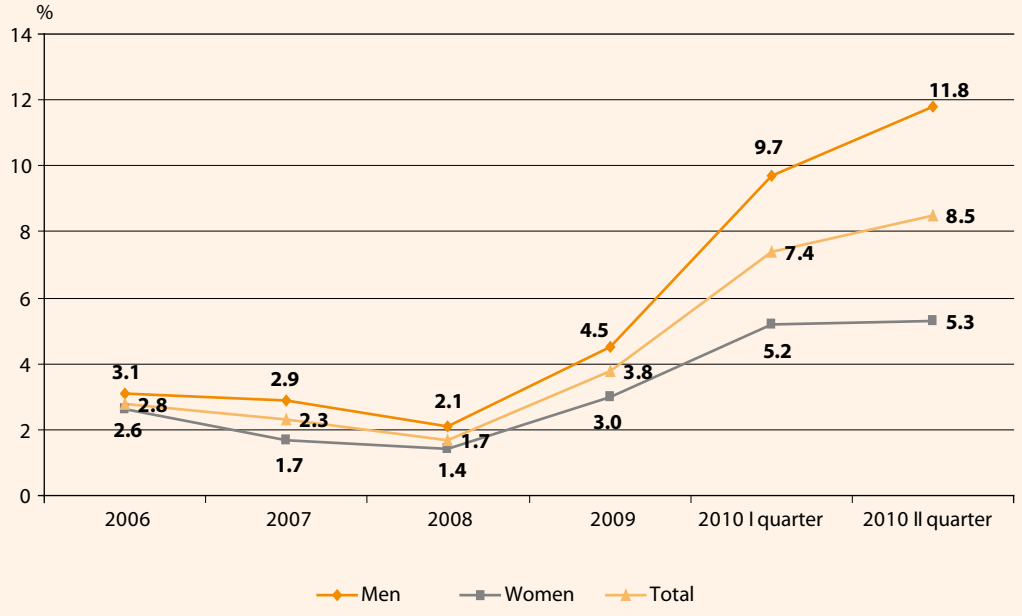
big socio-economical problem that brings about grave consequences for the unemployed person, his or her family and the whole of society.

Long-term unemployment decreased during the years of the economic boom from 2006 to 2008 in the conditions of labour shortage and therefore it was also significantly easier for persons who had been away from the labour market to find a place there. Long-term unemployment reached the minimum level in the second quarter of 2008 when 9,500 persons had been unemployed for 12 months or longer (the total number of unemployed persons was 27,300). Affected by the recession, unemployment started to rapidly increase thereafter, increasing five times to 137,000 unemployed persons by the first quarter of 2010. The number of long-term unemployed persons was 51,000 at that point and it increased even more in the second quarter of 2010, reaching 58,000, which is over six times more than in 2008 at the same period. While initially the number of short-term unemployed persons increased faster, starting from the third quarter of 2009, the number of persons unemployed for 12 months or more started to increase faster; the number of short-term unemployed persons decreased slightly in the fourth quarter. It could therefore be observed that these persons were becoming long-term unemployed persons.

The indicator describing long-term unemployment is the long-term unemployment rate[22], indicated on Figure 4.2. It can be seen that, compared by sex, the long-term unemployment rate of men has always been higher than that of women, but the gap increased the most in 2010 – while the long-term unemployment rate of women was 5.3% as of the second quarter of 2010, the indicator was over two times higher for men (11.8%). This may be explained by the lengthening of the job-seeking of men since during the recession, the demand for labour force in traditional men's activities (construction and manufacturing) decreased.

Looking at the distribution of long-term unemployed persons by age (Figure 4.3), it may be said that most of them belong to the best working age (aged 25–49 years) and the job-seeking of young persons lasts for less time than that of older persons. While 31% of young unemployed persons were long-term unemployed persons by the second quarter of 2010, there were 50% of long-term unemployed persons among persons aged 25–49 and 48% among older persons. The number of

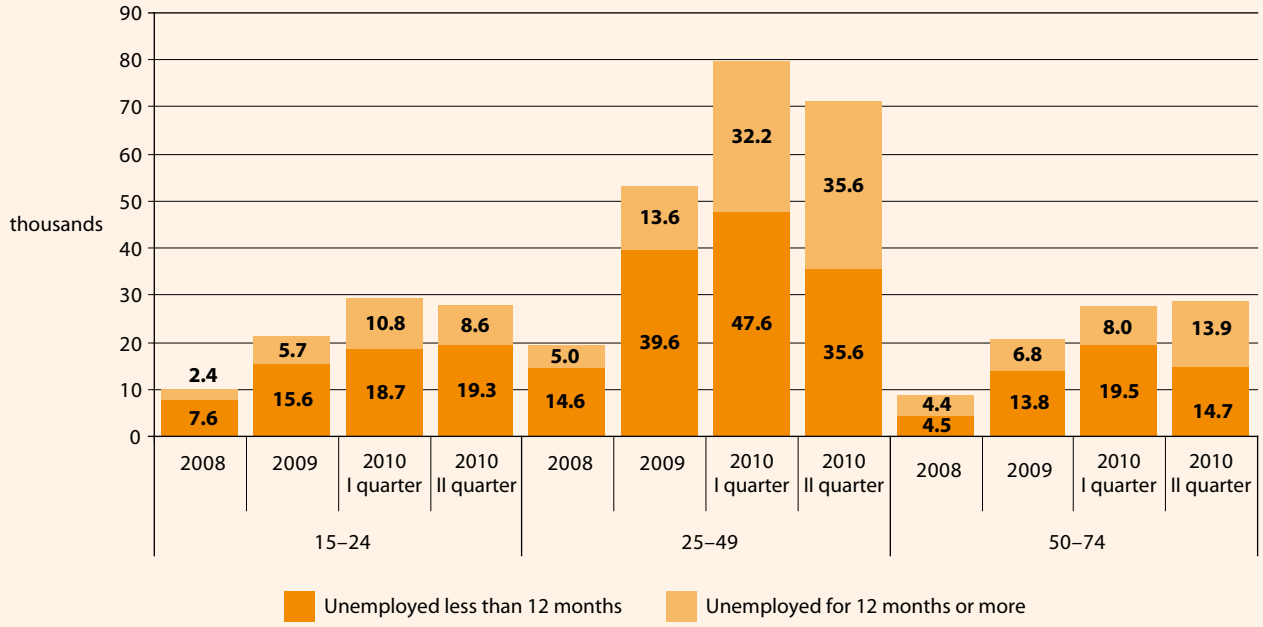
Figure 4.2. **Dynamics of the long-term unemployment rate of women and men from 2006 to the second quarter of 2010 (%)**



Source: Statistics Estonia, Estonian Labour Force Survey

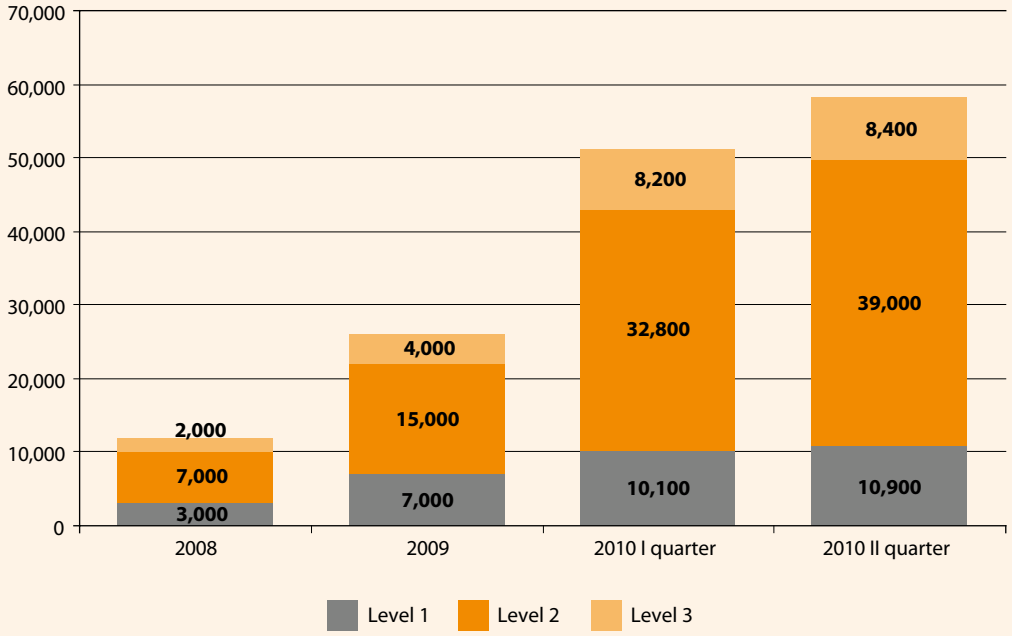
[22] Long-term unemployment rate – proportion of long-term unemployed persons in the labour force.

Figure 4.3. **Number of unemployed persons by age group and duration of unemployment from 2008 to the second quarter of 2010 (thousands)**



Source: Statistics Estonia, Estonian Labour Force Survey

Figure 4.4. **Numerical division of long-term unemployed persons by level of education from 2008 to the second quarter of 2010**



Source: Statistics Estonia, Estonian Labour Force Survey

long-term unemployed persons aged 15–24 has decreased in the last quarter while this indicator has still increased for the other age groups.

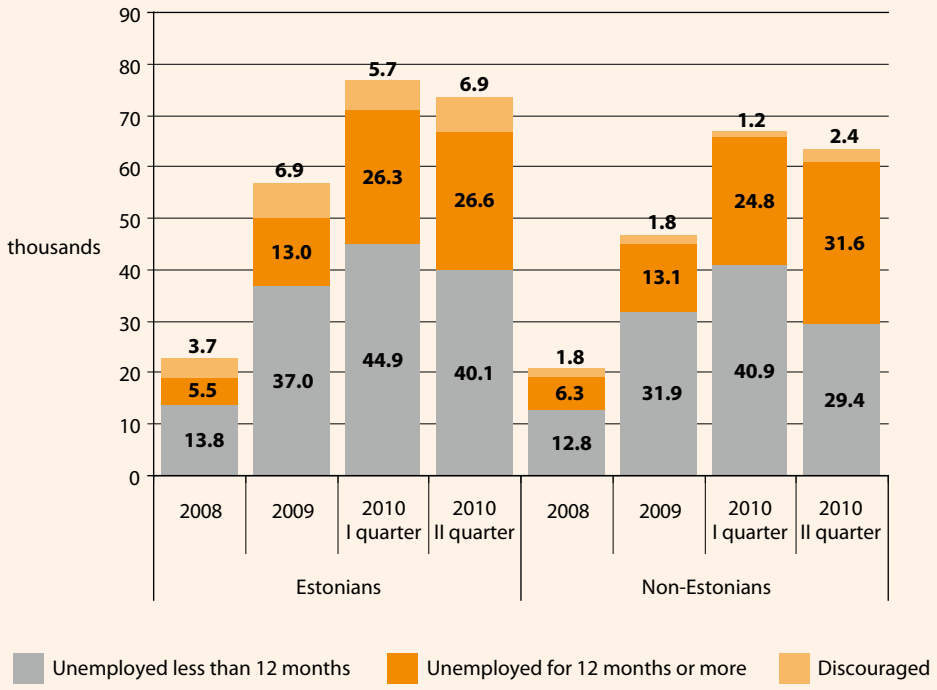
An important factor that affects the duration of job-seeking is the level of education: unemployment, including long-term unemployment, is generally higher among persons with a lower level of education. Yet many persons with a higher education lost their jobs due to redundancies in the conditions of the economic crisis and their job-seeking also lasted for a longer term due to lack of suitable

jobs. As Figure 4.4 indicates, the absolute number of long-term unemployed persons with level 3 education[23] has increased more than among persons with level 1 education. There were 8,400 long-term unemployed persons with higher education in the second quarter of 2010, which is over four times more than in 2008; the number of long-term unemployed persons with level 1 education has increased less than four times. However, the number of long-term unemployed persons has increased the most due to unemployed persons with level 2 education.

Unemployment has generally been higher and longer among non-Estonians than among Estonians. The unemployment rate of Estonians was 14.9% and 25.6% for non-Estonians in the second quarter of 2010; the long-term unemployment rates were respectively 5.9% and 13.3%. While there was roughly an equal number of long-term unemployed persons among Estonians and non-Estonians in 2009 (see Figure 4.5), Estonians constituted 51% of long-term unemployed persons in the beginning of 2010 whereas the proportion of non-Estonians increased to 54% in the second quarter of the year.

Long-term unemployment should be observed together with discouragement[24], as long-term unemployed persons often give up job-seeking and become inactive. Figure 4.5 indicates that the number of discouraged Estonians has increased by 86% while the number of discouraged non-Estonians increased by 33% during the recession. It can therefore be stated that in case of losing their job, Estonians give up job-seeking notably more often and become discouraged faster than non-Estonians. While Estonians constituted 46% of the long-term unemployed persons as of the second quarter of 2010, there were even 74% of them among discouraged persons.

Figure 4.5. **Short-term and long-term unemployed and discouraged persons by nationality from 2008 to the second quarter of 2010 (thousands)**



Source: Statistics Estonia, Estonian Labour Force Survey

[23] Education levels of the ISCED: first level – primary education, basic education, vocational education for young persons without basic education; second level – secondary education, vocational education on the basis of basic education, vocational secondary education on the basis of secondary education; third level – secondary specialised education on the basis of secondary education, academic education, professional higher education, doctor.

[24] Discouraged person – person who has given up job-seeking due to loss of hope of finding a job.

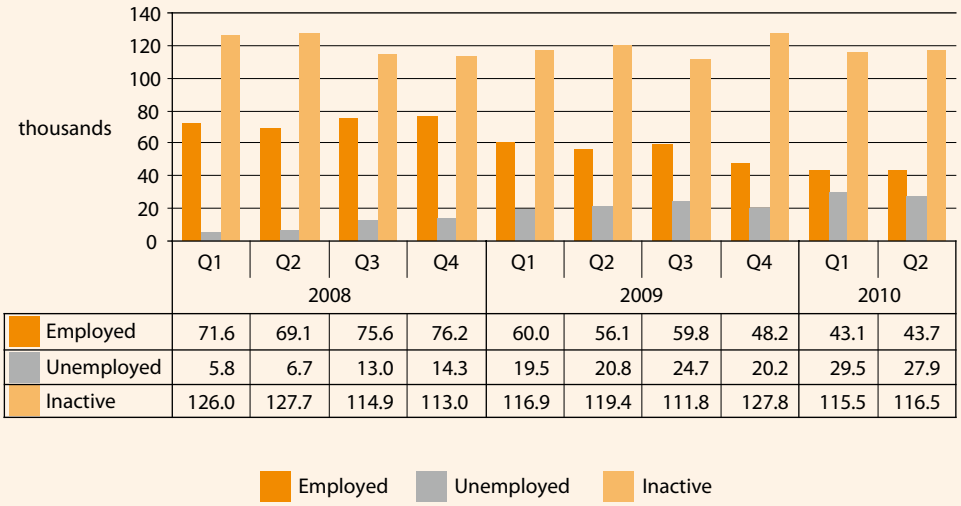
4.2. Young unemployed persons

High unemployment of young persons means a social issue for both the individuals and the society as a whole. Shortcomings in this stage of life caused by difficulties in entering the labour market may cause bigger issues in further life, *inter alia* making it difficult to stay competitive on the labour market. In other words, being unemployed as a young person affects the future outlook, increasing the risk of becoming unemployed in the future. Young persons are therefore seen as one of the risk groups of the labour market who need special attention. If young persons do not find a possibility to accomplish themselves in Estonia, they will start seeking such a possibility from abroad and their departure may often turn out to be permanent. Since the future of any society depends on young persons, it is extremely important that they find their place in the Estonian labour market and persons who have gained experience abroad have a chance to implement their knowledge at home.

There were a total of 188,100 young persons aged 15–24 in the second quarter of 2010; the majority of them (62%) were inactive (see Figure 4.6). The main reason for inactivity of young persons is studies: a large proportion of young persons are extending their studies to improve their future outlook for a job. The proportion of inactive persons among all young persons decreased during the recession compared to the years of economic growth, which may arise from the situation that studying young persons started to seek jobs themselves due to the increasing unemployment of their parents and the deteriorating economic situation; their employment status therefore changed from inactive to unemployed. The largest proportion of young persons, however, became unemployed due to decrease of employment. The number of young unemployed persons increased over five times by the first quarter of 2010 compared to the same period in 2008, reaching 29,500 unemployed persons. This indicator decreased by 1,600 in the second quarter of 2010.

As Figure 4.6 indicates, employment kept growing in 2008 when the number of unemployed persons already started to increase due to the recession, reaching the maximum level at the end of the same year. Thereafter the number of employed persons started to decrease rapidly, reaching 43,100 by the first quarter of 2010, which is 43% less than at the end of 2008. The employment of young persons increased a bit in the second quarter of 2010, reaching 43,700.

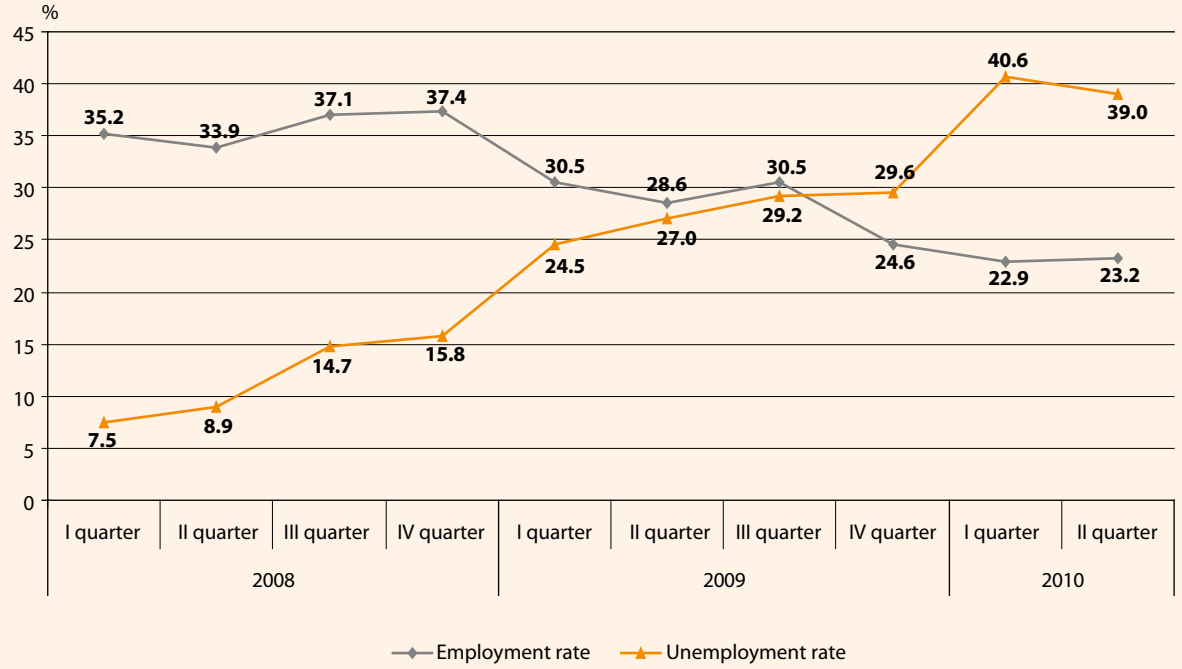
Figure 4.6. **Employment statuses of persons aged 15–24 from 2008 to the second quarter of 2010 (quarterly, thousands)**



	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Q1 2009	Q2 2009	Q3 2009	Q4 2009	Q1 2010	Q2 2010
Employed	71.6	69.1	75.6	76.2	60.0	56.1	59.8	48.2	43.1	43.7
Unemployed	5.8	6.7	13.0	14.3	19.5	20.8	24.7	20.2	29.5	27.9
Inactive	126.0	127.7	114.9	113.0	116.9	119.4	111.8	127.8	115.5	116.5

Source: Statistics Estonia, Estonian Labour Force Survey

Figure 4.7. **Dynamics of the employment and unemployment rates of persons aged 15–24 from 2008 to the second quarter of 2010 (quarterly, %)**



