2008 Estonian Human Development Report

Translation into English: **© Juta Ristsoo, Eero Pajula and Wiedemanni Tõlkebüroo 2009**

Design: **Mart Nigola**

Illustrations: winning entries of the creative work competition My Estonia held by the Estonian Cooperation Assembly

Front cover: *My Family and My People* by **Hanna Loore Ney**

Publisher: **Eesti Ekspressi Kirjastuse AS**

Copyright: Authors, Estonian Cooperation Assembly, 2009

Printing house: **AS Printon Trükikoda**

ISSN 1406-5401

2008 Estonian Human Development Report

EESTI KOOSTÖÖ KOGU

Tallinn 2009

Table of contents

Dear Reader,

You are holding another illustration of the current state of Estonia, which, this time, provides a reflection of our society in 2008. As in previous years, I call upon you to immerse yourself in the statistics and commentaries that elaborate on the numerical indicators disclosed by the research.

I express my sincerest thanks to those who commissioned and compiled this compendium, and who have found a new, quality of life angle for evaluating Estonia. I believe this provides us with a truer sense of reality than simply looking at Estonia's position in rankings, which measure various aspects of human development.

Generally, an increase in the standard of living gives rise to an improvement in the quality of life. This is confirmed by the considerable progress in well-being made by the Estonian population in 2003–2007. However, life satisfaction in a developed society is not determined only by an increase in material wealth. "Money does not bring happiness" is a familiar adage.

But then, what does? Read this report and find out.

We need this information now: at a time when the economic growth curve has taken a sudden downturn and yesterday's insouciance has been replaced by uncertainty about the future; at a time when Estonia's human development, or in other words, the society's true strength – what we are worth as a country and people – is being tested. Are we a mature society that searches for the best solutions in the course of open dialogue and resolves complicated problems with the analytical ability of adults? Or do we behave like sullen teenagers and withdraw to our separate corners in order to declare the "truth", look for guilty parties, and lament the loss of a brighter yesterday?

I share the position of Professor Marju Lauristin, the report's editor-in-chief, when she says that the quality of life based on spiritual values, deep human relations, healthy lifestyles, happy children and a strong sense of solidarity cannot be achieved with the help of money, but by investing one's time, intellect and will. If we look at Estonia from this standpoint, it seems possible that "the economic crisis may even help to re-establish the balance between tangible and intangible values".

As a citizen and the Head of State, I believe in the Estonian people's wisdom and ability to understand the reasons behind the problems we face and to overcome the difficulties together, thus emerging stronger. This is why I want to emphasize one of the statements in this compendium, which is actually an appeal to all of you whose decisions affect Estonia's ability to cope in complicated times:

"Since money is in short supply during the economic crisis, more attention should be devoted to the non-material aspects of the quality of life, especially the psychological sense of security. It is particularly important to maintain confidence that the state is acting in the public interest and is concerned with people's problems."

Money or economic growth percentages cannot be used to measure attentiveness, trust or thoughtfulness. Yet, these form the greatest capital of any functioning and developing society. The quantity and application of this capital is expressed in the indices for human development and quality of life.

Hoping that you enjoy the read and acquire new knowledge,

Toomas Hendrik Ilves
President of the Republic

Preface

This year, the Estonian Human Development Report focuses on exploring issues related to our quality of life. The topic "quality of life" has become increasingly popular among the world's social scientists and decision makers in recent years. Our understanding of this subject in the changing world is constantly developing. Hence we have attempted to evaluate the Estonian quality of life in the context of the European Union and the world's leading countries.

The economic depression has once again made us consider the direction in which we are headed. It is obvious that our country and society will not evolve without economic development. However, sustainable development requires people who are able to make new decisions in the changing world and mobilize action in order to reach new development goals, as well as a living environment that facilitates such activities. Several international studies devoted to quality of life indicate that the countries that do best in this regard demonstrate an ability to evaluate and diversify risks, and furthermore, have a high level of social dialogue and solidarity.