Source: Statistics Estonia, Estonian Labour Force Survey

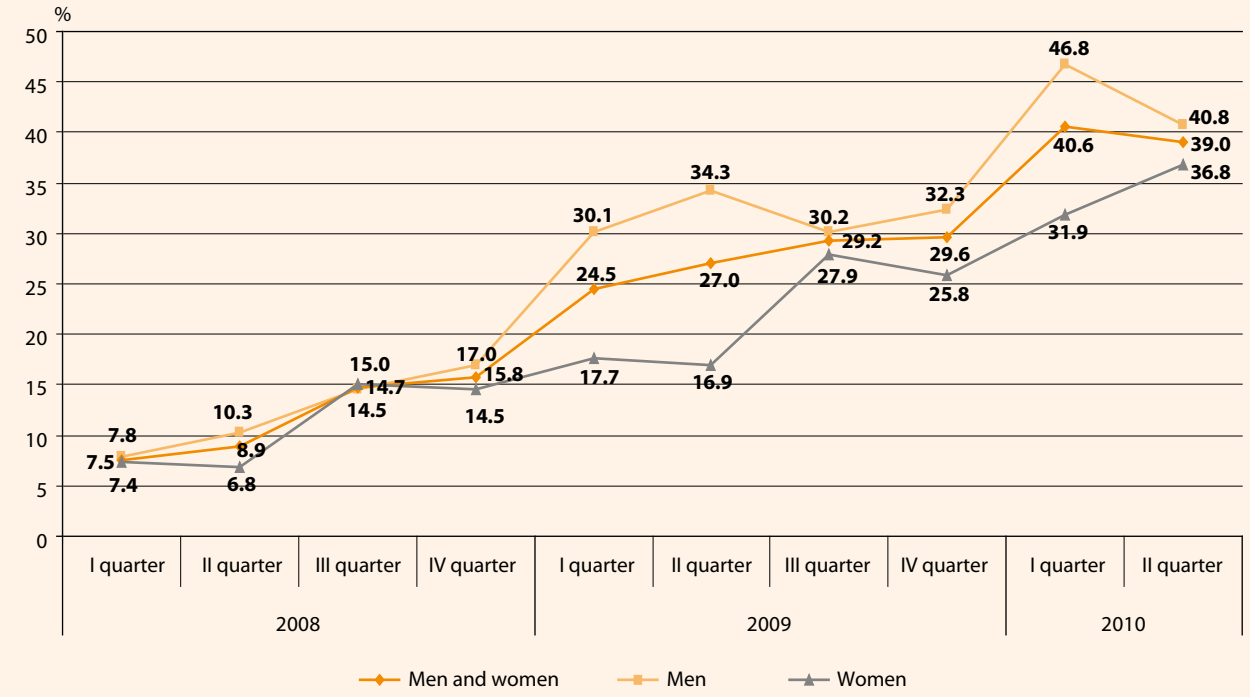
Comparing the situation of young persons (Figure 4.7) to the whole population of working age (see Chapter 2, Figure 2.1), it can be stated that while the employment rate of young persons was a bit less than two times lower than the employment rate of persons aged 15–64 until the fourth quarter of 2008, the gap increased to more than two-fold starting from the first quarter of 2009. One of the reasons why employment tends to be lower among young persons is the existence of the so-called queue of jobs.[25] As newcomers to the labour market, young persons may find themselves at the end of that queue and since employers often prefer workers with more experience, young persons will only have jobs in case of big demand for labour force. Since the demand for labour force decreased significantly during the recession, it was a lot harder for persons entering the labour market for the first time to find a job and therefore the cooling of the economy had a heavy impact on young persons.

The unemployment rate started to show an increase tendency in 2008 both among persons aged 15–24 and persons aged 15–74, but as the economic situation worsened, the unemployment rate of young persons increased faster than the overall rate of unemployment. By the first quarter of 2010, the unemployment rate of young persons had increased 5.4 times compared to the same period in 2008, up to 40.6%. The unemployment rate of persons aged 15–74 increased 4.7 times in the same time period, reaching 19.8% by the first quarter of 2010, which is two times lower than the unemployment rate of young persons. In the second quarter, however, the unemployment rate decreased in both age groups: down to 39% among young persons and down to 18.6% among persons aged 15–74.

When observing the unemployment rate of young persons by sex (see Figure 4.8), it can be stated that the situation of young men on the labour market is worse than that of young women. While the unemployment rates were at roughly the same level in the first quarter of 2008 (7.8% for men and 7.4% for women), the gap increased about one and a half times by the first quarter of 2010. The unemployment rate of young men increased 6 times (to 46.8%) in this period, the unemployment of women increased a bit above 4 times (to 31.9%). This can be explained by the fact that the recession brought about a rapid decrease of the demand of labour force in activities where men traditionally work (in the construction sector and manufacturing) and since the persons with less education

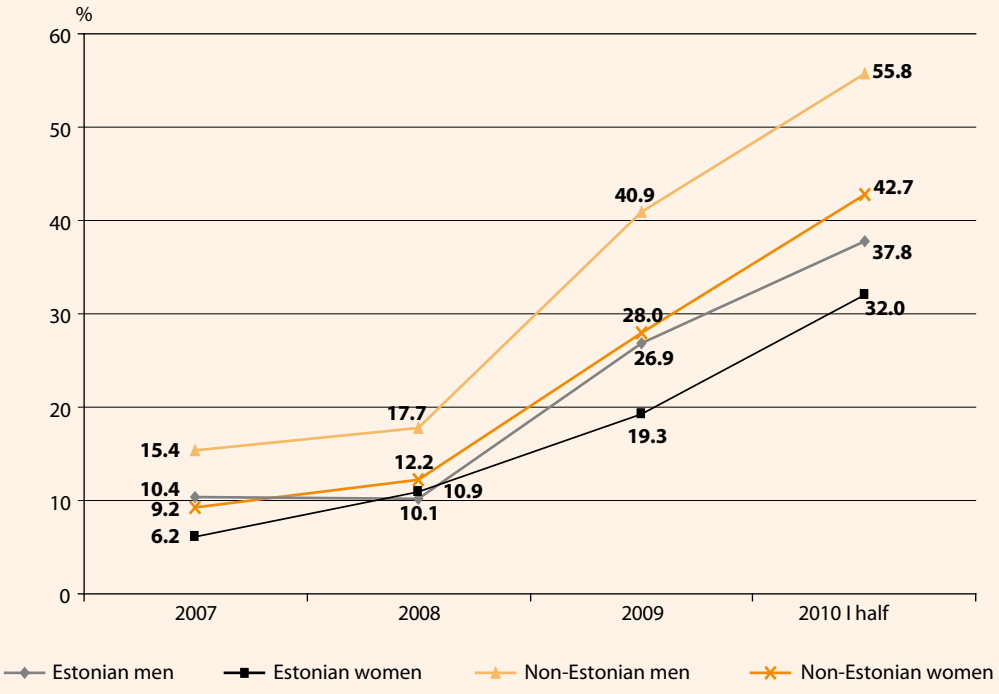
[25] *Youth Employment*. World Youth Report 2003. Department of Economic and Social Affairs, United Nations, New York.

Figure 4.8. **Unemployment rate of persons aged 15–24 by sex from 2008 to the second quarter of 2010 (quarterly, %)**



Source: Statistics Estonia, Estonian Labour Force Survey

Figure 4.9. **Unemployment rate of persons aged 15–24 by nationality and sex from 2007 to the first half of 2010 (%)**



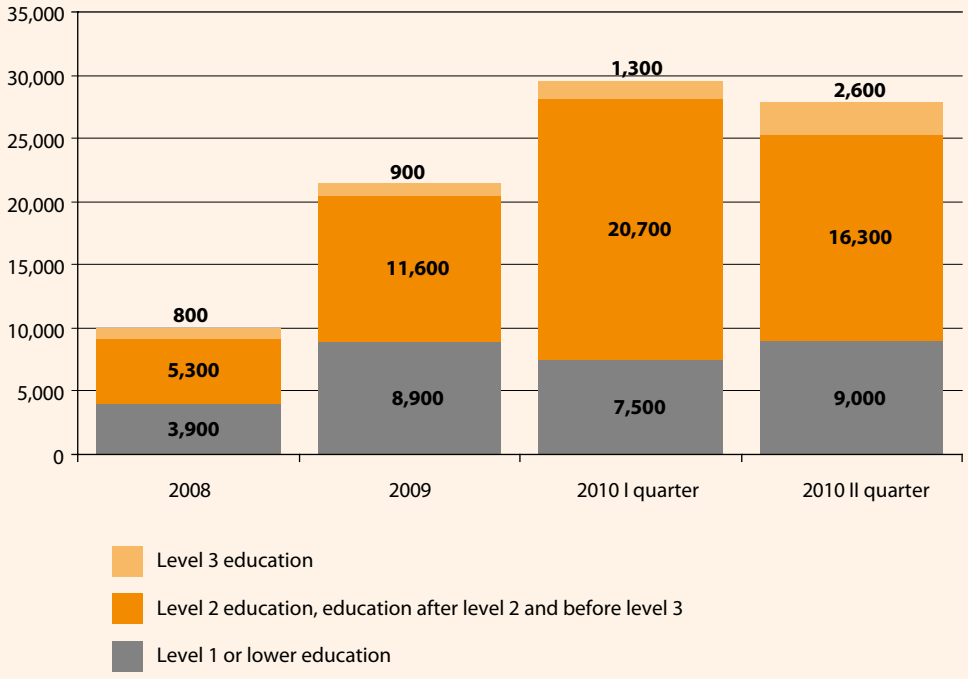
Source: Statistics Estonia, Estonian Labour Force Survey

found themselves in a worse situation when the economic crisis started (in Estonia, the level of education of men is substantially lower than that of women), men suffered the most. The situation changed in the second quarter of 2010: while the unemployment rate of young women continued to increase, the unemployment rate of young men started decreasing, reaching 40.8% which is just 4 percentage points higher than that of women.

It appears, when observing the division by sex among Estonian and non-Estonian young unemployed persons (Figure 4.9), that the unemployment rate was the highest among non-Estonian young men (55.8%) as of the first half of 2010. The unemployment rate of Estonian young men was 18 percentage points lower. The situation of non-Estonian young women is also worse than that of Estonian young women: the unemployment rate of non-Estonian young women was 42.7% in the first half of 2010 while the unemployment rate of Estonian young women was 32%. It can therefore be stated that young non-Estonians are in a substantially worse condition on labour market than Estonian young persons.

Although the risk of becoming unemployed decreases as the level of education increases, the unemployment of young persons in Estonia has increased for all levels of education due to the fact that the extent of the effect of education on unemployment is in turn affected by the situation of the economy. Figure 4.10 shows that persons of all levels of education have become unemployed while the highest increase has been among young persons with level 2 education. However, while the number of young unemployed persons with level 2 education decreased in the second quarter of 2010, the number of young unemployed persons with level 1 and level 3 education increased even more (20% and 100%, respectively).

Figure 4.10. **Numerical division of unemployed persons aged 15–24 by level of education from 2008 to the second quarter of 2010**

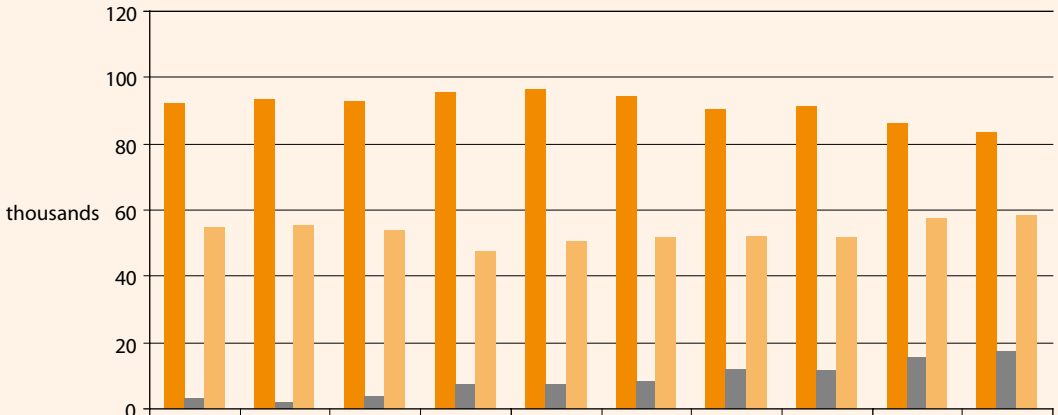


Source: Statistics Estonia, Estonian Labour Force Survey

4.3. Older persons

Older persons, that is, persons aged 55–64, are considered a risk group because they are more likely to be affected by the problem of dropping off the labour market and not finding a new job than younger persons. This may be caused by several circumstances: for example, a decrease in the capacity to work due to deterioration of health, prejudice by employers, lack of a suitable job and motivation and also because the obtained education is not competitive. Since the amount of population of working age is decreasing due to population ageing and the proportion of older persons is increasing, the employment of older persons and the increase thereof must be paid attention to and efforts must be made to maintain their capacity to work and their wish to keep working.

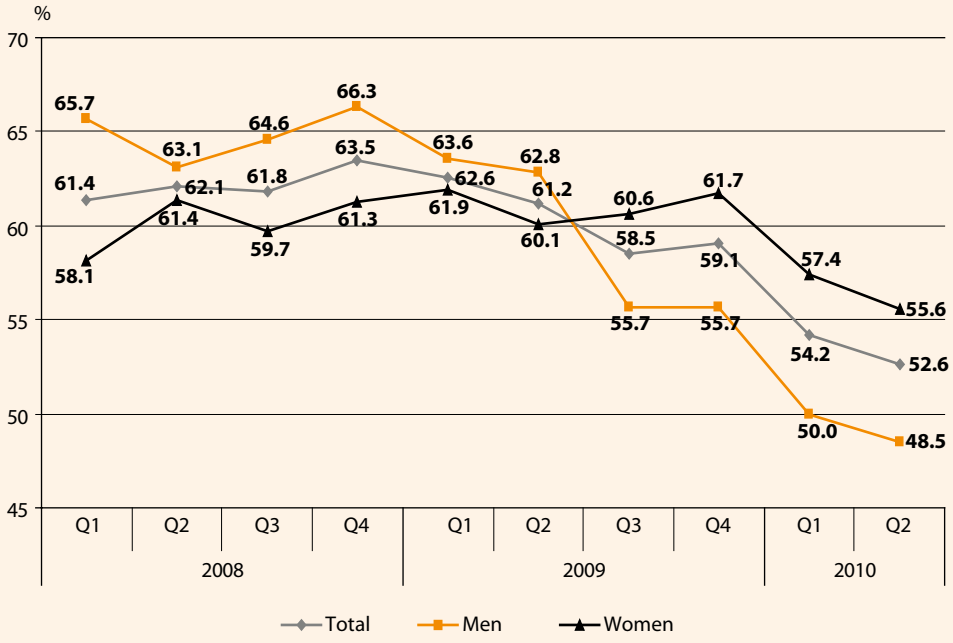
Figure 4.11. **Employment statuses of persons aged 55–64 from 2008 to the second quarter of 2010 (quarterly, thousands)**



	I quarter	II quarter	III quarter	IV quarter	I quarter	II quarter	III quarter	IV quarter	I quarter	II quarter
	2008				2009				2010	
Employed	92.2	93.3	92.8	95.4	96.6	94.2	90.3	91.2	86.3	83.7
Unemployed	3.0	1.9	3.7	7.5	7.1	8.1	11.8	11.6	15.4	17.0
Inactive	55.0	55.1	53.8	47.3	50.6	51.6	52.3	51.5	57.5	58.5

Source: Statistics Estonia, Estonian Labour Force Survey

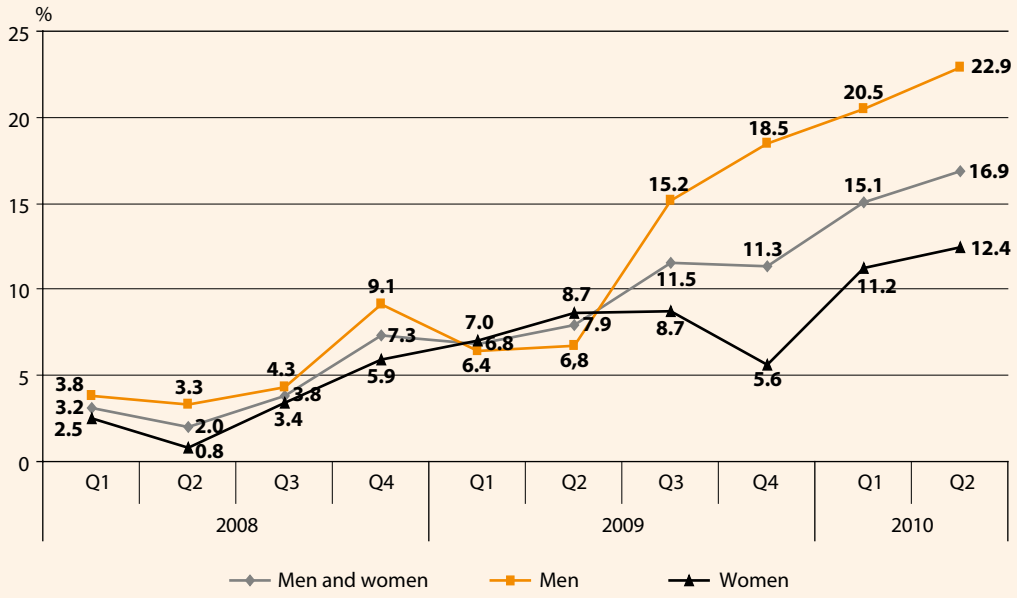
Figure 4.12. **Employment rate of persons aged 55–64 by sex from 2008 to the second quarter of 2010 (quarterly, %)**



Source: Statistics Estonia, Estonian Labour Force Survey

Figure 4.11 provides an overview of the employment statuses of the older persons of Estonia and the changes thereof. There are a total of 159,200 persons aged 55–64 in Estonia; 83,700 of them are working and 17,000 are unemployed. When characterising the effect of the economic crisis to the employment statuses of older persons, it can be said that the number of unemployed persons aged 55–64 has increased almost 9 times compared to the second quarter of 2008 whereas the increase was 4.3 times among persons aged 15–54. At the same time, the number of employed persons among older persons increased even in the second half of 2009, which afterwards took a downward trend, decreasing to 83,700 persons by the second quarter of 2010 (about 87% of the level of the

Figure 4.13. **Unemployment rate of persons aged 55–64 by sex from 2008 to the second quarter of 2010 (quarterly, %)**



Source: Statistics Estonia, Estonian Labour Force Survey

beginning of 2009). There are more and more inactive older persons since 2009 and the proportion of them reached 37% among all persons aged 55–64 by the second quarter of 2010. The main reason for inactivity is the retirement age and also illnesses that hinder taking part in working life.

Based on data of the Statistics Estonia, the employment rate of older persons was 52.6% as of the second quarter of 2010; the employment rate of older women was 55.6% and the employment rate of older men was 48.5%. When comparing the employment dynamics of men and women, a stronger effect of the recession to the employment of men can be seen. While employment among men was higher than that among women until the second quarter of 2009, the situation was reversed thereafter. Whereas the employment of men decreased 17.2 percentage points compared to the beginning of 2008, the decrease was only 2.5 percentage points for women. The employment rate of older women even increased in 2008–2009, reaching 61.7% by the end of 2009. After that, the said indicator decreased rapidly in the first half of 2010, just like the employment indicator of older men.

The unemployment rate of persons aged 55–64 was 16.9% as of the second quarter of 2010: 12.4% for women and 22.9% for men. The unemployment rate of older persons has always been lower than the average employment rate in Estonia (18.6% for persons aged 15–74 in the second quarter of 2010), although during the last two years (from the second quarter of 2008 to the second quarter of 2010) the unemployment rates of both age groups have increased more or less equally – by approximately 15 percentage points. However, the unemployment rate of men aged 55–64 has increased more than the unemployment rate of men aged 15–74. The reason for this is once again the loss of jobs that are traditionally performed by men, which has had a bigger impact on older persons since they are no longer as ready to adjust to the new structure as younger persons.