Hence the Estonian Cooperation Assembly wishes to combine public interest and the studies conducted by researchers from Estonia as well as other countries. Furthermore, it desires to promote the discussion on defining the Estonian quality of life model on the basis of the existing standards of the European Union, which create a comparative environment for evaluating the Estonian quality of life.

Our people's expectations regarding improvement in our standard of living are high, but such improvement can only occur in a strong society. The quality of a society is measured using its level of trust, among other indicators. Thus, Estonia's rise and potential for development must be based on trust in our society and economy. In light of this, it is important for us to understand as well as to constantly measure and evaluate the quality of our society and living environment. Engaging in these practices will enable us to create the necessary preconditions for establishing new long-term development goals in addition to guaranteeing a balanced development in the society and improvement in people's quality of life.

Peep Mühls
Chairman of the Executive Board
Estonian Cooperation Assembly

Foreword

The 2008 Estonian Human Development Report, which is now reaching the readers, has been prepared while the Estonian economy, along with the global economy, is experiencing a sudden downturn. The Estonian government and the entire population are concerned about how to preserve every family's ability to cope and how to guarantee the society's capacity to handle the economic difficulties and make a recovery.

Last year, when the Estonian Cooperation Assembly that publishes the report chose the "quality of life" as the topic for this year's Human Development Report, we were facing cheerful prospects for improvements in Estonian life. However, we feel that the quality of life is still a very important topic in the new situation, when it has become clear that both the government and individual families have less money to spend. It is necessary now to weigh very carefully what is important in life against what can be postponed, and to avoid taking steps that may irrevocably damage our quality of life, deeply scarring the viability of our population.

The data on which the 2008 Human Development Report is based shows us Estonia in retrospect, capturing the moment when the wave of economic growth was cresting and the population's expectations for improvements in their standard of living were optimistic. However, the risks and weaknesses of Estonia's development were already visible a year or two ago. The topics that are familiar from previous reports include the depletion of current resources for economic development, the problems in education, insufficient cohesion of the society and weakness of civil society. Even more critical issues are discussed in this year's overview, especially the problems related to the population's health, the social problems that threaten the viability of the society, the spread of consumerist attitudes, as well as social and ethnic tensions. While addressing these common concerns, however, the authors also provide the readers with a picture of a society that has developed rapidly and, during the last few years, has almost caught up with "Western standards of living" in terms of well-being, the availability of information, lifestyles, and the level of satisfaction with life – something that seemed very distant and even unachievable ten or twenty years ago. The Human Development Report proves that the Estonian society entering this period of global crisis is neither poor nor helpless. Instead, we have managed to accumulate a relatively healthy reserve of strength. Increased well-being provides the basis for moving toward a broader understanding of a good life. Money alone cannot achieve a quality of life that is based on spiritual values, deep human relations, healthy lifestyles, happy children and a strong commonality; one must invest one's time, intellect, emotions and will.

The discussions in all six chapters converge around the quality of life as a central concept. The first chapter provides a traditional treatment of Estonia's position in the global context, based on the rankings of the annual Human Development Index; alongside which a closer examination is made of two components that comprise this index – the material indicators of well-being, as well as the level and quality of education. The second chapter is dedicated to the population's health problems. The third chapter deals with people's satisfaction with life, focusing on the quality of life for children and the elderly. The fourth discusses the situation of ethnic minorities in Estonia against the background of other European countries, specifically analyzing the situation of minorities in the labour market and their participation in political life. The fifth chapter enables us to cast a glance at an entirely new set of problems related to quality of life that have appeared along with Estonia's development into an information and consumer society. Here too, the focus is on children and young people. The final sections of the Human Development Report are dedicated to the correlations between well-being and economic development – the sixth chapter highlights the relationship between economic development and social policies. The final summary concludes with exploring the most topical issues – how the economic crisis will impact the quality of life and what priorities should be considered when making difficult choices.