As with all age groups, the activity of older persons in the labour market depends on their level of education. Persons with a higher level of education are more active and the higher the level of education is, the higher the employment. For example, the employment rate of older persons with basic education was 35% in 2009 whereas it was 75% for older persons with higher education. Compared to 2008, employment has decreased more or less equally between these two levels of education – by approximately 3 percentage points. The decrease has been lower in the case of employment rate of older persons with level 2 education; this indicator decreased to 59% by 2009.

4.4. Non-Estonians

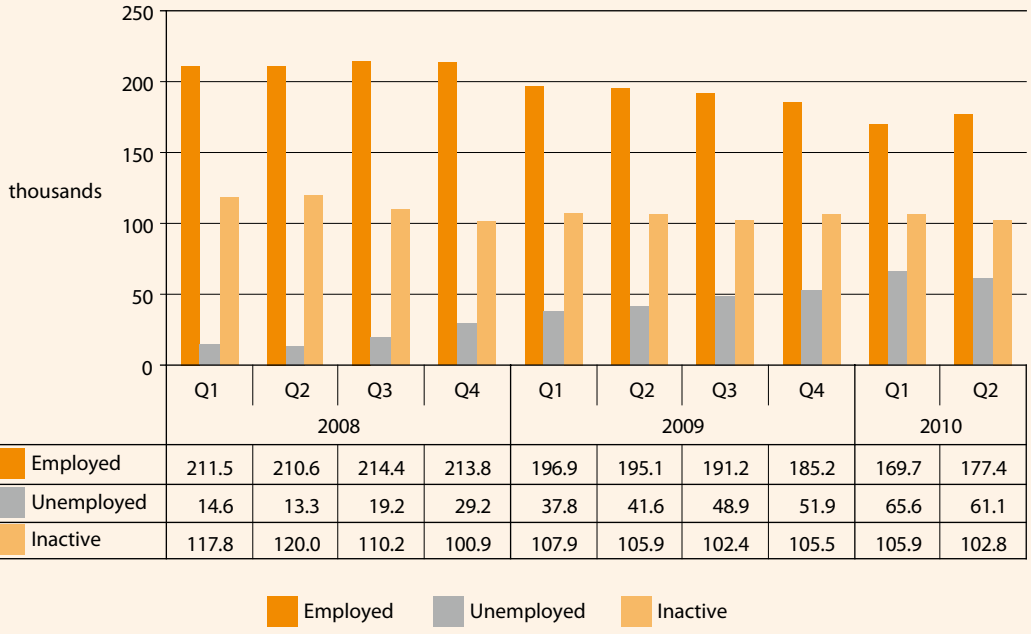
Non-Estonians constitute a significant part of the population of working age in Estonia, about one third. Compared to the main nationality, other nationality groups are generally in a more difficult situation on the labour market, since the main hindrance of getting a job for them is lack of skill in Estonian. Various attitudes and relationships between nationality groups may additionally affect their situation on the labour market. It is therefore important to treat the participation of non-Estonians as one of the risk groups and their issues on the labour market separately.

There were 341,300 non-Estonians of working age in the second quarter of 2010; 177,400 were employed whereas 61,100 were unemployed. The number of non-Estonian unemployed persons reached the maximum level in the first quarter of 2010 when there were 4.6 times more of them than in the second quarter of 2008 (the difference was five times for Estonians). However, while the number of Estonian and non-Estonian unemployed persons decreased by the same amount (by 4,500) in the second quarter of 2010, the number of employed persons increased for non-Estonians (by 7,770) whereas the same indicator decreased for Estonians (by 2,400) in the same period. This difference is caused by the different participation of Estonians and non-Estonians in the labour force: non-Estonians are more active on the labour market than Estonians.

The proportion of inactive persons was 30% among non-Estonians as of the second quarter of 2010 while the same indicator exceeded 35% for Estonians. Whereas the proportion of inactive persons has decreased among non-Estonians due to the recession, the proportion has, on the contrary, increased among Estonians. It can therefore be stated that Estonians give up job-seeking more easily when they become unemployed and become inactive instead. While there are more non-Estonians among unemployed persons and especially long-term unemployed persons, there are significantly more Estonians among discouraged persons.

The employment rate of non-Estonians has constantly been below that of Estonians (see Figure 4.15); the gap became especially big in the first quarter of 2010: the employment rate of Estonians

Figure 4.14. **Employment statuses of non-Estonians aged 15–74 from 2008 to the second quarter of 2010 (quarterly, thousands)**



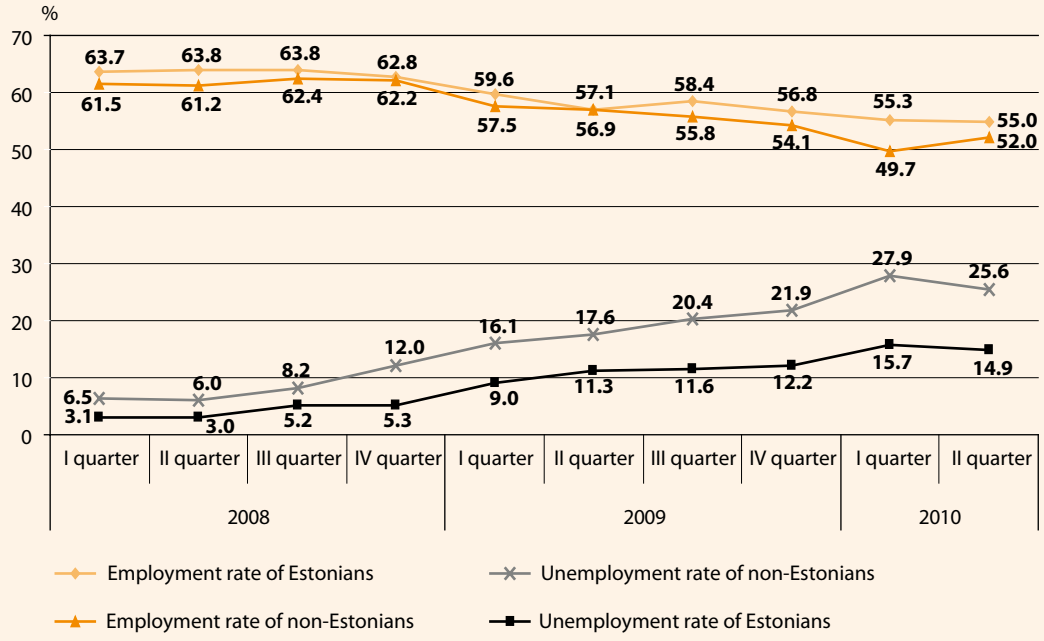
	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Q1 2009	Q2 2009	Q3 2009	Q4 2009	Q1 2010	Q2 2010
Employed	211.5	210.6	214.4	213.8	196.9	195.1	191.2	185.2	169.7	177.4
Unemployed	14.6	13.3	19.2	29.2	37.8	41.6	48.9	51.9	65.6	61.1
Inactive	117.8	120.0	110.2	100.9	107.9	105.9	102.4	105.5	105.9	102.8

Source: Statistics Estonia, Estonian Labour Force Survey

was 55.3% while the rate was only 49.7% for non-Estonians. However, the gap decreased in the second quarter of 2010 in relation to the aforementioned decrease of employment of Estonians and increase of employment of non-Estonians.

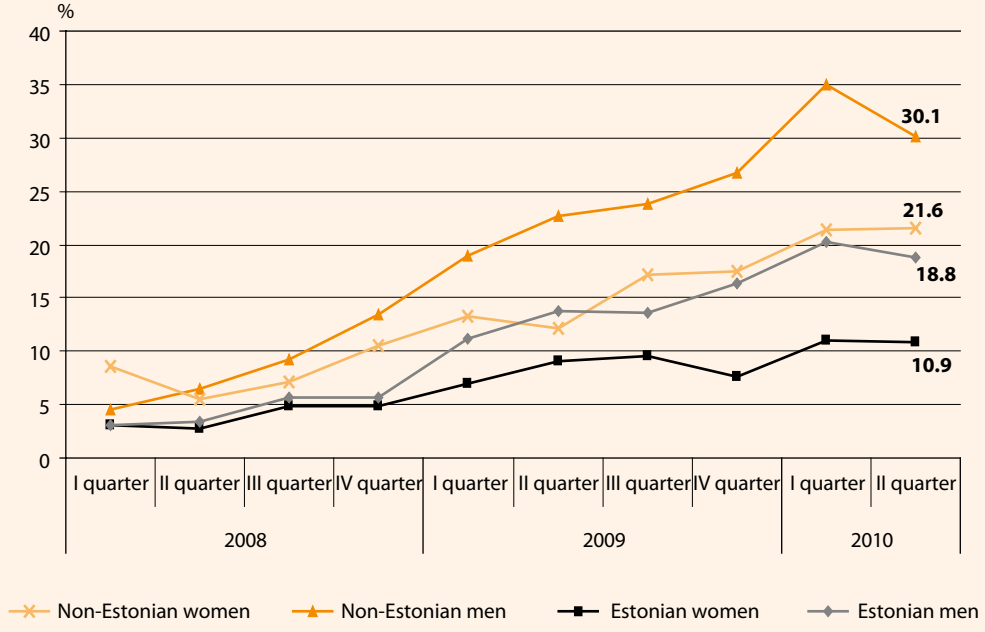
As Figure 4.15 indicates, the unemployment rate of non-Estonians has been constantly higher than that of Estonians. Although the gap decreased during the period of economic growth, the indicator started to increase again during the recession, reaching the maximum level in the first quarter of 2010 when the unemployment rate of Estonians was 15.7% and 27.9% for non-Estonians (a difference of 12.2 percentage points). In the second

Figure 4.15. **Employment and unemployment rates of persons aged 15–74 by nationality from 2008 to the second quarter of 2010 (quarterly, %)**



Source: Statistics Estonia, Estonian Labour Force Survey

Figure 4.16. **Unemployment rate of Estonians and non-Estonians aged 15–74 by sex from 2008 to the second quarter of 2010 (quarterly, %)**



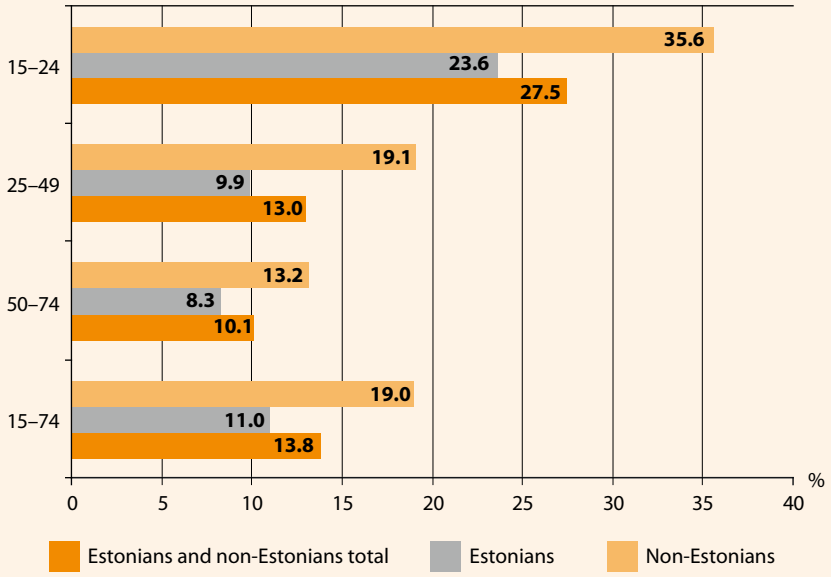
Source: Statistics Estonia, Estonian Labour Force Survey

quarter, the gap already decreased to 10.7 percentage points.

It is important to observe sex in addition to nationality since women and men are at different positions on the labour market. Figure 4.16 indicates that the recession has significantly increased the difference between the unemployment rates of women and men, notwithstanding the nationality. Non-Estonian men are in a particularly difficult situation; their unemployment rate was 30.1% in the second quarter of 2010 while the unemployment rate of Estonian men was 18.8%. The unemployment rate of non-Estonian women is likewise higher than that of Estonian women, 21.6% and 10.9%, respectively.

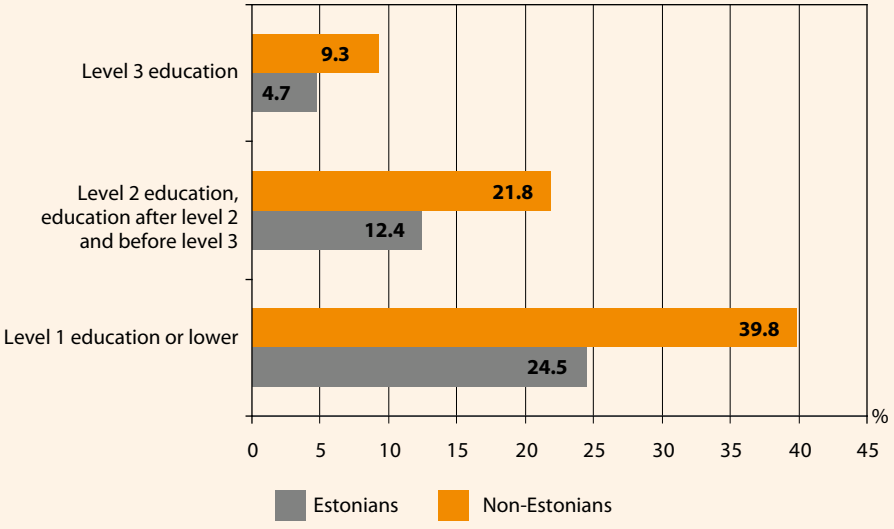
Young persons are in the most difficult situation on the labour market; their unemployment rate is significantly higher both among Estonians and non-Estonians (see Figure 4.17). The gap between the unemployment rates of Estonians and non-Estonians is also the biggest among them. The gap is the smallest among persons aged 50–74 – the average unemployment rate of this age group is lower than average notwithstanding the nationality. The differences between the unemployment rates of different age groups are bigger for non-Estonians

Figure 4.17. **Unemployment rate by age group and nationality, 2009 (%)**



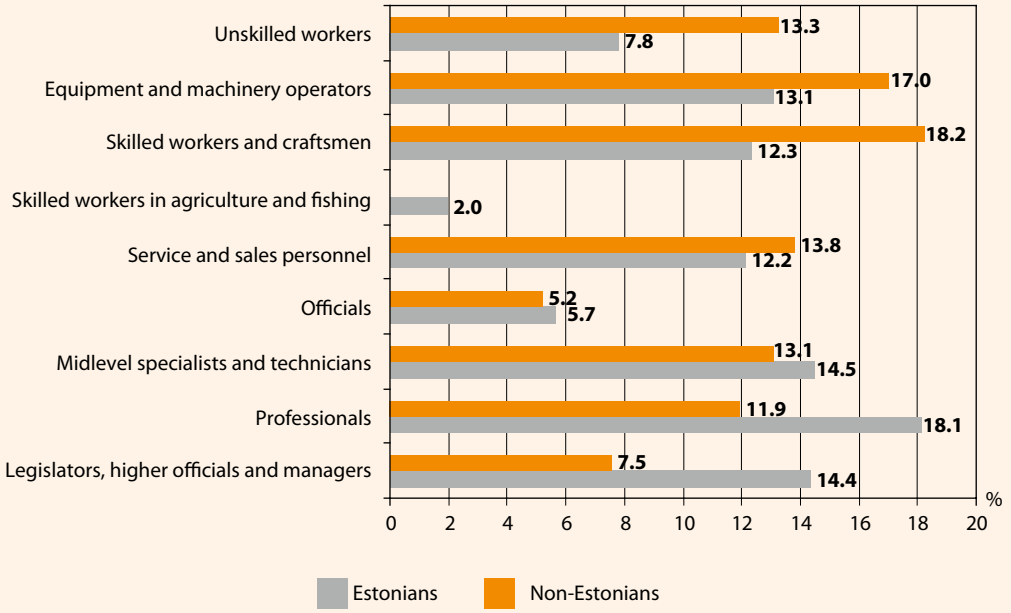
Source: Statistics Estonia, Estonian Labour Force Survey

Figure 4.18. **Unemployment rates of Estonians and non-Estonians aged 15–74 by ISCED levels of education, 2009 (%)**



Source: Statistics Estonia, Estonian Labour Force Survey

Figure 4.19. **Division of Estonian and non-Estonian workers by occupations, 2009 (%)**



Source: Statistics Estonia, Estonian Labour Force Survey

than Estonians: the variability is up to 22.4 percentage points whereas it is close to 15 percentage points for Estonians.

Figure 4.18 indicates that it is harder for non-Estonians to get a place in the labour market than for Estonians notwithstanding the level of education. The gap between the unemployment rates of persons from different nationalities is the smallest in the group of persons having the highest education, i.e. level 3 education: the unemployment rate was 4.7% for Estonians and 9.3% for non-Estonians in 2009. The unemployment rate of non-Estonians having the lowest education, i.e. education level 1 increased up to almost 40% in 2009 whereas it was a bit below 25% for Estonians. Therefore, the level of education affects coping on the labour market but even a higher education might not provide complete protection against unemployment. Observing the data of the Labour Force Survey of the second quarter of 2010, it appears that while 13% of non-Estonian unemployed persons had education level 1 and 24% had education level 3, the relation was basically the contrary among Estonian unemployed persons: 23% of Estonian unemployed persons had education level 1 and 14% had education level 3. It can therefore be said that non-Estonian unemployed persons have a higher level of education than Estonian unemployed persons.

Ethnic segregation by occupations characterised by Figure 4.19 may also be an issue hindering the process of getting a job for non-Estonians. The proportion of Estonians working as managers and professionals exceeds the proportion of non-Estonians working at the same occupations by nearly a half: 32.5% of Estonians are working in the so-called white collar jobs, the percentage for non-Estonians is only 19.4% Nearly half of employed persons among non-Estonians are working as skilled workers and craftsmen, equipment and machinery operators and unskilled workers whereas the proportion of Estonians working in these so-called blue collar jobs is just 33%. The difference is the smallest among service and sales personnel, officials and midlevel specialists and technicians.

In conclusion

It can be concluded that, as demonstrated in this chapter, all of the presented risk groups have problems with coping on the labour market. The situation of long-term unemployed persons and young, older and non-Estonian unemployed persons has significantly deteriorated due to the recession. It is therefore important to pay special attention to these groups when shaping the measures of the labour market policy of Estonia.

5. Registered unemployment and labour market policy

Ave Lepik, Liina Malk

A period of rapid changes started on the labour market of Estonia in the second half of 2008. Firstly, the difficult global economic situation brought about a steep increase of unemployment. Secondly, the Estonian Unemployment Insurance Fund took over the tasks of the Labour Market Board in May 2009 and became the main implementing body of the labour market policy. Starting from 1 May 2009, the Estonian Unemployment Insurance Fund has a new purpose – to help unemployed persons and job-seekers find jobs quickly thanks to various employment services in addition to the earlier function, which was the administration of unemployment insurance.[26]

The following chapter provides an overview of persons registered as unemployed in the Estonian Unemployment Insurance Fund and the belonging of them to different risk groups. Likewise, the offering of employment services, allowances and benefits, vacancies and placement and expenses on the labour market policy are observed.

5.1. Registered unemployment

Both the registered and general unemployment[27] started to increase rapidly in the second half of 2008 in Estonia, reaching 30,307 unemployed persons by the end of the year[28]. The number of registered persons in a month doubled in 2009: while there were 41,252 registered unemployed persons in January 2009, there were already 92,221 unemployed persons in December. This indicator also continued to increase in the first quarter of 2010. The number of registered unemployed persons in a month reached the maximum level in March 2010 when 101,590 persons were registered in the Unemployment Insurance Fund. That is over 1.7 times more than in March 2009 and over five times more than in March 2008. The number of registered unemployed persons in a month had therefore increased over five times in two years.

There was a steady increase of over 9,000 new unemployed persons until March 2010; only in the summer months slightly less. The number of all registered unemployed persons has decreased since April 2010 and the number of new registered unemployed persons per month has been between 6,400 and 7,400. There were 80,847 unemployed persons registered in the Estonian Unemployment Insurance Fund in August 2010, including 6,800 new unemployed persons.

There were a total of 136,974 persons registered as unemployed in 2009, which is over three times more than in 2007 (see Figure 5.2). Of these persons, 121,231 persons were registered as new unemployed persons in 2009, which is over four times more than in 2007.