Its treatment of social problems with academic objectivity and reliance on numbers and international comparisons has made the Human Development Report an indispensable handbook for ordinary citizens as well as journalists and politicians who are interested in the society. It is noteworthy that the Human Development Report 2007 led to a lively discussion at a special session of the Riigikogu. Hopefully, the 2008 Estonian Human Development will also provide a great deal of food for thought and discussion. It is not impossible that the economic crisis may even help to re-establish the balance between tangible and intangible values. This is also one of the goals of this year's Human Development Report.

Marju Lauristin
Editor-in-chief, HDR 2008

CHAPTER 1

Estonian Human Development Index and its components

1.1. Global Human Development Index

The measurement of human development and the paradoxes related thereto

Today's rational person is characterized by a desire to quantitatively measure all kinds of phenomena with the goal of assessing and comparing them, and also managing and directing them to change in the desired direction. For this, however, one must be sure about the direction one wants to move in. When measuring the development of society, it is necessary to understand what determines the developmental level a society or country has achieved. How important are wealth and the abundance of opportunities? In determining a country's developmental level, what role is played by the population's perception of the surrounding world – against the background of a scientific or religious worldview? Is the sustainability of the population and culture a precondition for a high developmental level in a country/society, or is it a consequence? To what extent, are the developmental level of a society and the quality of life and happiness of its people related? Is there reason to believe that the highest possible quality of life of its societal members is the objective we should to aspire to?

With regards to countries, it has been the custom for a long time to speak about their developmental level, but the quantitative scale for measuring developmental levels is a relatively new phenomenon. Since 1990, the UN has issued an annual Human Development Report. It has also included a Human Development Index (HDI) calculated for each UN member state and a country ranking based on the index. According to this concept, the Human Development Index should measure the opportunities available to the population of each country, based on the assumption that an abundance of opportunities is related to a higher quality of life for the people living in that country.

Every numerical composite indicator is associated with a statistical paradox: the occurrence of development should be demonstrated by an increase in the average level, while, in the case of many indicators, a higher average often results in greater inequality, indicating the disparity of the society's development. Since this disparity results from the processes actually taking place and the particularities of individual phenomena and various speeds of development, the reduction of the inequality of various indicators requires the implementation of additional resources. Therefore the higher a country's average developmental indicator, the more resources are required to reduce the inequality. Thus it follows that the guarantee of an abundance of opportunities is one of the primary assignments of the state for the support of positively progressing developmental processes.

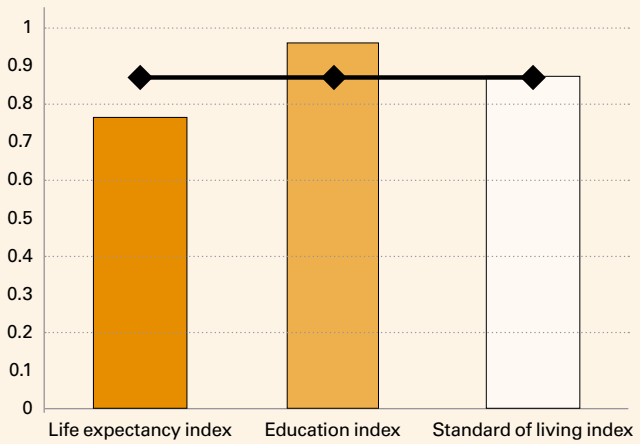
The calculation of the Human Development Index is based on three relatively easy-to-find indicators that characterize the country's social and economic situation. These indicators are:

- Life expectancy at birth, which indicates a population's health and longevity;
- Educational attainment, which is indicated, on the one hand, by adult literacy, and on the other hand, by the enrolment rate of students at various educational levels;
- Standard of living, which is measured by GDP per capita at purchasing power parity in US dollars.