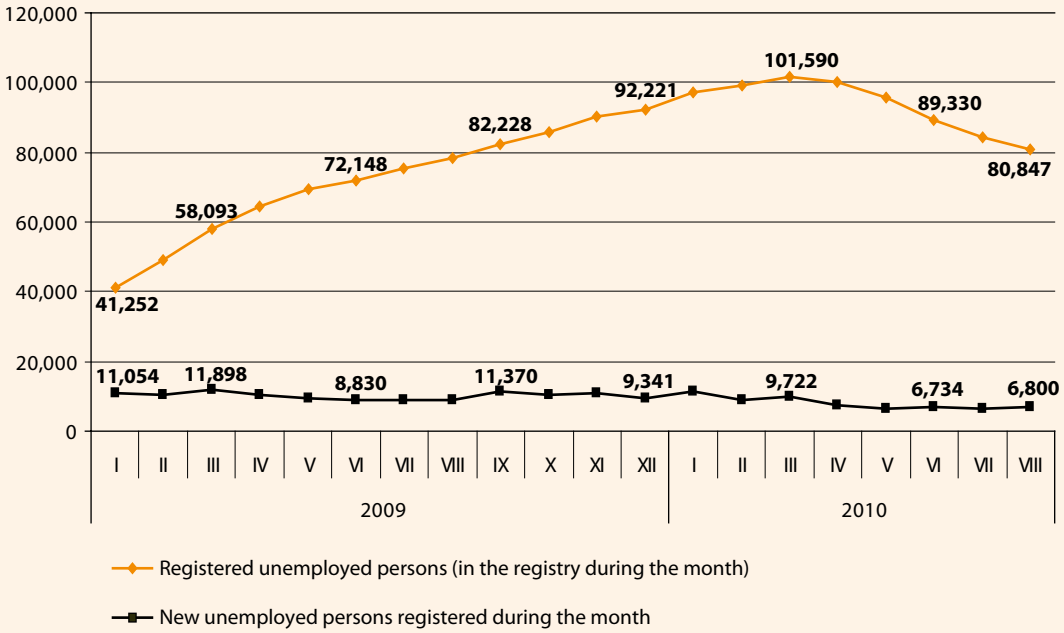
In 2009, the average proportion of registered unemployed persons in the labour force, that is, the rate of unemployment, increased by 7.2 percentage points compared to 2008, up to 10.2%. The general unemployment rate of persons aged from 16 until the retirement age increased even more in that period: by 8.7 percentage points to 14.4%. Therefore, the gap between the general and registered unemployment rates increased by 1.5 percentage points compared to 2008. The average unemployment

[26] The forwarding body of data regarding registered unemployed persons and services was the Labour Market Board until 30 April 2009; since 1 May, statistics have been forwarded by the Estonian Unemployment Insurance Fund.

[27] General unemployment refers to unemployment according to the definition of the ILO, which is used by the Statistics Estonia for Labour Force Surveys. According to this, an unemployed person is a person without work who is actively seeking a job and is ready to start working within two weeks of finding a job.

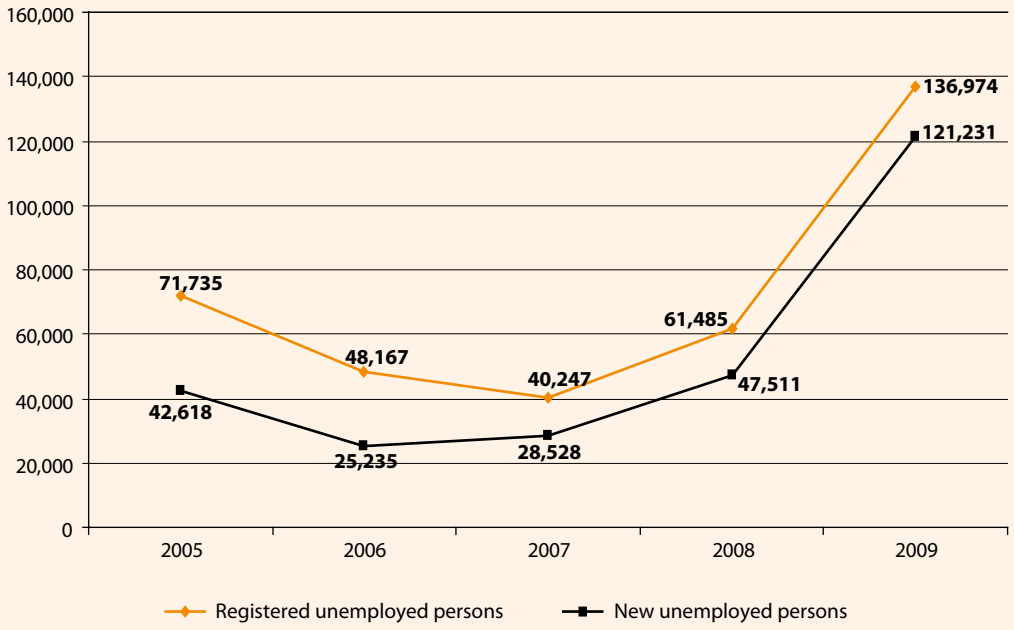
[28] A registered unemployed person is a person who is not working and has registered himself or herself in the Unemployment Insurance Fund as an unemployed person.

Figure 5.1. **Registered unemployed persons, including new unemployed persons from January 2009 to August 2010**



Source: Estonian Unemployment Insurance Fund

Figure 5.2. **Number of registered unemployed persons and new unemployed persons, 2005–2009**

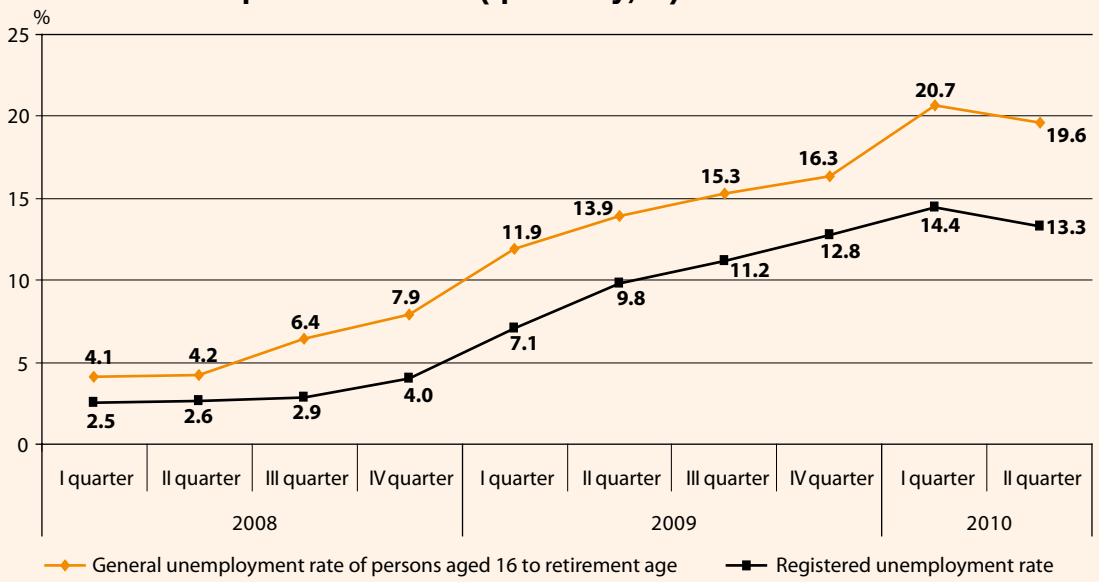


Source: Estonian Unemployment Insurance Fund

rate of the first eight months of 2010 is 13.2%, that is three percentage points higher than the average of 2009 (the average number of labour force has been used when calculating the proportion).

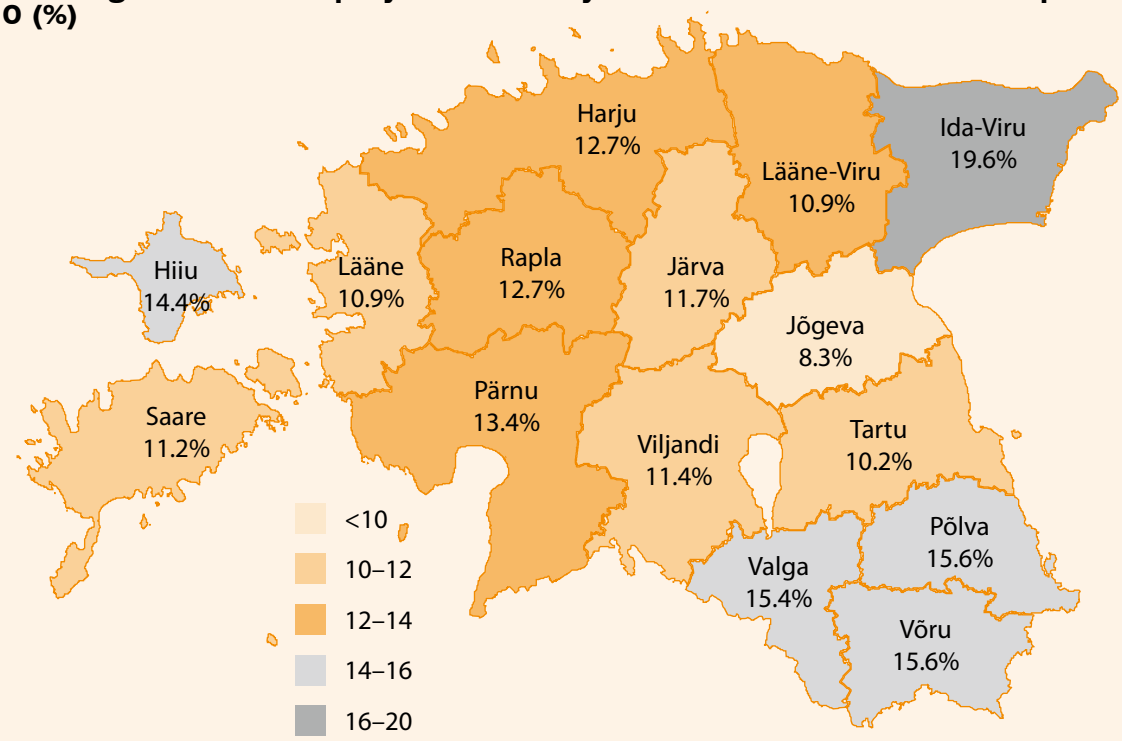
Figure 5.3 provides the general and registered unemployment rates quarterly from 2008 to 2010. While registered unemployed persons constituted 2.5% of the labour force of Estonia aged 16 years to the retirement age in the first quarter of 2008, the indicator increased to 14.4% or almost six times by the first quarter of 2010. The general unemployment rate increased five times in the same period. In the second quarter of 2010, all unemployed per-

Figure 5.3. **Rates of registered unemployment and general unemployment from 2008 to the second quarter of 2010 (quarterly, %)**



Sources: Statistics Estonia, Estonian Labour Force Survey, Estonian Unemployment Insurance Fund

Figure 5.4. **Registered unemployment rate by counties as of the second quarter of 2010 (%)**



Source: Estonian Unemployment Insurance Fund

sons constituted 19.6% and registered unemployed persons constituted 13.3% of the Estonian labour force aged 16 to the retirement age.

The unemployment rate differed over 2.3 times from county to county as of the second quarter of 2010 (see Figure 5.4): the unemployment rate was the highest in Ida-Viru County (19.6%) and in Southern Estonia (15.6% in Põlva County, 15.6% in Võru County, 15.4% in Valga County). The unemployment rate was the lowest in Jõgeva County (8.3%), Tartu County (10.2%) and Lääne County (10.9%). Compared to the average of 2009, the registered unemployment rate increased the most in

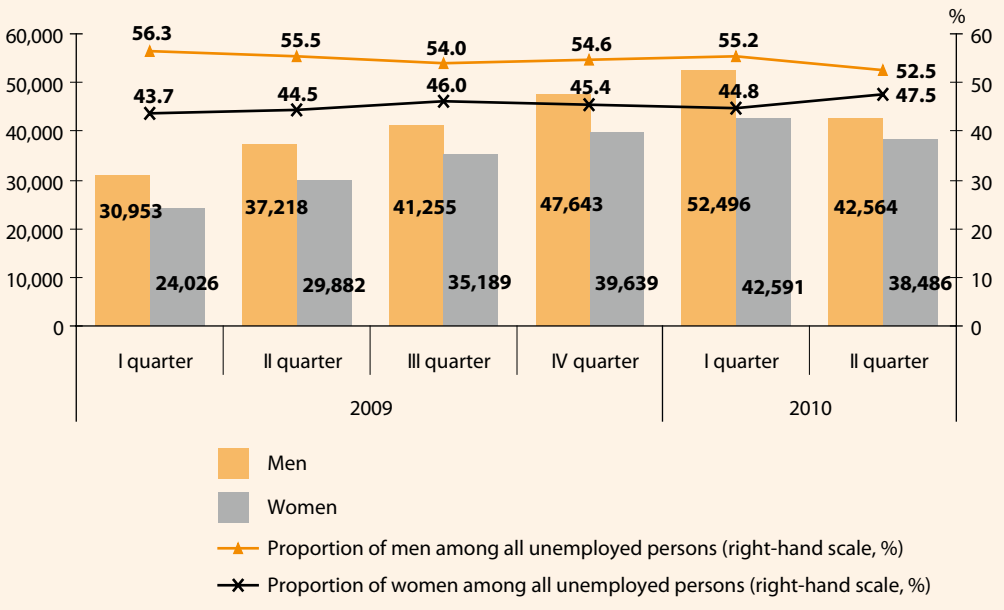
Hiiu County, Ida-Viru County and Põlva County (5.2, 3.6 and 3.1 percentage points, respectively) and the least in Lääne County (0.3 percentage points). In two counties, the registered unemployment rate has decreased compared to the average of 2009 – by 0.1 percentage points in Võru County and by 1.2 percentage points in Jõgeva County.

As of the end of the second quarter of 2010, 52.5% of all registered unemployed persons were men and 47.5% were women. Compared to the second quarter of 2009, the proportion of men among all registered unemployed persons has decreased by three percentage points and the proportion of women has, on the contrary, increased by the same number. However, in the first quarter of 2010, the proportion of men was still more or less equal to the second quarter of 2009; therefore the decrease has taken place during the second quarter of 2010.

It appears, when observing the division by age of the registered unemployed persons, that of all the registered unemployed persons at the end of 2010, 14.5% were aged 16–24 and 15% were older persons (55 years and older). Compared to the second quarter of 2009, the proportion of young persons has decreased and the proportion of older persons has increased.

Of all the registered unemployed persons as of 2010, 18.4% had level 1 education[29] and 23.6% had level 3 education. Unemployed persons with level 2 education constituted 58.1% of all registered unemployed persons, that is, the majority of the unemployed persons either had general secondary education or vocational education on the basis of basic education. While the proportion of persons with level 1 education among unemployed persons has decreased as of the second quarter of 2010 compared to the same period of 2009, the proportion of persons with higher education has instead increased by five percentage points. Therefore it cannot be stated that unemployment is an issue only for people with less education: persons with higher education have also had problems with finding a suitable job during the recession.

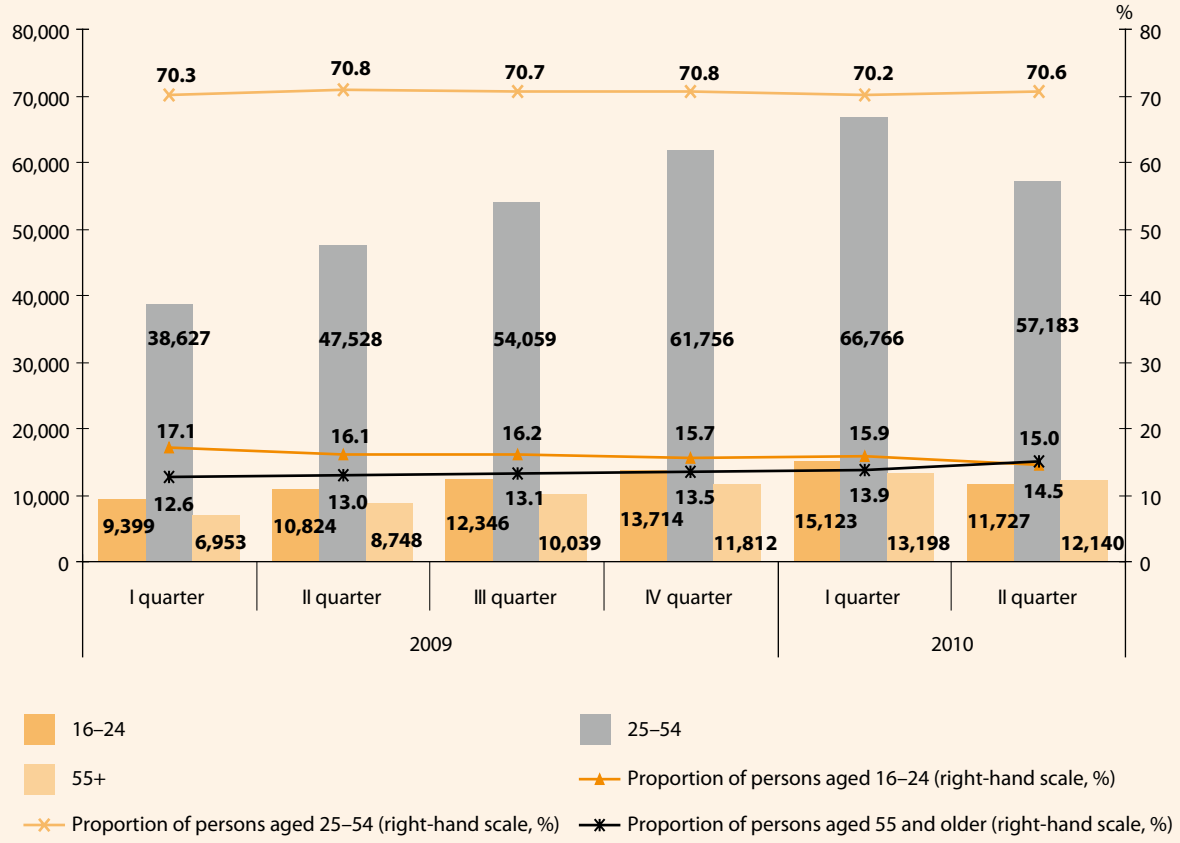
Figure 5.5. **Registered unemployed persons by sex from 2009 to the second quarter of 2010 (as of the end of the quarter)**



Source: Estonian Unemployment Insurance Fund

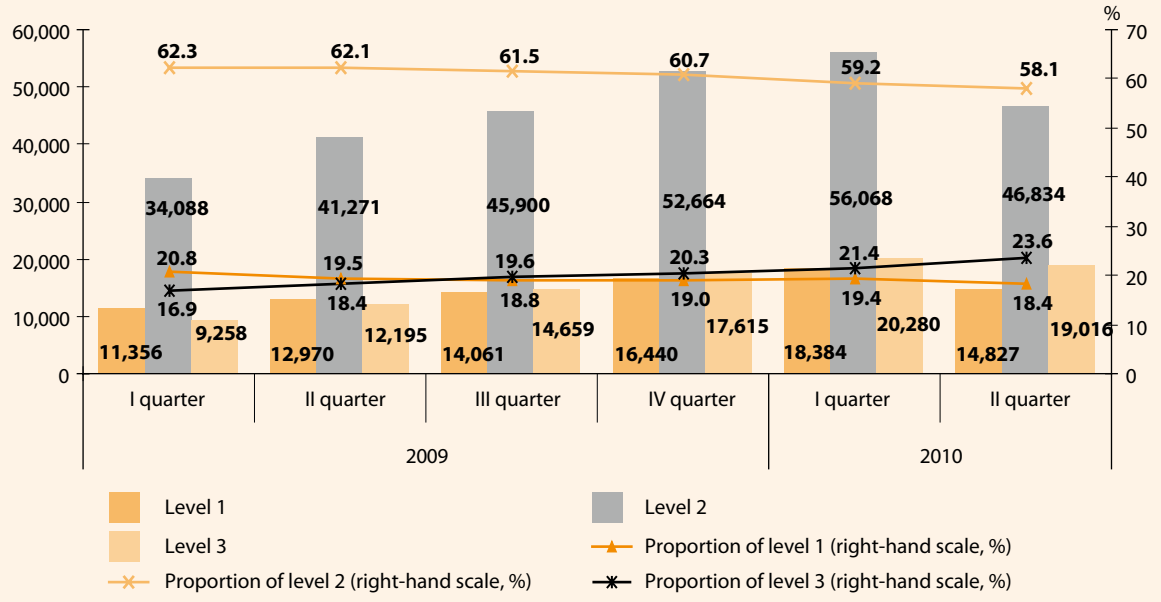
[29] First level – primary education, basic education, vocational education for young persons without basic education. Second level – secondary education, vocational education on the basis of basic education, vocational secondary education on the basis of secondary education. Third level – secondary specialised education on the basis of secondary education, academic education, professional higher education, doctor.