A component (index) is calculated on the basis of each indicator, which is assigned a value between 0 and 1. The higher the value of the corresponding component, the higher the level of the corresponding life sphere in the country is. The HDI is calculated as the average of the three components (Figure 1.1.1.).

Even though one may be somewhat sceptical about the Human Development Index as a whole, because the combination of its components is not substantively well justified, it has still turned out to be useful as a comparative assessment

Figure 1.1.1. The Human Development Index (horizontal line) and its components (Estonia, 2008)



Source: HDR 2008

of countries and as a tool for monitoring the developmental dynamics of individual countries. Using the levels of single dimensions rather than the composite index is especially informative for monitoring the development of a country.

Human Development Report 2007/2008 and Estonia's place in the ranking

Each UN Human Development Report deals with global problems that are important for humankind during the current year. The most recent report (UN Human Development Report 2007/2008) is dedicated to climate change. However, in the current report, we comment only the second part of the HDR 2007/2008, which includes tables with the indicators regarding the human development of UN member states. These indicators focus primarily on the Human Development Index, its components and their dynamics. Technically, the data included in these reports cannot be very fresh since the collection, quality assessment and calculation of the indicators are unavoidably a time-consuming assignment. Therefore the majority of the data in the 2007/2008 report dates from 2005.

However, a new document, the Human Development Indices, was published on 18 December, 2008, which presents concretized and corrected HDI data based on 2006 data. Compared to the former document, Estonia has arisen two places in the human development ranking and has reached 42nd place among 179 countries. Based on the HDI, the countries were categorised into three groups.

- Countries of high human development (total 75);
- Countries of medium human development (total 78),
- Countries of low human development (total 26).

Due to a lack of information, 15 countries were omitted from the ranking.

Based on this division, Estonia definitely belongs to the countries of high human development, being in 42nd place. Twenty-six European countries held higher positions in the last HDI ranking starting with Iceland (1) and Norway (2), incl. the majority of EU countries, except for Lithuania (43), Latvia (44), Bulgaria (56) and Romania (62), which are in the same group but located below Estonia. The countries with higher human development indices than Estonia include countries from all corners of the world except Africa. In America, Canada (3) and the US (15) are well ahead of Estonia; Chile (40) has also surpassed Estonia. Australia (4) is at the top of the ranking, but New Zealand (20) and Brunei Darussalam located on the island of Borneo (27) are also ahead of Estonia. The ranking of Asian countries is led by Japan (8), followed by Hong Kong (22), Israel (24), South Korea (25), Singapore (28) and a series of Arab countries – Kuwait (29), United Arab Emirates (31), Bahrain (32), Qatar (34) and also an Caribbean country – Barbados (37) surpass Estonia. Of the European countries, those with indices lower than Estonia's include Montenegro (64), Serbia (65), Belarus (67), Macedonia (68), Albania (69), Russian Federation (73), as well as Bosnia and Herzegovina (75). Of the African countries, Seychelles (54) and Mauritius (74) belong to this group.

Of European countries, the only ones of medium human development are Ukraine (82), Armenia (83), Georgia (93) and Azerbaijan (97). Of the larger countries, China is in 94th place and India in 132nd place.

There are 26 countries of low human development, 25 of which are located in Africa.

Two-year-old (previously also three-year-old) data is used to calculate the Human Development Index. The basic material for the 2007/2008 report includes data from 2005, and in the updated table that is commented on here, 2006 data was used.

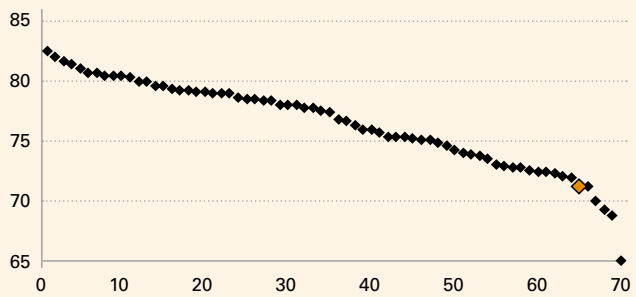
Life expectancy index According to UN data, the average life expectancy at birth in Estonia in 2006 was 71.3 years; as a result of standardization, the index value was calculated at 0.771.

The education index includes two sub-indices. One of these shows the literacy rate of those who are at least 15 years old (with the weight 2/3), which is not measured in the majority of developed countries. In this case, an indicator value of 0.99 is assigned. The second sub-index is the combined net primary, secondary and tertiary enrolment rates -, which is calculated as the ratio of enrolled students to school-aged children and young people. The gross enrolment rate in Estonia according to UN data is 91.2% and the education index value is 0.964. Until 1995, the education index was based on the average number of study years instead of the level of formal education, which was standardized for the purposes of uniformity.

Living standard index. The distribution of incomes by countries is very different. In order to ensure that the various values of GDP (especially the high values) do not have too strong an impact on the Human Development Index, suitable modifications are used when calculating the sub-index that reduces its variability. Initially, only GDP values that are higher than average were modified, but since 2000, the upper threshold is used to cut off the highest GDP values, and thereafter the logarithm for the results is found. According to the UN, Estonia's GDP value in 2006 was 19,155 US dollars per capita, which corresponds to a sub-index value of 0.877, and as an average of the three components, the average Human Development Index value (HDI) is 0.871.

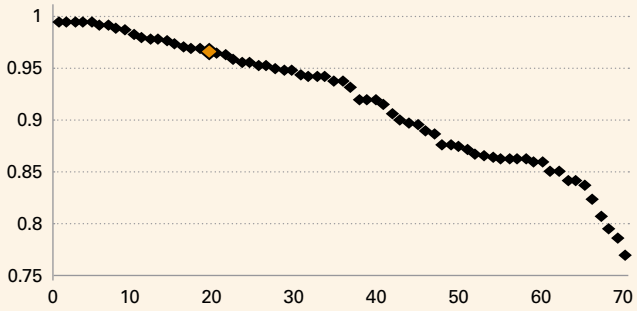
On examining Estonia's ranking by the Human Development Index, we have noticed that Estonia's position in the rankings for the separate components is quite different.

Figure 1.1.2. Life expectancy in countries of high human development. The large diamond denotes Estonia



Source: HDR 2007/2008

Figure 1.1.3. Life expectancy in countries of high human development. The large diamond denotes Estonia



Source: HDR 2007/2008

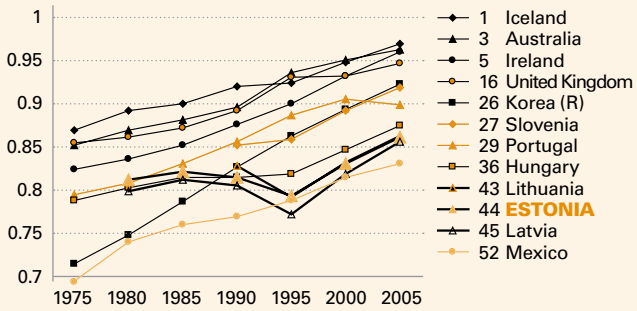
With respect to life expectancy, Estonia is placed more or less in the middle of the ranking of all the countries being examined, but at the bottom of the countries of high HDI. Sixty-five countries with high HDI have better life expectancy indices (2005 data) than Estonia's (Figure 1.1.2.) as well as 24 countries with medium HDI. This means that the life expectancy indicator pushes Estonia downward in the ranking, and by improving this indicator Estonia's ranking could improve most effectively.

On the other hand, Estonia is in a relative good position with respect to the education indicator, being in 19th place (2005) among all the countries (Figure 1.1.3.). Here, there is little room for improvement, because with respect to the weightiest component (adult literacy) Estonia is at the maximum level and the gross enrolment ratio (0.924) is relatively close to the maximum value.

With respect to the living standard index, Estonia is one of the few countries whose ranking corresponds exactly to its HDI ranking.