Figure 5.6. **Registered unemployed persons by age from 2009 to the second quarter of 2010 (as of the end of the quarter)**



Source: Estonian Unemployment Insurance Fund

Figure 5.7. **Registered unemployed persons by education from 2009 to the second quarter of 2010 (as of the end of the quarter)**



Source: Estonian Unemployment Insurance Fund

5.2. Registered unemployed persons belonging to risk groups

This section provides an overview of the persons registered in the Estonian Unemployment Insurance Fund by risk groups. Risk groups are considered to be groups of persons who may have issues with finding a job again. The Estonian Unemployment Insurance Fund offers special services to the following risk groups:

- unemployed persons aged 16–24;
- unemployed persons aged 55 and over;
- disabled unemployed persons;
- unemployed persons without sufficient knowledge of Estonian;
- unemployed persons released from prisons;
- long-term unemployed persons[30];
- unemployed persons who have been previously engaged with duties of care and received caregiver's allowance.

As of the ending day of the second quarter of 2010, 76.3% of all registered unemployed persons belonged to at least one of the risk groups, which is 15.8 percentage points more than at the end of 2009.[31] Figure 5.8 provides the proportions of persons belonging to risk groups among all the registered unemployed persons. It must be noted that an unemployed person may have features of several risk groups and he or she may therefore belong to several risk groups at once.

Figure 5.8 indicates that long-term unemployed persons constitute the largest part of all the risk groups and their proportion of all the registered unemployed persons has substantially increased during the recession: from 30% to 52%. The proportion of persons with insufficient knowledge in Estonian has also significantly increased in the

Figure 5.8. **Proportion of unemployed persons belonging to risk groups among registered unemployed persons by risk group; 2008, 2009 and the first half of 2010 (as of the end of the period)**

Source: Estonian Unemployment Insurance Fund

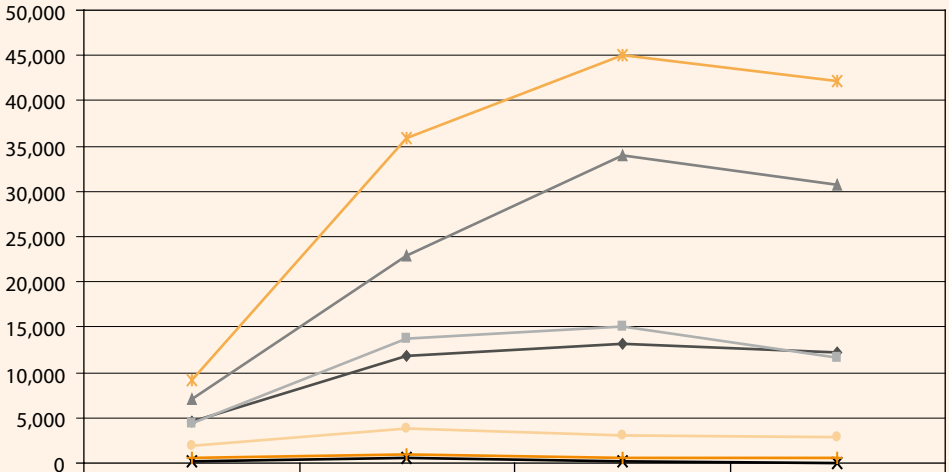
[30] A long-term unemployed person is a person who has not been employed or engaged in activities that are counted equal to employment within the immediate 12 months preceding registration as an unemployed person. A young person aged 16-24 is a long-term unemployed person if he or she has not been employed for six months.

[31] Due to the changeover to a new information system at the end of 2009, entering of the risk groups of registered unemployed persons has changed and the data of 2010 and the periods preceding it cannot be completely compared (caregivers, persons with insufficient knowledge of Estonian, disabled persons, persons released from prisons).

same period: from 23% to 38%. The proportion of older persons and young persons out of all the registered unemployed persons has been staying at around 15%.

When observing the changes in the number of persons belonging to a risk group (see Figure 5.9), it can be seen that the maximum level of belonging to the majority of the risk groups was reached at the end of the first quarter of 2010. The number of long-term unemployed persons increased the most: there were 45,092 of them by the end of the first quarter of 2010, which is 4.9 times more than in 2008. There were 33,992 persons with insufficient knowledge in Estonian by the end of the first quarter of 2010, which is 4.8 times more than at the end of 2008. The number of young unemployed persons also increased a lot by the first quarter of 2010 – three and a half times compared to 2008, reaching its maximum level: 15,123. However, in the second quarter of 2010, the number of persons in most of the risk groups started to decrease (except persons released from prisons). The number of young unemployed persons even decreased by 22.5% whereas the indicators for long-term unemployed persons, older persons and persons with insufficient knowledge in Estonian respectively decreased by 6.3%, 8% and 9.7%.

Figure 5.9. **Number of unemployed persons belonging to risk groups by risk groups; 2008, 2009 and the first half of 2010 (as of the end of the period)**



	as of the end of 2008	as of the end of 2009	as of the end of the first quarter of 2010	as of the end of the second quarter of 2010
55 and older	4,589	11,812	13,198	12,140
Aged 16–24	4,368	13,714	15,123	11,727
Persons with insufficient skill in Estonian	7,095	22,902	33,992	30,706
Persons giving care	268	560	102	71
Long-term unemployed persons	9,227	35,804	45,092	42,261
Disabled persons	1,997	3,904	3,035	2,813
Persons released from prison	577	859	531	600

Source: Estonian Unemployment Insurance Fund

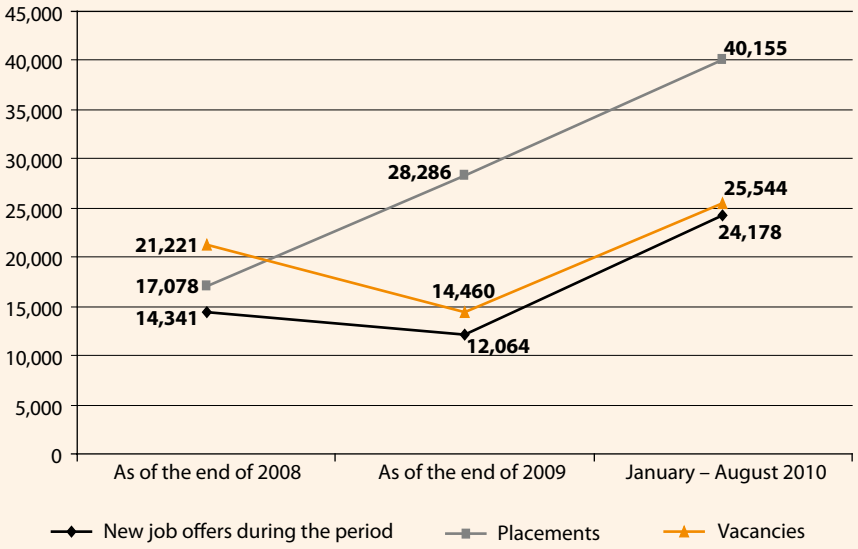
5.3. Vacancies and employment mediation

One of the tasks of the Estonian Unemployment Insurance Fund is employment mediation, which means directing unemployed persons and job-seekers to suitable free jobs, i.e. vacancies. Likewise, the Estonian Unemployment Insurance Fund is seeking suitable workers for employers based on the demands they have presented. In 2009, the Estonian Unemployment Insurance Fund could mediate 14,460 jobs, which was 32% less than in 2008 (see Figure 5.10). During this period, there were 16% less new job offers than in 2008. However, during the first eight months of 2010, significantly more

jobs were offered than in 2009 in total: 25,544 jobs. This number included 24,178 new offers; that is two times more than in 2009 in total. While the average number of new vacancies per month was about 1,000 in 2009, there were 3,000 new jobs per month at average during the first eight months of 2010.

Service and sales personnel and skilled workers and craftsmen were needed the most in the first half of 2010, followed by unskilled workers, mid-level specialists and technicians and equipment and machinery operators. The vacancies of 2009 were divided in a similar fashion, but the proportions of skilled workers and craftsmen and service and sales personnel among vacancies were a bit bigger and the proportions of unskilled workers and equipment and machinery operations a bit smaller than in the first half of 2010.

Figure 5.10. **Number of vacancies, placements and registered unemployed persons; 2008, 2009 and January to August of 2010**



Source: Estonian Unemployment Insurance Fund

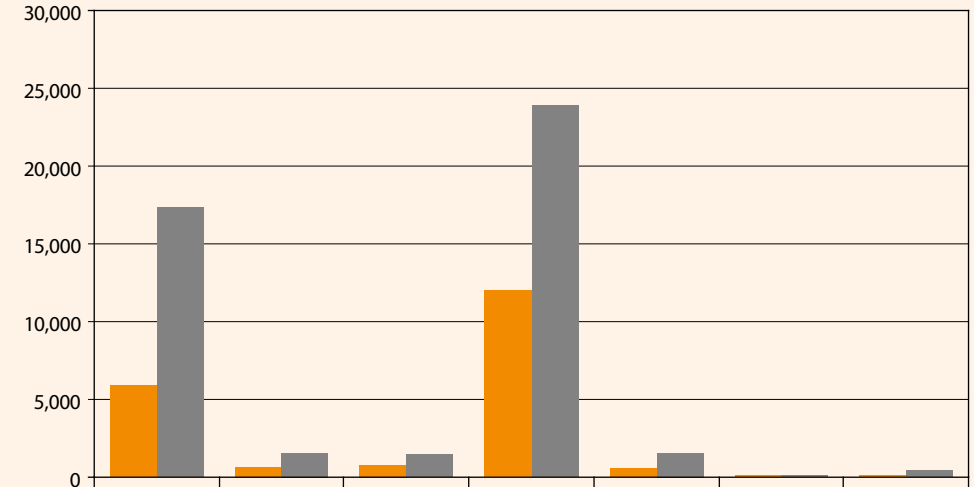
5.4. Employment services

The Estonian Unemployment Insurance Fund is offering other services besides employment mediation to help unemployed persons get a job as well. Active labour market services are, for example, work practice, coaching for working life, in-service training and re-training. The proportion of all registered unemployed persons who entered in labour market services was 34.9% in 2009.

Career counselling has been the most popular active labour market measure in the recent years. Career counselling was used 23,916 times in 2009, which is nearly twice more than in 2008 (see Figure 5.11). The proportion of all registered unemployed persons who entered in career counselling was 17.6% in 2009. Another popular labour market service besides career counselling was wage subsidies to employers. While it can be seen from Figure 5.11 that the proportion of wage subsidies to employers was very small among entering in labour market services in 2009 and only 12 persons were employed thanks to wage subsidies to employers in the second quarter, the number was already 3,729 in the second quarter of 2010. 3,929 persons received career counselling in the same period.

Entrance in labour market training was more than three times higher in 2009 than in 2008 – 17,319 times, constituting 12.7% of all registered unemployed persons. Entrance in work practice and coaching for working life increased in 2009 as well: practical training was used for 1,550 and work exercise for 1,465 times, constituting respectively 1.14% and 1.08% of all the registered unemployed persons. Public work was used 1,561 times in 2009, which was about 1,000 more than in 2008.

Figure 5.11. **Number of entries in active labour market services by type of service, 2008–2009**



	Labour market training	Work practice	Coaching for working life	Career counselling	Public work	Wage subsidy to employers	Business start-up subsidy
2008	5,851	645	826	12,046	592	71	162
2009	17,319	1,550	1,465	23,916	1,561	161	495

Note: Entrance in a service means all initiations of the service in the observed period. One person may therefore be counted multiple times in some cases.

Source: Estonian Unemployment Insurance Fund

5.5. Unemployment allowance, unemployment insurance benefits and collective redundancy and insolvency benefits

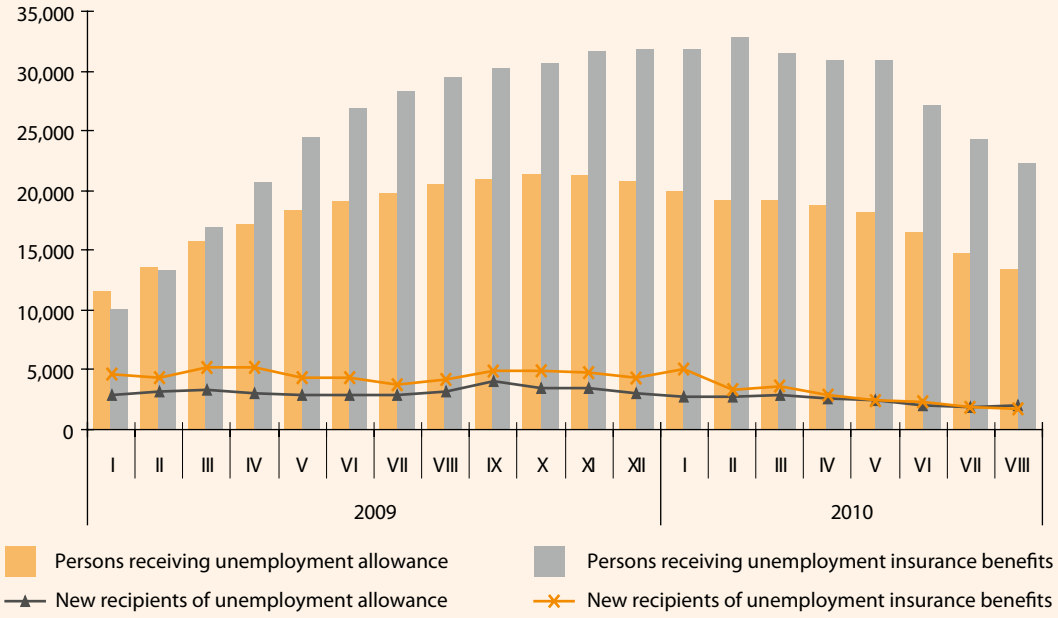
In addition to providing employment mediation and other employment services, the Estonian Unemployment Insurance Fund is also paying unemployment allowance and unemployment insurance benefits to unemployed persons. A benefit is also paid in case of insolvency of the employer and redundancy.

The unemployment allowance is paid to unemployed persons who have worked for at least 180 days during the last year or been engaged in activities that are considered as equivalent to work.[32] In 2009, the unemployment allowance was paid two times more than in 2008, that is, to 46,376 unemployed persons. In the first half of 2010, the unemployment allowance was paid to 49,101 unemployed persons. The increase in the number of persons who received the unemployment allowance was predictable as the number of registered unemployment persons increased as well. The number of new persons receiving the unemployment allowance also increased two times compared to 2008, but the proportion of new persons receiving the unemployment allowance among new registered unemployed persons decreased: while this indicator was 39% in 2008, the indicator was 32% in 2009 and 31% as of the end of August 2010 (the total number of new persons receiving the unemployment allowance in August was 19,438).

Unemployment insurance benefits are paid by the Estonian Unemployment Insurance Fund to unemployed persons whose unemployment insurance period in the last three preceding years is at least 12 months and whose last employment relationship did not end at their own initiative or mutual agreement.[33] In 2009, the Estonian Unemployment Insurance Fund paid unemployment insurance

[32] Labour Market Services and Benefits Act (RT I 2005, 54, 430).
[33] Unemployment Insurance Act (RT I 2001, 59, 359).

Figure 5.12. **Number of unemployed persons who received the unemployment allowance and unemployment insurance benefits and the number of new persons receiving these benefits from January 2009 to August 2010**



Source: Estonian Unemployment Insurance Fund

benefits to 57,616 insured persons, which is 3.7 times more than in 2008. In the same period, the proportion of new persons receiving unemployment insurance benefits among new registered unemployed persons increased from 33% to 45%. There were 54,970 new persons receiving unemployment insurance benefits, which is 3.5 times more than in 2008.

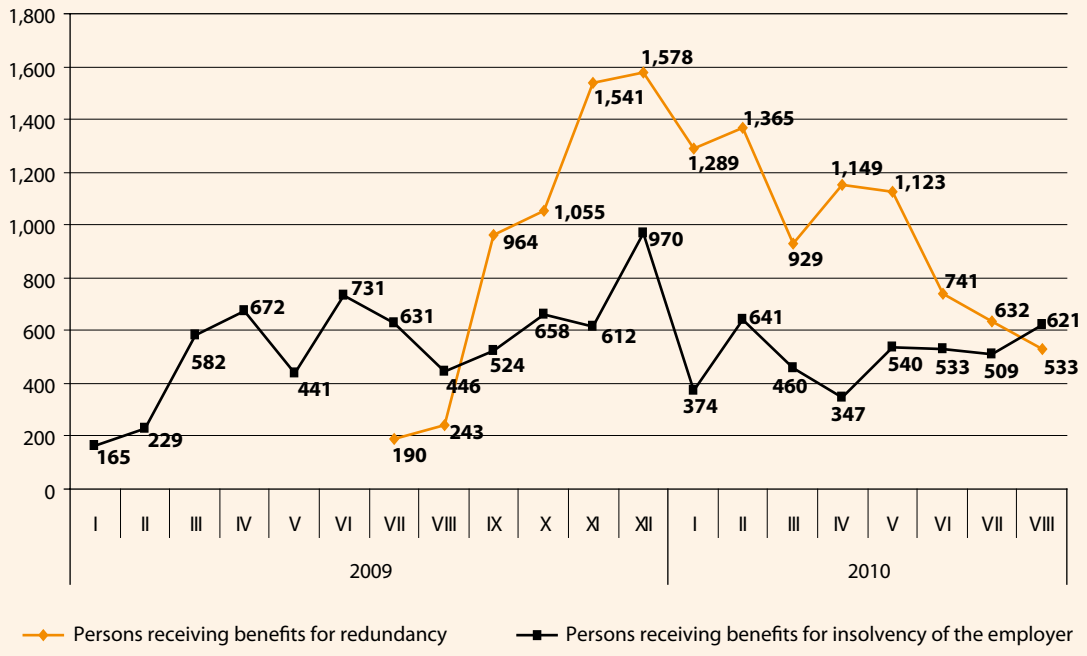
In the first half of 2010, the number of persons receiving unemployment insurance benefits increased; in average, over 30,000 persons per month received benefits. An average of less than 19,000 persons per month had received benefits during the first six months of the previous year. The number of new persons receiving unemployment insurance benefits has decreased in every month of 2010, from 5,076 in January to 1,889 in July.

The average amount of unemployment insurance benefits was over 4,000 kroons per month in both 2009 and 2010. The average unemployment insurance benefit per month was 4,490 kroons per month in 2009 and 4,180 kroons in the second quarter of 2010 (4,600 kroons in the same period in 2009).

Although the Estonian Unemployment Insurance Fund calculated the collective redundancy benefit until the end of June 2009, this chapter will not dwell on that topic since the last such payment was made in November 2009. Starting from 1 July 2009, the Estonian Unemployment Insurance Fund started to appoint a benefit in case of redundancy instead of the collective redundancy benefit. We will next speak of the benefits paid by the Estonian Unemployment Insurance Fund in case of insolvency of the employer as well. The Estonian Unemployment Insurance Fund is paying the worker the remuneration that the latter did not receive due to insolvency of the employer.

Figure 5.13 indicates how the number of persons receiving benefits in case of redundancy has changed during the first year of paying the benefit. The highest number of persons receiving benefits in case of redundancy was in November 2009 (1,541) and December 2009 (1,578). Comparing the indicators of July and August of 2009 and 2010, it can be seen that in July, the number of persons receiving the benefit increased over three times, but a bit over two times in August.