Global dynamics of the Human Development Index

Figure 1.1.4. Changes in the Human Development Index in a series of countries (number in front of the name indicated the ranking in 2007/2008)



Source: HDR 2007/2008

Although the history of the human development reports only dates back to 1990, the values have also been calculated retroactively and repeatedly been corrected afterwards. As a general trend, the indices generally increase, while decreases in the index values indicate crises or shocks in the country's development. The crisis in the mid-1990s that struck the Baltic countries is an example of this (Figure 1.1.4.). Some developing countries, like the Republic of Korea, are very rapid risers, while the growth tempo of the "old leaders" is more modest.

In the following three sections of this chapter, we will examine the spheres of life related to the three HDI components and their developmental trends in Estonia.

References

1. Human Development Reports, http://hdr.undp.org/en/humandev/
2. Human Development Indices, http://hdr.undp.org/en/media/HDI_2008_EN _Tables.pdf
3. Human Development Report 2007/2008, http://hdr.undp.org/en/media/ HDR_20072008 _EN_Complete.pdf

1.2. Estonia's demographic development and its sustainability

Fertility and mortality trends

In the case of Estonia, as a nation of one million, demographic development is of existential importance. In larger nations, the problems related to population development tend to be social in nature, related to the ratio between the working and dependent population (which is important in Estonia as well). In Estonia, however, the ratio between births and deaths is the most important indicator of developmental sustainability. In the case of migration, the top priority for Estonia is not just the integration of immigrants, but whether that the Estonian-

speaking people will remain the majority ethnic group in Estonia.

Demographic shock

Demographic development is expressed by some important statistical indicators – these include natural population growth, i.e. the difference between births and deaths, the birth rate indicators related thereto, the life expectancy, as well as the net migration, i.e. the difference between immigration and emigration.

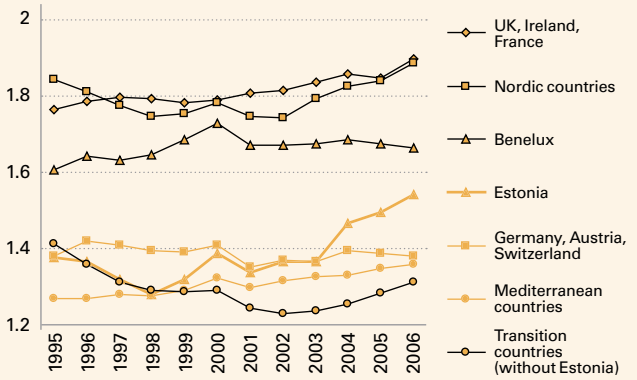
A sudden demographic shock occurred in all the Central and East European transition countries during the 1990s, which resulted in an abrupt decline in marriages and birth rates, while death rates increased and the life expectancy decreased. This was definitely caused by great changes in the society. On the one hand, this was caused by the inability to cope with the organization of life in a changed society, while on the other hand, it resulted from the expansion of opportunities related to the opening of society, especially the change in the social position of women, which had taken place much earlier in the democratic countries of Europe, and the revaluation of the values related to marriage and the family.

In Estonia, the demographic shock in the middle of the 1990s was very intense: marriages decreased more than twofold, from 1990–1994, the decline in the birth rate averaged 10% annually, and in 1994, the life expectancy dropped to the lowest level in the past 35 years. As a result of negative natural growth, the population decreased by almost 0.5% annually in the second half of the 1990s. Net migration was also characterized by a strong negative trend. As a result, the population decreased by more than 12% between the 1989 and 2000 censuses.

Despite the very rapid changes at the beginning of the 1990s, it turned out that the demographic shock in Estonia started to recede notably faster than in the majority of other transition countries. To a certain extent changes in family-related attitudes had started to take place in Estonia already a few decades earlier: cohabitation was quite popular at least prior to legal marriage, and society accepted both children born outside of wedlock and to single parents.