Figure 5.13. **Number of persons receiving benefits in case of redundancy and insolvency benefits from January 2009 to August 2010**



Source: Estonian Unemployment Insurance Fund

Compared to 2008, the number of persons receiving insolvency benefits increased about three times in 2009, reaching 6,661. While insolvency benefits were received by 3,987 persons during the first eight months of 2009, the number was slightly higher in the same period of 2010: 4,025.

5.6. Expenditure on labour market policy

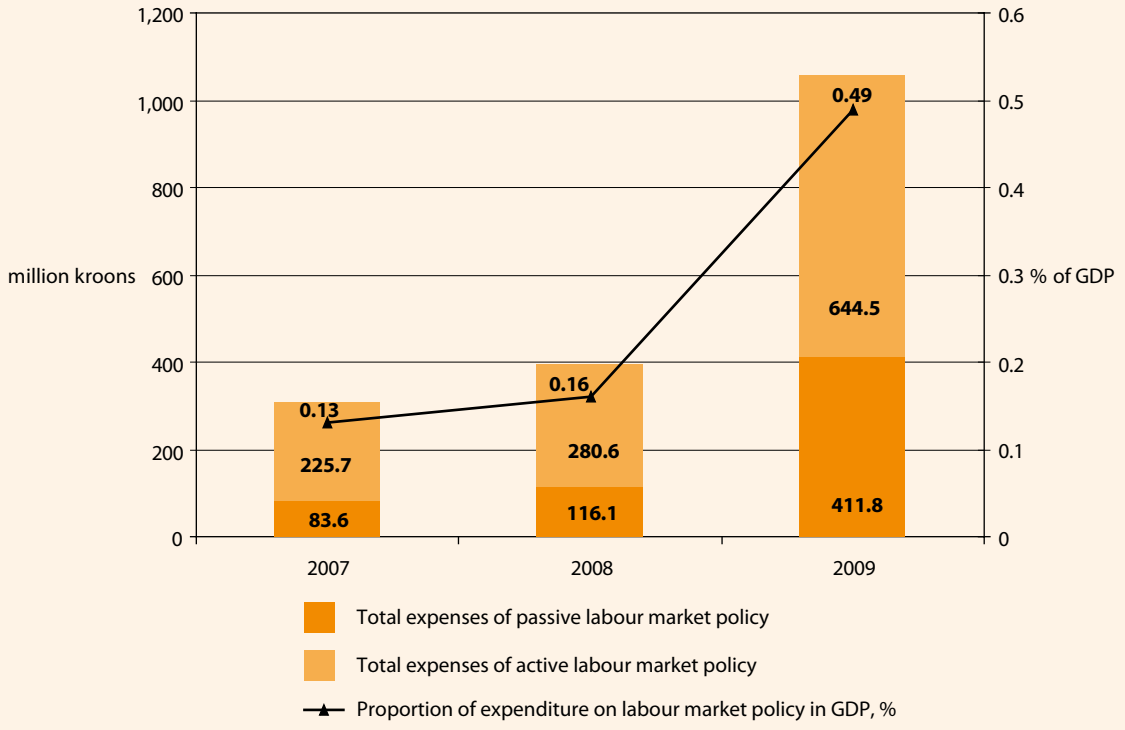
Expenditure on labour market policy until the end of 2009 will be observed next. Labour market services and payments of the unemployment allowance are financed from the state budget and external resources of the European Social Fund.

Figure 5.14 indicates expenditure on both passive and active labour market policy and the proportion of the total expenditure in the GDP of Estonia. It can be seen that the expenditure on passive labour market policy (unemployment allowance and special social tax) has increased by 3.5 times by 2009 compared to 2008 and by approximately 5 times compared to 2007, reaching a level of 411.8 million kroons. While in 2008 expenditure on passive labour market policy constituted 29% of the total expenditure on labour market policy, the indicator was 39% in 2009. This change characterises the increase of the need to support unemployed persons in the conditions of recession and high unemployment.

Expenditure on active labour market policy increased less than in the case of passive labour market policy: expenditure on active labour market policy has increased 2.3 times by 2009 compared to 2008 and by 2.9 times compared to 2007, reaching a level of 644.5 million kroons. For example, expenditure on labour market training, work practice, coaching for working life, business start-up assistance as well as the volume of expenditure on grants, transportation benefits and accommodation benefits increased significantly in 2009 compared to 2008.

The proportion of expenditure on labour market policy in the GDP has increased in the recent years: while the proportion of expenditure on

Figure 5.14. **Expenditure on labour market policy, 2007–2009**



Source: Ministry of Social Affairs

labour market policy was 0.13% of GDP in 2007, it was already 0.49% in 2009. This is logical, taking into account the increase of unemployment caused by the recession that started at the end of 2008, which forced the state to support this field more than before.

In conclusion

In conclusion, it can be said that, as this chapter demonstrated, the effect of the economic crisis on the labour market of Estonia has been very strong in 2009 and in the beginning of 2010. In two years, the number of registered unemployed persons increased by over five times, reaching the maximum level in March 2010 – 101,590 registered unemployed persons. Registered unemployment started decreasing since April and in September there were 77,400 registered unemployed persons. The upturn of the economy and the labour market can therefore be indicated, but the seasonal work in the summer surely has a fair share in this.

6. Working environment

Ester Rünkla

Working environment is the surroundings in which the person works. Pursuant to the Occupational Health and Safety Act, it is the task of the employer to ensure that the working environment is safe to work in and safe to the health of employees.

Employers, employees and the state are interested in a good working environment and the development thereof.

- The expectations of the employer are related to avoiding occupational accidents and illnesses caused by work, increasing productivity, good capacity for work of the employees and competent advices by occupational healthcare specialists.
- The expectations of the employee are related to improvement of the working environment in order to eliminate the possibility for damage to health, timely discovery of health disorders and, if necessary, possibilities of rehabilitation and health promotion supported by the employer.
- The interests of the state are to decrease the health disorders of employees by ensuring a good level of occupational health and safety and lengthen the period of capacity for work of persons.

The worse the situation in the working environment is, the more occupational accidents happen and the more illnesses related to work are diagnosed. The internationally accepted indicators for assessing the level of occupational health and safety in a state are:

- number of occupational accidents per 100,000 employed persons;
- number of fatal occupational accidents per 100,000 employed persons;
- number of occupational diseases per 100,000 employed persons.

This chapter provides an overview of the effects of the economic crisis of the recent years and the significant decrease in the number of employed persons related to it to the indicators characterising the safety of the working environment, the expenses related to illness of employees and the results of the supervision of the working environment by the Labour Inspectorate. Data of the Labour Inspectorate, annual reports of the Estonian Health Insurance Fund and the Social Insurance Board and databases of the Estonian Labour Force Survey and Eurostat have been used when composing this overview.

6.1. Occupational accidents

The procedure for registering and notifying of occupational accidents differs from country to country, being based on either the data of insurance companies or the reports of employers. Eurostat considers statistics of occupational accidents based on insurance to be correct, but deems statistics based on the reports of employers to be underreported. Since occupational accidents are registered on the basis of the reports of employers in Estonia, we are probably dealing with underreporting of occupational accidents. In order to compare the statistics of occupational accidents of different countries, Eurostat has implemented a methodology that enables to adjust the data based on the reports of employers in such a way as to be comparable to the data based on insurance. In order to do that, the levels or scales or underreporting of occupational accidents are calculated in countries based on data obtained by performing surveys. An overview of the scaling of registered occupational accidents will be provided at the end of this chapter.

2,927 occupational accidents were registered in the Labour Inspectorate in 2009 (1,844 involving men and 1,083 involving women), which is 1,131 acci-

dents less than in 2008. The number of occupational accidents decreased by 28.1% in a year. The absolute number of occupational accidents decreased by 257 accidents in Tallinn; the number decreased the most in Harju County (–212) and Ida-Viru County (–152) in a comparison of counties. Compared to 2008, there were 11 more occupational accidents in Valga County, 8 more occupational accidents in Saare County and 1 more occupational accident in Põlva County.

The rate of occupational accidents per 100,000 employed persons has been relatively stable until 2008 (Figure 6.1). The small increase refers to a decrease of concealing occupational accidents and the tendency to reflect the actual situation of the working environment.

The sharp decrease of occupational accidents in 2002 was related to a legislative change (accidents that took place on the way to work were no longer considered to be occupational accidents). The decrease in 2009 (21% compared to 2008) is probably related to the fact that the number of employed persons and the intensity of work decreased due to the recession.

Based on the data of the Labour Inspectorate, the number of occupational accidents per 100,000 employed persons decreased in nearly all counties in 2009, the most in Rapla County (46%), Võru County (44%) and Viljandi County (39%).

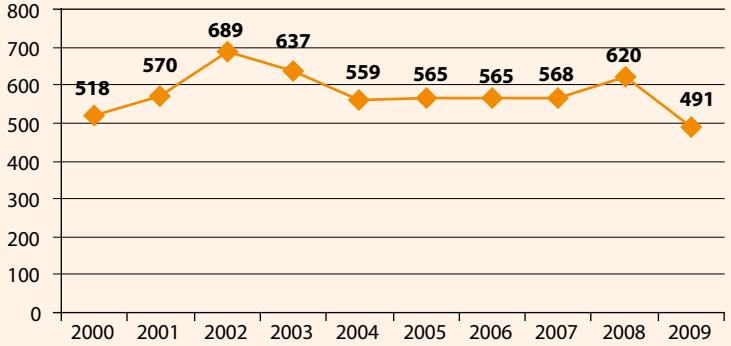
The total number of registered occupational accidents registered in the Labour Inspectorate during the last three years by activities is presented in Table 6.1.

By activities, the number of occupational accidents has decreased in all sectors of production and manufacturing. In the activity of metal industry, production of machinery and electrical equipment that had the highest number of occupational accidents in 2008, the number of occupational accidents decreased by 48% or by 241 accidents, and 35% or by 106 accidents in the timber industry. The supervision specialists of the Labour Inspectorate say the big decrease in the number of occupational accidents in all branches of manufacturing was caused by the decrease of intensity caused by the economic crisis: in many activities, almost nothing was produced; instead, work was being performed part-time in hopes of a better future. The more intensive the work is, the more likely occupational accidents are to happen.

Compared to last year, the proportion of occupational accidents per 100,000 employed persons has increased the most in the administrative and supportive activities due to an increase in the amount of accidents but also due to the decrease of the employed persons. In the activities of art and entertainment, accommodation, catering, electric power and food industry, the proportion of occupational accidents increased only slightly and mainly due to the decrease in the number of employed persons.

The plentiful accidents in the public and national defence sectors compared to production activities and manufacturing can be explained by the fact that the economic situation of 2009 affected the sectors of production activities and manufacturing the most, resulting in a decrease of both employed persons and production volumes – therefore, the number of occupational accidents has also de-

Figure 6.1. **Registered occupational accidents per 100,000 employed persons, 2000–2009**



Source: Labour Inspectorate

Table 6.1. **Number of occupational accidents by activities, 2007–2009**

ACTIVITY	Number of occupational accidents			Occupational accidents per 100,000 employed persons		
	2007	2008	2009	2007	2008	2009
TOTAL	3,723	4,073	2,927	568	620	491
Agriculture, hunting, fishing, forestry	189	189	144	624	747	600
Mining and quarrying	54	43	40	982	717	625
Food industry	246	256	203	1,547	1,249	1,318
Textile and leather industry	102	78	54	425	368	342
Timber industry	368	306	200	1,840	1,974	1,408
Furniture industry	93	94	83	886	1,044	864
Paper industry, printing	42	64	25	1,235	1,103	543
Production of chemicals and chemical goods	193	165	94	1,331	1,100	831
Metal industry, production of machinery and other equipment	444	507	266	1,047	1,090	650
Electricity, gas, steam and air conditioning	16	16	21	184	195	273
Water supply and sewerage	32	50	26	1,524	2,174	1,083
Construction	428	479	261	521	591	448
Retail and wholesale business	375	404	278	432	437	334
Hotels and restaurants	70	131	116	314	555	577
Transportation and storage	282	293	237	533	587	477
Information and communication	10	17	15	74	111	105
Financial mediation, real estate	37	56	27	193	272	131
Professional, scientific and technical activities	87	127	26	494	620	127
Administrative and supportive activities	89	97	180	489	561	1071
Public administration and national defence, statutory social insurance	320	372	328	816	969	894
Education, health and social work activities	181	234	215	199	257	225
Art, entertainment	48	65	73	271	439	514
Other types of service	17	30	15	101	203	130

Source: Labour Inspectorate

creased. The economic situation has not affected the public sector that much and activities have continued in the same volume. Taking into account the activities of the public sector and national defence, most of the occupational accidents are registered in relation to police workers, workers of the Rescue Board and prisons and with peacekeepers of the national defence sector.

Serious occupational accidents

In 2009, 594 serious occupational accidents were registered at the Labour Inspectorate[34], which is 353 less than in 2008 (a decrease of 37%). The division of the occupational accidents taken place in the last three years by the degree of severity determined by the doctor is presented in Table 6.2.

In international statistics, occupational accidents are compared according to the days of incapacity for work caused by the accident: serious accidents are accidents in case of which the incapacity for work lasts over 30 days. The division of occupational accidents depending on the days of incapacity for work caused by the accident is presented on Figure 6.2. Until 2008, the number of registered occupational accidents increased mainly on account of minor occupational accidents with up to 3 days of incapacity for work. In 2009, the number of serious occupational accidents that was quite stable

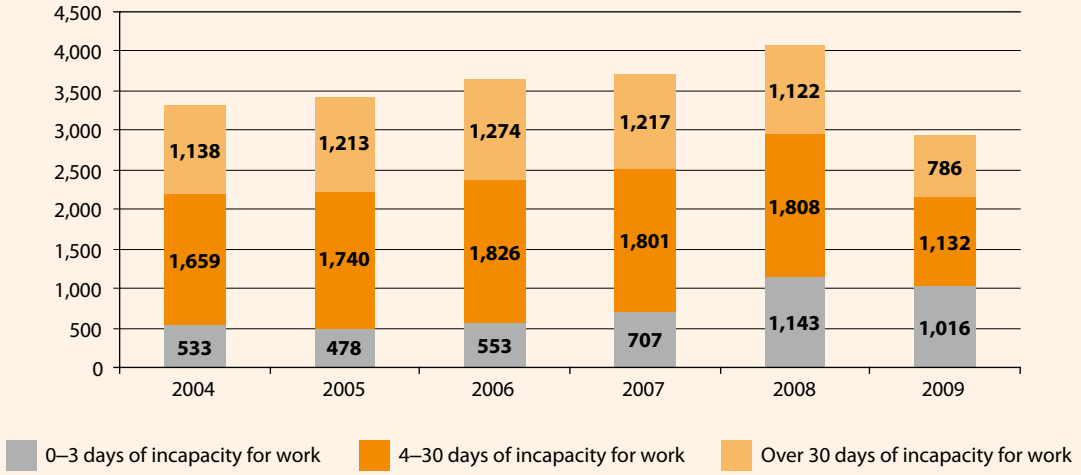
[34] According to legislation, occupational accidents in Estonia are classified according to the degree of severity determined by the doctor: minor, serious, fatal.

Table 6.2. **Number of occupational accidents by degree of severity, 2007–2009**

	Number of occupational accidents			Occupational accidents per 100,000 employed persons		
	2007	2008	2009	2007	2008	2009
Total number of occupational accidents	3,723	4,073	2,927	568	620	491
Minor	2,615	3,105	2,314	399	473	388
Serious	1,087	947	594	166	144	100
Fatal	21	21	19	3.2	3.2	3.2

Source: Labour Inspectorate

Figure 6.2. **Number of registered occupational accidents according to days of incapacity for work, 2004–2009**



Sources: Labour Inspectorate, Estonian Health Insurance Fund

in the previous years also decreased along with the decrease of the overall number of occupational accidents. While the total number of occupational accidents has decreased by 20.8% compared to 2008 (by 1,146 occupational accidents), the number of accidents involving over 30 days of incapacity for work has decreased by 30% (by 353 occupational accidents) and the number of occupational accidents involving 4–30 days of incapacity for work has decreased by 37.4% (by 676 occupational accidents). The number of occupational accidents involving up to 3 days of incapacity for work has stayed at roughly the same level as in 2008.

As serious occupational accidents involving a longer period of incapacity for work have generally been related to branches of construction and manufacturing, the decrease of the number of employed persons in these sectors during the economic crisis of 2008 (28% in construction and 15.7% in manufacturing) also decreased the number of serious occupational accidents.

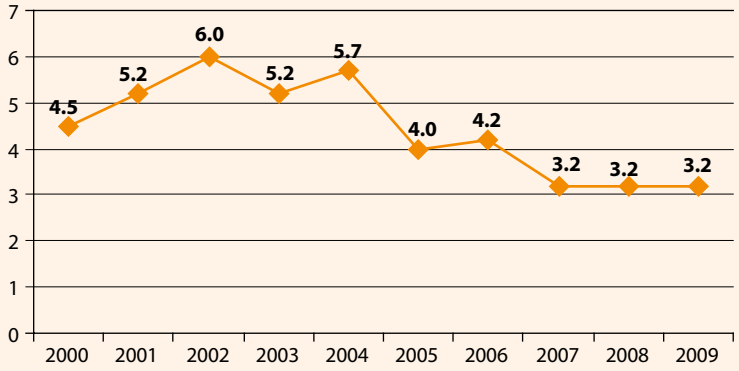
Fatal occupational accidents

19 fatal occupational accidents were registered in the Labour Inspectorate in 2009 (all happened to men). There were 10%, or 2 less fatal occupational accidents compared to 2008.

In comparison of counties, 6 fatal occupational accidents were registered in Tallinn and Harju County, 2 in Rapla County, 2 in Viljandi County, 1 in the Ida-Viru, Lääne-Viru and Saare Counties and 6 outside the territory of Estonia. In comparison of activities, the biggest number of fatal occupational accidents took place in the sector of national defence (5), where all the cases were related to a state of war outside the territory of Estonia – such cases are not subject to occupational health and safety supervision.

The absolute number of fatal occupational accidents has decreased in the recent years, but the ratio per 100,000 employed persons has remained

Figure 6.3. **Fatal occupational accidents per 100,000 employed persons, 2000–2009**



Source: Labour Inspectorate

the same (Figure 6.3) since the number of employed persons has also constantly decreased in the last three years. The big oscillations on the trend line of fatal occupational accidents of previous years are most likely coincidental and related to the situation characteristic to Estonia: taking into account the small size of the country, there are generally few cases of death and the statistics are therefore dependent on a few single occupational accidents. The statistics of fatal occupational accidents per 100,000 employed persons by activities is presented next in order to clarify the issue (Table 6.3). Taking the fatal occupational accidents as the basis, we can consider the most dangerous activities of 2009 to be public administration and national defence as well as construction whereas manufacturing is holding a modest seventh place and mining and quarrying that held the first place in comparison of fatal occupational accidents per 100,000 has come down to the positive side of the table along with all the activities where no fatal occupational accidents happened in 2009.

Table 6.3. **Fatal occupational accidents per 100,000 employed persons by activities, 2007–2009**

	2007	2008	2009
Public administration and national defence, social insurance	5	3	14
Construction	6	7	9
Information and communication	0	0	7
Transportation and storage	4	6	6
Administrative and supportive activities	5	6	6
Agriculture, forestry and fishing	3	4	4
Manufacturing	3	3	2
Education, health and social work activities	0	0	1
Mining and quarrying	18	67	0
Supply of electric energy, gas and water	0	0	0
Wholesale and retail trade; repair of motor vehicles	5	0	0
Accommodation and catering	0	0	0
Financial mediation and real estate	0	5	0
Professional, scientific and technical activities	6	0	0
Art and entertainment	0	0	0
Other activities of societal, social and personal service	0	0	0

Source: Labour Inspectorate

The previous example explains the consequences of one fatal accident in the statistics. Fatal occupational accidents cannot be considered as the most important indicator when assessing the situation of the working environment of Estonia even though the problem of underreporting is minimal in case of fatal occupational accidents. Taking into account the small size of Estonia, there are generally few cases of death; therefore the statistics depend a lot on single occupational accidents.

In 2007 and 2009, the module of occupational accidents of Eurostat was added to the Estonian Labour Force Survey that grants the possibility to find out the actual number of occupational accidents and thus the level of underreporting of registered occupational accidents based on the results of the survey. Analysis of the survey results indicates that the average level of underreporting of occupational accidents involving over three days of incapacity for work is 41% (the scale is 2.4). The level of reporting was very low in construction where, based on the results of the survey, only 17% of occupational accidents are reported; the branches of manufacturing were viewed together and the resulting reporting level was 48% (the scale is 2.1). Based on the data of the survey, half of the occupational accidents in manufacturing and even 83% in construction are not registered. This methodology for finding out the level of underreporting of occupational accidents still needs customisation since taking into account the small size of Estonia, there are generally few occupational accidents; therefore it is problematic to calculate authoritative scales by activities on the basis of the results of the survey.

In conclusion, it can be said regarding the statistics of occupational accidents that whereas the statistics of fatal accidents in Estonia is probably true, the other occupational accidents are underreported and it may be assumed that the statistics regarding the activities is not correct. While a goal has been set to reduce the number of occupational accidents in the EU by 25% in the years 2007–2012, it is only possible to speak of this goal in case of fatal occupational accidents in the context of Estonia. It is important to ensure authoritative statistics of occupational accidents in the next few years.

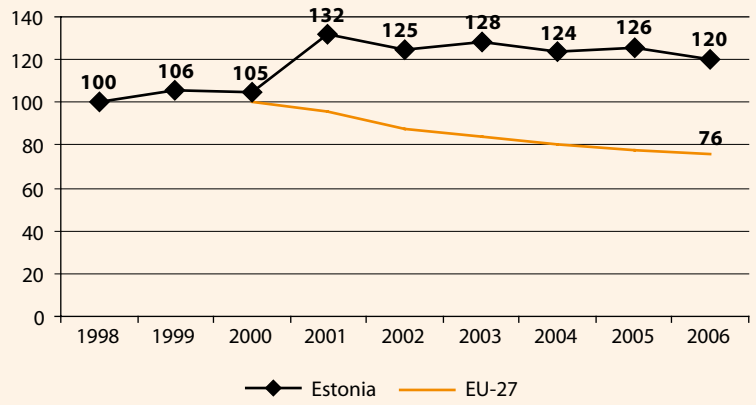
Statistics of occupational accidents in the EU

The comparative statistics of occupational accidents of different countries is collected and published by Eurostat. A methodology that takes into account occupational accidents involving more than three days of incapacity for work and fatal occupational accidents has been put into use there.

Pursuant to this methodology, data about occupational accidents involving more than three days of incapacity for work is collected for the nine most important activities: agriculture, manufacturing, electric power, construction, wholesale and retail trade, hotels and restaurants, financial mediation, transportation and business activities. The collected comparative data is published per 100,000 employed persons in a unified form, assuming that the year 1998 = 100 for all countries. The methodology enables better comparison of the changes in the statistics of occupational accidents of the recent years and likewise makes it possible to give an evaluation to the efforts of countries to decrease the number of occupational accidents and improve the working environment.

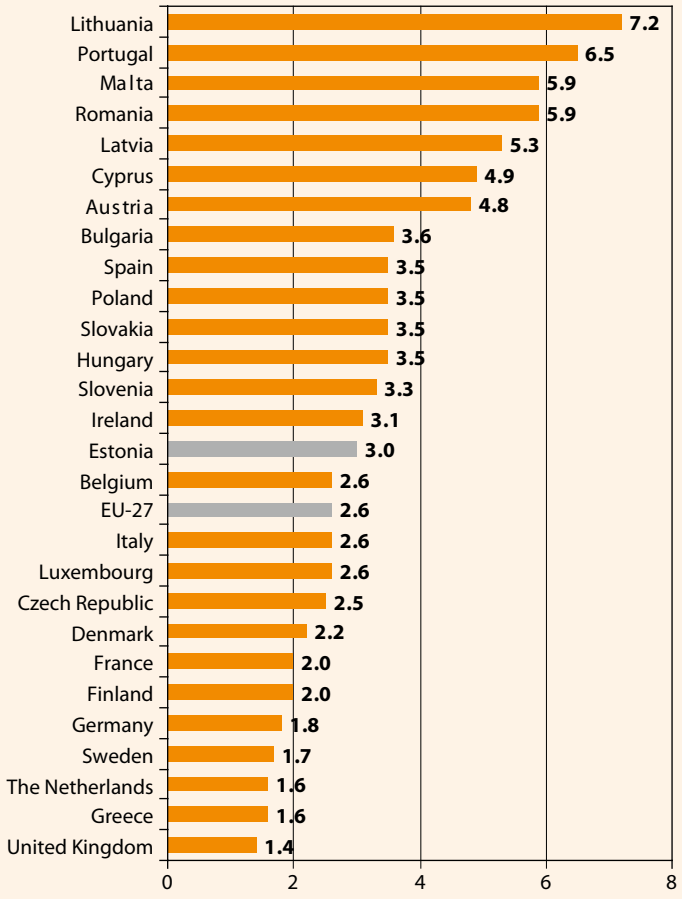
According to the methodology of Eurostat, the average level of registered occupational accidents of the extended EU has shown a constant decrease trend (Figure 6.4), but the number of occupational accidents has increased in Estonia. Compared to the data of 1998, the number of occupational accidents per 100,000 employed persons has increased by 20% in Estonia while the respective indicator has decreased by 24% in the European Union. As the number of occupational accidents is the main indicator for assessing the working environment, it might seem that the situation in the Estonian working environment is substantially worse than elsewhere in the European Union. However, as occupational accidents have been underreported for years in Estonia, the increase trend of the number of occupational accidents in the last years may be explained as the increase of awareness of the parties to the employment relationship and thus also a decrease in the concealment of occupational accidents.

Figure 6.4. **Occupational accidents per 100,000 employed persons in the EU and in Estonia (year 1998 = 100)**



Source: Eurostat (data published until 2006)

Figure 6.5. **Number of fatal occupational accidents per 100,000 employed persons in the EU and in Estonia, 2005**



Source: Eurostat

Data concerning fatal occupational accidents is collected and published by Eurostat based on eight main activities, excluding the transportation sector from the previous list of activities of occupational accidents involving more than three days of incapacity for work. According to the methodology of Eurostat, the newest comparable data of the fatal occupational accidents of all the 27 EU Member States has been published for the year 2005.

Figure 6.5 indicates that Estonia is placed as average among the 27 EU Member States. Almost all the more developed EU Member States are below Estonia while mostly the new Member States are above Estonia. It has to be mentioned again that taking into account the small size of Estonia, there are generally few cases of death; therefore, the statistics depend on a few single occupational accidents more than elsewhere; thus the statistics of cases of death per 100,000 employed persons should not be the most important indicator when assessing the working environment of such a small state as Estonia.

Comparing Figure 6.3 (fatal occupational accidents registered in Estonia) and Figure 6.5 (comparison of the Eurostat of countries based on fatal occupational accidents), we can see a difference in the data of 2005 concerning Estonia (4.0 and 3.0, respectively). The difference arises from the methodology of Eurostat since it only takes eight activities into account.

6.2. Health disorders related to work

The Occupational Health and Safety Act classifies health disorders related to work into occupational diseases, diseases caused by work and diseases related to work.

Occupational diseases and diseases caused by work

Occupational diseases are health disorders that develop in case of long-term working under conditions that pose a health hazard. Occupational diseases are directly caused by the hazards of the working environment, i.e. there is a cause-and-effect relationship between the hazard and the disease. In the case of an occupational disease, the professional capacity for work of the injured person has decreased and he or she has a right to demand compensation for damage from the employer.

In case of diseases caused by work, the hazard of the working environment is one of the many factors that could cause the disease. Diseases caused by work need the attention of specialists who deal with solving the issues of the working environment in order to channel the necessary resources to reduce the effect of the hazards of the working environment and prevent occupational diseases.

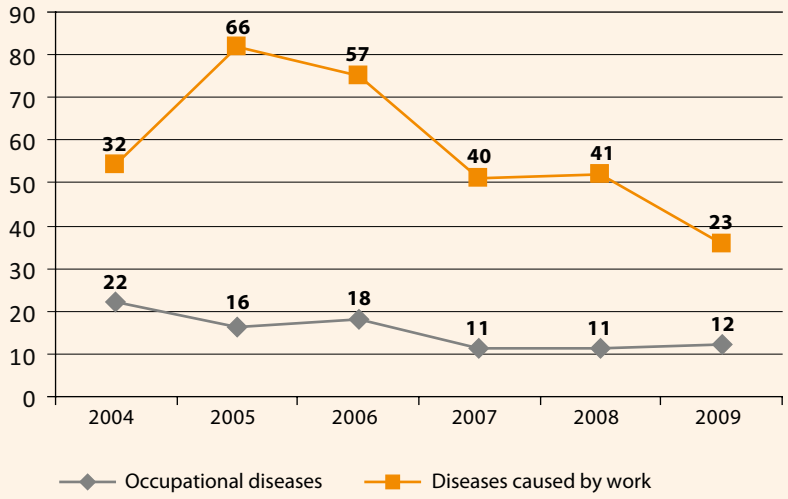
Pursuant to the Occupational Health and Safety Act, occupational diseases and diseases caused by work are diagnosed by an occupational health doctor who will collect data about the current and previous working conditions and type of work for it. The Labour Inspectorate is maintaining a register of occupational diseases and, since 2004, of diseases caused by work as well.

In 2009, according to the Labour Inspectorate:

- 73 cases of occupational diseases (OD) were registered (30 men and 43 women), in the course of which 153 different diagnoses of occupational diseases have been raised (75 cases and 165 diagnoses in 2008);
- 139 cases of diseases caused by work (DCW) were registered (62 men and 77 women), there were 215 different diagnoses (266 cases and 394 diagnoses in 2008);
- the age group with the most diagnoses of ODs was persons aged 55–64 while the age group with the most diagnoses of DCWs was persons aged 45–54. The number of persons diagnosed with disease has not increased in the younger age groups, but in 2009, disease caused by work was diagnosed for two persons younger than 24;
- of occupations, the operators of various machines and skilled workers and craftsmen have the most diagnoses of ODs and the most diagnosed DCWs are among operators of lifting devices and unskilled workers in mines;
- the ODs diagnosed the most are musculoskeletal and connective tissue diseases caused by excess physical load while the most diagnosed DCW was hearing impairment.

The constantly low level of registered occupational diseases and the continuing decrease in the number of diseases caused by work (Figure 6.6)

Figure 6.6. **Registered occupational diseases and diseases caused by work per 100,000 employed persons in Estonia, 2004-2009**



Source: Labour Inspectorate

can be explained on the one hand by the decrease in the number of employed persons in the recent years, but also by deepening issues in the funding of occupational health doctors as occupational health services provided by medical specialists[35]. A case of occupational disease is often registered as a disease caused by work because the occupational health doctor cannot perform the necessary expert assessments in order to diagnose the occupational disease due to funding issues. Taking into account the fact that essentially, a disease caused by work is the same as an occupational disease (in both cases, at least one of the factors causing the disease is the hazard of the working environment), it is important that workers do not continue working under the same conditions and in the same working environment where the disease was formed for both diseases caused by work and occupational diseases.

Diseases related to work

The definition of diseases related to work is broader, covering all health disorders and diseases that working conditions may cause, aggravate or cause along with other factors. Data about diseases related to work is collected with surveys.

In 2007 and 2009, a module of Eurostat was included in the Estonian Labour Force Survey in order to analyse health disorders related to work. It appears from the results of the survey that the proportion of these workers who have had a disease, impairment, disability or other illness within the last 12 months increased in 2009. While the proportion of such workers among employed persons was 34.3% in 2007, the proportion was 36.4% in 2009. The proportion of health disorders related to work among all health disorders was 28.6% in 2007. Based on the survey of 2009, the proportion of health disorders related to work among all health disorders has decreased to 16%.

Workers do not necessarily associate health disorders with work even though the proportion of all health disorders has increased by a few percentage points. The decrease in the health disorders related to work is caused by the general decrease in the intensity of work caused by the economic crisis in all of the main branches of production and manufacturing.

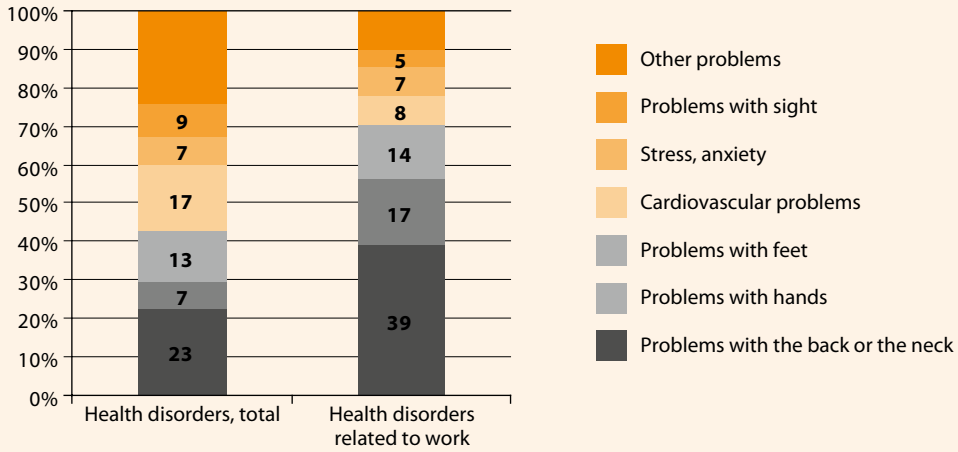
It appears, when comparing all health disorders and the health disorders related to work that were marked in the 2009 survey, that musculoskeletal

[35] Occupational health service – fulfilling the duties of the occupational health doctor, occupational health nurse, occupational psychologist or ergonomist with the purpose of contributing to creating a safe working environment for the health of the employee, to prevent work-related diseases and to preserve and promote the health capacity for work of the employee.

health disorders are mainly related to work. While problems with hands, feet, the back or the neck constitute 43% of all health disorders, their proportion among health disorders related to work is 70% (Figure 6.7). Whereas cardiovascular problems constitute 17% of all health disorders, the proportion of cardiovascular problems is only 8% of health disorders related to work. Stress constitutes 7% of all health disorders and has the same proportion in case of health disorders related to work.

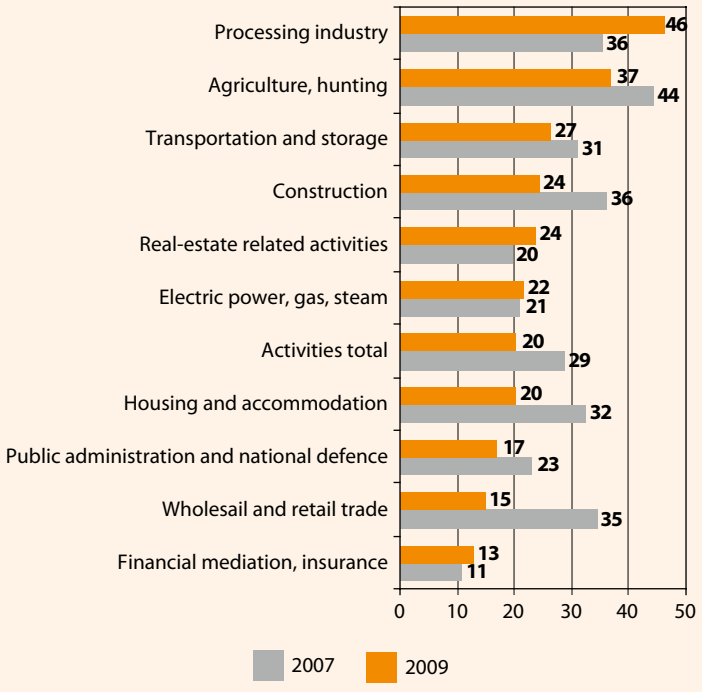
The nature of the health disorders related to work refers to a need to improve the working environment, decrease monotonous work, decrease the contact of workers to hazards that cause musculoskeletal diseases to a minimum, to train and instruct workers to handle loads etc. More attention should be paid to reducing excess physical load and noise in the working environment.

Figure 6.7. **All health disorders and health disorders related to work, 2009 (%)**



Source: Statistics Estonia, Estonian Labour Force Survey

Figure 6.8. **Health disorders related to work by activities (% of all health disorders)**



Source: Statistics Estonia, Estonian Labour Force Survey

It appears, when comparing the results of the surveys of health disorders related to work of 2007 and 2009 by activities (Figure 6.8) that the proportion of health disorders related to work among all health disorders has decreased in most activities.

The decrease of health disorders related to work in 2009 can be explained by decrease in the number of employed persons and the intensity of work. The general picture is the same: the proportion of health disorders related to work among all health disorders of workers is as high as 20–25% in nearly all activities. The financial sector and wholesale and retail trade are nice exceptions, where health disorders related to work respectively constitute 13% and 15% of all health disorders.

6.3. Permanent incapacity for work

Various health disorders caused by work may bring about permanent incapacity for work for the person. The Social Insurance Board will carry out the expert assessment of permanent incapacity for work,[36] engaging medical experts. Permanent incapacity for work with a degree of 40–100% gives the right to apply for pension for incapacity for work.[37]

This section provides an overview of the changes in the number of persons permanently incapacitated for work caused by work as of the end of the year and of the permanent incapacity for work caused by work that is determined for the first time.

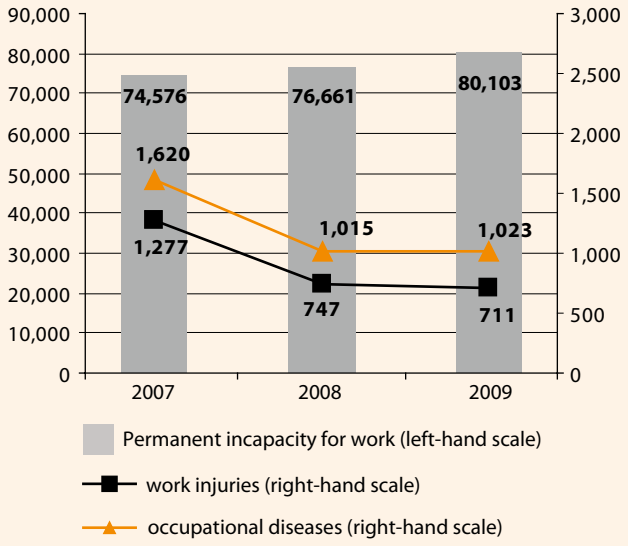
Permanent incapacity for work caused by work

Based on the data of the Social Insurance Board, there were 80,103 persons in Estonia who were permanently incapacitated for work (41,299 men and 38,804 women) by the end of 2009; out of these persons, 711 persons (595 men and 116 women) had lost the capacity to work due to an occupational accident and 1,023 persons (553 men and 470 women) due to an occupational disease.

While the total number of persons with permanent incapacity for work has increased by 3,442 persons (4.5%) compared to 2008, the indicator of permanent incapacity for work due to an occupational disease has increased by 8 persons (1%) and the indicator of permanent incapacity for work due to work injuries has decreased by 36 persons (–5%).

It appears, when observing permanent incapacity for work caused by work by age groups (Figure 6.10) that whereas the highest number of persons who are permanently incapacitated for work due to

Figure 6.9. **Permanent incapacity for work, 2007–2009**

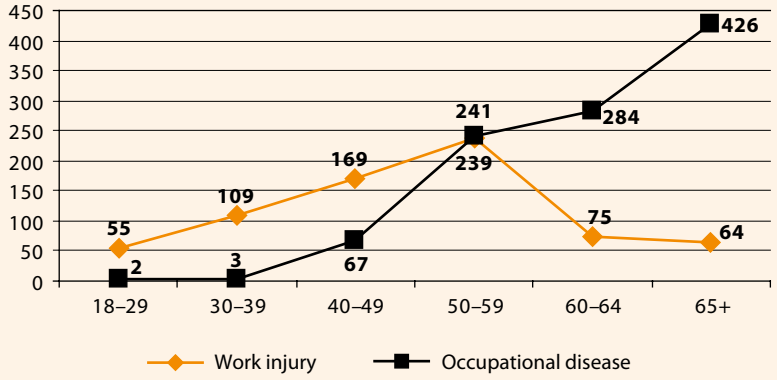


Source: Social Insurance Board

[36] Permanent incapacity for work is
– total (100%) if the person has a serious functional impairment caused by an illness or injury due to which he or she is not able to work in order to support himself or herself;
– partial (10–90%) if the person is able to work to support himself or herself but due to a functional impairment caused by an illness or injury is not able to perform work suitable to him or her in the amount corresponding to the general national standard for working time.

[37] A pension for incapacity for work will be appointed for the person who is determined to be permanently incapacitated for work for the whole duration of the incapacity for work but not longer than until reaching the retirement pension age.

Figure 6.10. **Permanent incapacity for work due to work by age groups, 2009**



Source: Medical examinations of the Social Insurance Board

a work injury were among the age group of 50–59 years of age and fewer among older persons, the number of persons who are permanently incapacitated for work due to an occupational disease is, on the contrary, higher among persons older than 50 years of age.

The proportion of persons who are permanently incapacitated for work due to work among all the persons who are permanently incapacitated for work is not big (2.2% in 2009), but in total it means 1,734 persons who have permanently lost the capacity to work due to a work injury or an occupational disease and to whom the state is paying a pension for incapacity for work in case of at least 40% of loss of capacity for work and, if necessary, benefits for occupational accident or occupational disease. By extending this to all employed persons, we get the result that in 2009, there was one person per every 300 employed persons who had been determined to be permanently incapacitated for work due to work.

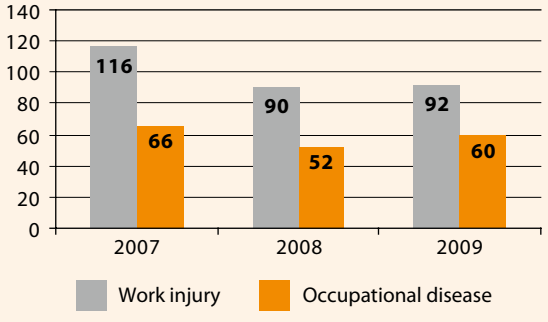
First-time permanent incapacity for work due to work

In 2009, based on the data of medical examinations of the Social Insurance Board, first-time permanent incapacity for work was determined for 12,973 persons in total (7,191 men and 5,782 women). Figure 6.11 provides an overview of the number of the persons who have been determined as first-time permanently incapacitated for work due to a work injury or an occupational disease.

In 2008, first-time permanent incapacity for work related to work injuries and occupational diseases showed a decrease trend compared to the previous year, which can be explained by the economic crisis and the decrease of employed persons. In 2009, first-time permanent incapacity for work due to work has become more frequent again.

Comparing the statistics of occupational accidents and occupational diseases registered in the Labour Inspectorate to the data of the medical examinations of the Social Insurance Board, it turns out that in 2009, the following was registered:

Figure 6.11. **First-time permanent incapacity for work due to work, 2007–2009**



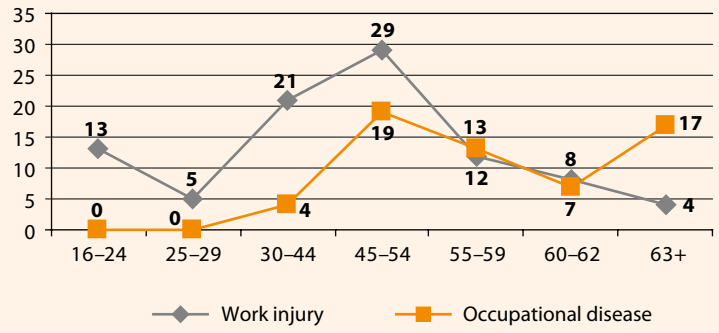
Source: Medical examinations of the Social Insurance Board

- 2,927 occupational accidents whereas first-time permanent incapacity for work due to work injury was determined for 92 persons (76 men and 16 women), which is about 3% of occupational accidents;
- 73 occupational diseases whereas first-time permanent incapacity for work caused by an occupational disease was determined for 60 persons (25 men and 35 women), which is about 83% of the occupational disease cases.

Figure 6.12 provides an overview of the number of persons who were determined as first-time permanently incapacitated for work due to a work injury or an occupational disease in 2009 by age groups.

While most of the cases of first-time permanent incapacity for work related to occupational illnesses are connected to older workers, that is, workers older than 45, there were 13 occupational accidents in 2009 that brought about permanent incapacity for work for men who were younger than 25 based on the data of the medical examinations of the Social Insurance Board.

Figure 6.12. **First-time permanent incapacity for work due to work by age groups, 2009**



Source: Medical examinations of the Social Insurance Board

6.4. Expenses related to illness of employees

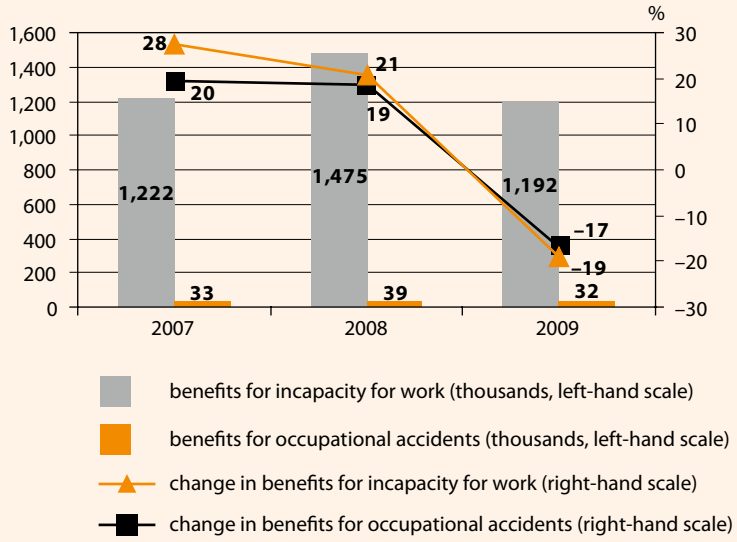
Occupational accidents and diseases related to work bring about economic loss to the employee, the employer, the state and society as a whole. This section gives an overview of the direct expenses to the state related to the illness of employees. We will provide an analysis of the benefit and treatment expenses of workers related to temporary incapacity for work and the compensation expenses related to permanent incapacity for work due to work injuries or occupational diseases. Annual reports of the Estonian Health Insurance Fund and the Social Insurance Board are used in the analysis.

Benefits for incapacity for work

Based on the reports of the Estonian Health Insurance Fund,[38] the expenses of temporary incapacity for work related to illnesses not caused by an accident or regular employment and related to occupational accidents have constantly increased. We will next determine the proportion of benefits for incapacity for work of workers constituted by benefits for incapacity for work related to occupational accidents.

[38] Annual reports of the Health Insurance Fund.

Figure 6.13. **Benefits for incapacity for work, 2007–2009**

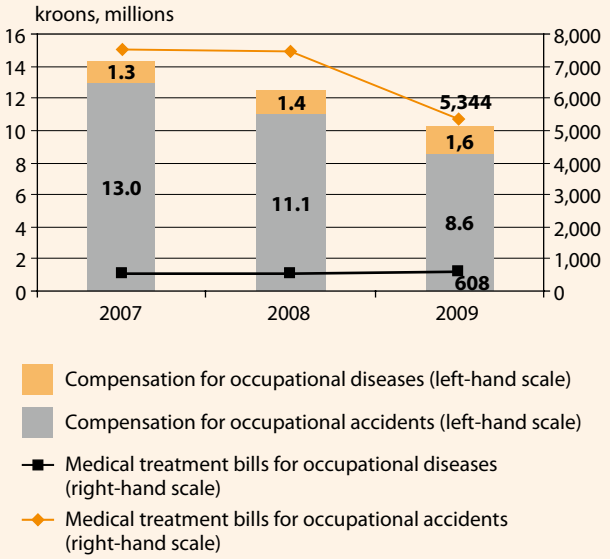


Source: Estonian Health Insurance Fund

In 2009, the Estonian Health Insurance Fund paid approximately 1.2 million kroons of benefits for incapacity for work, including 32,000 kroons of benefits for occupational accidents (Figure 6.13). Benefits for temporary incapacity for work of workers increased steadily until 2008, but the total amount of benefits for incapacity for work decreased by 19% in 2009. The amount of benefits for occupational accidents decreased somewhat less, by 17%.

The proportion of benefits for occupational accidents among benefits for incapacity for work stayed at the level of the previous year: benefits for occupational accidents constituted 2.6% of benefits for incapacity for work in both 2008 and 2009. The decrease of benefits for incapacity for work in 2009 was related to the decrease of employed persons caused by the recession.

Figure 6.14. **Compensation for occupational accidents and occupational diseases, 2007–2009**



Source: Estonian Health Insurance Fund

Treatment expenses

In 2009, the Estonian Health Insurance Board compensated for 5,344 medical treatment bills in a total sum of 8,569,091 kroons (7,483 medical treatment bills and 11,080,278 kroons in 2008, respectively) and 608 medical treatment bills related to occupational diseases in a total sum of 1,630,578 kroons (554 medical treatment bills and 1,436,750 kroons in 2008, respectively).

The total treatment compensations for occupational accidents and occupational diseases were about 10.2 million kroons in 2009 (Figure 6.14). While the total sum of treatment compensations for occupational accidents has decreased in the recent years mainly due to the decrease of occupational accidents due to decrease of employed persons, the total sum of treatment compensations related to occupational diseases is showing a constant increase trend: it has increased by about 200,000 kroons compared to 2008.

It appears from the analysis of the data of treatment compensations of 2009 that while the medical treatment bill has been up to 20,000 kroons in the case of an occupational disease, the medical treatment bills have exceeded 200,000 kroons six times in the case of serious occupational accidents.

In total, approximately 10.2 million kroons were paid by the Estonian Health Insurance Fund to compensate for occupational accidents and diseases in 2009, which is 0.13% of the total expenses of health insurance benefits (8,049,487,000 kroons) of the Estonian Health Insurance Fund.[39]

Pensions for incapacity for work

A permanent incapacity for work in the degree of 40–100% gives the right to apply for pension for incapacity for work. Based on the annual report of the Social Insurance Board, 77,344 persons received pension for incapacity for work by the end of 2009 and a total of about 2.5 billion kroons of pension for incapacity for work was paid (71,448 persons receiving pension for incapacity for work and a total of about 2.2 billion kroons in 2008, respectively).

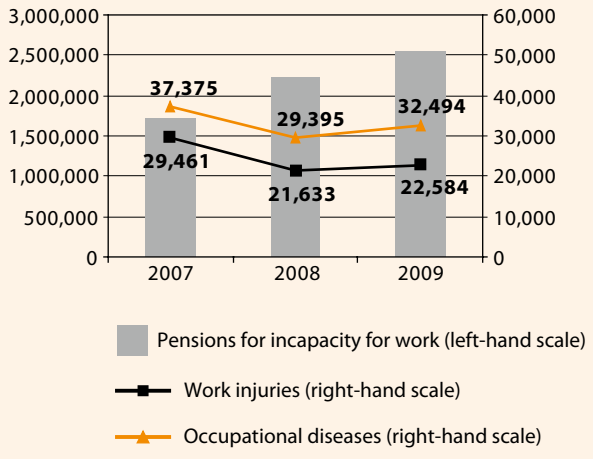
There were 1,121 persons with permanent incapacity for work due to an occupational accident and 1,523 persons with permanent incapacity for work due to an occupational disease whose degree of incapacity for work exceeded 40% and who had a right to apply for pension for incapacity for work registered in the Social Insurance Board at the end of 2009.

Compensations for damage

Employees who have suffered damage to health while performing work duties have the right to claim for the compensation of damage caused by the damage to health from the employer. Damage to health may have been caused as a consequence of either an occupational accident or an occupational disease due to which permanent incapacity for work has been determined for the employee. The employee has the right to compensation if the damage to health was caused at the fault of the employer. If the employer responsible for the damage has been liquidated without a legal successor, the obligation of compensating for the unreceived remuneration and additional expenses is transferred to the national social security system.

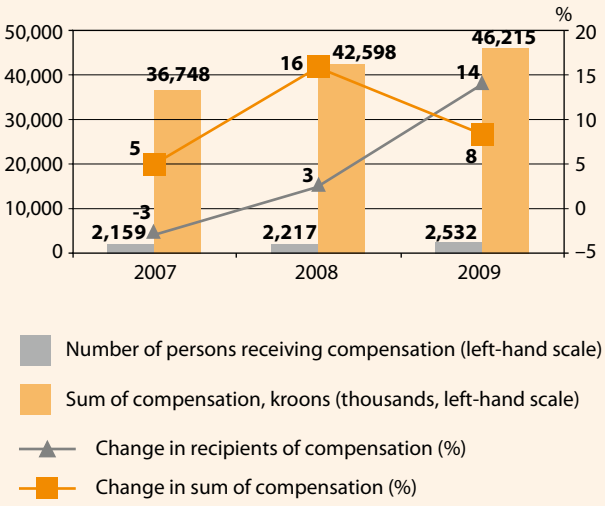
The Social Insurance Board is paying compensation for damage to persons who have become permanently incapacitated for work as a result of occupational accidents or occupational diseases,

Figure 6.15. **Total amount of pensions for incapacity for work, 2007–2009 (kroons, thousands)**



Source: Social Insurance Board

Figure 6.16. **Compensation related to occupational accidents and occupational diseases, 2007–2009**



Source: Social Insurance Board

[39] Annual report of the Health Insurance Fund 2009.

the total amount of which amounts to millions of kroons each year, in addition to the pension for incapacity for work.

The number of persons receiving compensation has increased sharply in 2009, increasing by 14% compared to 2008, whereas the total amount of compensation paid has only increased by 8% (Figure 6.16). Taking into account the decrease of registered occupational accidents and occupational diseases in 2009, the increase of the number of persons receiving compensation through the Social Insurance Board has to be explained by the increase of cases where the employer responsible for damage related to an occupational accident or an occupational disease has been liquidated without a legal successor and the obligation of compensating the employee for the unreceived remuneration and additional expenses has been transferred to the national social security system.

6.5. Supervision of the working environment

2009 was a difficult year for both employees and employers: this is characterised by the significant increase of labour disputes. Labour dispute committees received 6,371 petitions in 2009, which is 55% more than in 2008 (4,102 petitions) and 2.4 times more than in the years preceding the economic crisis (for example, 2,610 petitions in 2007).

The activities of the supervision of the working environment were affected by the decrease in the number of companies and, above all, employees. The recession in Estonia has affected the working environment as a whole, resulting in the ending of the activities of many companies as estimated by labour inspectors; this could be observed first and foremost in the smaller counties and it impacted the construction sector to a large degree.

The Labour Inspectorate exercises state supervision over complying with the requirements of the legislation regulating occupational health and safety in the working environment. In the course of supervision of occupational health and safety, 4,042 (4,201 in 2008) companies were visited, constituting 22% of companies with over five employees in Estonia. Compared to 2008, the Labour Inspectorate increased the number of checks of the working environment, during which the working environment as a whole was assessed in companies and more attention was paid to various hazards.

In the course of supervision of the working environment in 2009:

- 2,421 grading sheets of the hazards of the working environment were filled (2,351 in 2008);
- 13,780 violations of the regulations of the legislation were detected (10,530 in 2008);
- 5,098 precepts were issued, which constitutes 37% of the cases of violations of the regulations (3,159 and 30% in 2008, respectively);
- 5,382 violations of the requirements arising from the Occupational Health and Safety Act were detected, which is 39% of the number of all violations (4,844 and 46% in 2008, respectively). Lacking a risk assessment was the most common violation concerning the numbers of violations. This was also the most significant violation in nearly all counties;
- in 131 cases, work was halted to eliminate violations and in 245 cases, the use of certain work equipment was forbidden (81 and 5 in 2008, respectively);
- 643 warnings were issued for a total penalty payment of 2,627,350 kroons (560 and 2,434,900 kroons in 2008, respectively);
- in 20 cases the penalty payments were enforced in a total sum of 67,300 kroons (40 and 151,000 kroons in 2008, respectively);
- misdemeanour proceedings were started in 151 cases (117 in 2008). Fines were imposed on legal persons as a result of investigating occupational accidents and occupational diseases in 59 cases in a total sum of 243,400 kroons (67 and 262,500 kroons in 2008, respectively) and on natural persons in 11 cases in a total sum of 17,600 kroons (9 and 9,780 in 2008, respectively). The number of misdemeanour proceedings and the fines imposed increased somewhat compared to 2008.

According to the goal of the Labour Inspectorate of ensuring a more efficient and effective supervision,

somewhat more violations were detected when visiting companies than in the previous years. More warnings of penalty payments, halting of work and forbidding the use of dangerous work equipment were used in order to ensure the elimination of violations. On the other hand, it is a good sign that only 3% of precepts with a warning of implementing a penalty payment were not performed by the deadline. It can therefore be concluded that supervision over companies has become more effective and violations are rather eliminated without sanctions.

Several new activities were started in the Labour Inspectorate in 2009:

- information days were organised in counties in order to increase the effectiveness of notification activities;
- issuing of an electronic informative letter of the Labour Inspectorate was started;
- permanent sections in several local newspapers and on the websites of towns were opened;
- a database of best practices was created on the website of the Labour Inspectorate;
- training events for working environment specialists and the managers of small scale enterprises were held in order to increase the competence for occupational health and safety;
- a national research of psychosocial factors related to work was organised.

In conclusion

To conclude the chapter of the working environment, it can be said that although the strategic parameters that characterise the working environment have not improved in 2009, the statistical data of 2009 is insufficient to adequately assess the working environment since statistics are affected by the recession and the stressful situation on the labour market that accompanied it for the past few years.

The year 2009 has been a time of analysing the performed steps for working environment policy makers and a preparatory period for planning changes in the working environment policy.

A strategy of occupational health and safety has been worked out for the years 2010–2013, designating the development of the control system and organisation of work of companies in a way that will support occupational health and safety, promoting a positive psychosocial climate in the company, creating a prerequisite for increasing labour productivity, helping maintain the population of working age capable of working and creating the prerequisites for ensuring authoritative statistics of occupational accidents and occupational diseases. It is possible to read up on the documents of the strategy at the address:

http://www.sm.ee/meie/eesmargid-ja-nendetaitmine/valdkondade-arengukavad.html.

Surveys were organised in 2009 in order to support the planning of possible changes of the legislation of occupational health and safety, clarifying the issues of employees when ensuring the safety of the working environment and decreasing the health hazards to employers, likewise the expenses of employers for fulfilling the requirements arising from the Occupational Health and Safety Act. The materials of the surveys are also accessible in the web:

http://www.sm.ee/meie/uuringud-ja-analuusid/toovaldkond.html.

The strategy of occupational health and safety and surveys related to the working environment help create knowledge-based policies of occupational health and safety that must above all observe that the changes in legislation would not reduce the safety of employees or pose a hazard to their health.

Series published earlier

Series published in 2010:

8/2010 Migration Potential of Working-age Population in Estonia in 2010. – Policy analysis (*available also in English*).

7/2010 Coping of Disabled Adults and Care Load Arising from Disability. – Policy analysis (*available also in English*).

6/2010 Unemployed non-Estonians on the Labour Market of Estonia. – Policy brief.

5/2010 Long-term Unemployed Persons on the Labour Market of Estonia. – Policy brief.

4/2010 Young Unemployed Persons on the Labour Market of Estonia. – Policy brief.

3/2010 Gender Equality and Inequality: Attitudes and Situation in Estonia in 2009. – Policy analysis (*available also in English*).

2/2010 Issues Arising From the Occupational Health and Safety Act to Employers. – Policy analysis.

1/2010 Gender Equality Monitoring 2009. – Research report.

Series published in 2009:

5/2009 Injuries in Estonia. – Policy brief (*available also in English*).

4/2009 Single-parent Families: Problems, Needs and Policy Measures. – Policy analysis (*available also in English*).

3/2009 Employment and Working Life in Estonia 2008–2009. – Trends (*available also in English*).

2/2009 Unconventional Work Arrangements in Estonian Enterprises. – Policy analysis.

1/2009 Burden of Disease of Estonian Population. – Policy brief (*available also in English*).

All the series are available on the web page of the Ministry of Social Affairs www.sm.ee > Väljaanded > Toimetised

Trends is a series of publications of the Ministry of Social Affairs designed to analyse the trends in the fields of social, labour and health policy and thereby promote the development of knowledge-based policies.