The lowest point of the shock was reached in 1994, and from then on, the life expectancy has consistently increased. The total fertility rate (which indicates the average number of children per woman) started to increase again (with small setbacks) as of 1999.

Figure 1.2.1. Total fertility rates in groups of European countries and Estonia



Source: Eurostat

Fertility

The increase in the total fertility rate has notably accelerated as of 2004 (Figure 1.2.1.). There are apparently several reasons for this: the improved economic situation and families' feeling of security regarding the future based thereon, and births postponed from previous years. One can also not underestimate family policy measures, especially parental benefits. It became clear that it was after the implementation of parental benefits a change occurred in the childbearing strategies of households. As of 2004, the probability of making a decision in favour of childbirth exceeded the probability of having an abortion; furthermore, there was a noticeable increase in the number of working women and those with higher educational levels that gave birth (while the rest remained the same). Although there were similar changes in the entire population, these changes among those giving birth significantly exceeded the changes in the general population. Based on various assessments, parental benefits have increased the fertility rate by 5–10%. To date the impact has been permanent and cumulative by years. However, the total fertility rate in Estonia (which is quite good in the European context) is not sufficient for the sustainable development of the population.

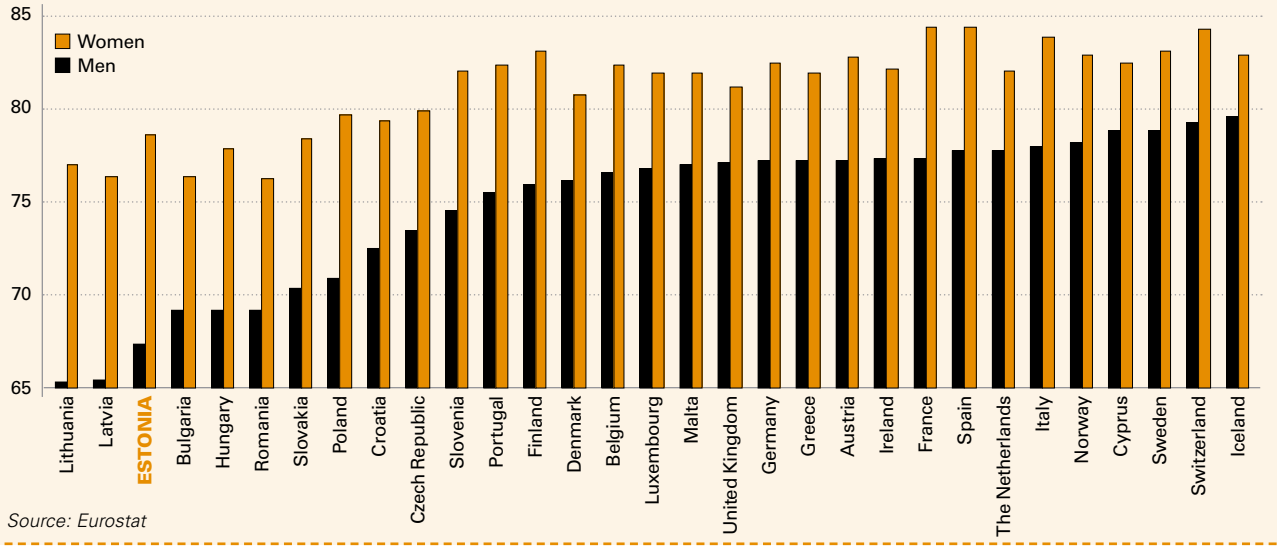
What is life expectancy at birth and what affects it?

To calculate the life expectancy index, the average life expectancy at birth for the country's population is used, based on data for the reference year. This indicator characterizes the death rate for the reference year. Figuratively, one could say that a child born in the reference year would live this long on average if the death rate remained exactly the same as it was in the reference year throughout his or her subsequent life span. Of course, this is not actually true, and one can be sure that children born in the reference year are likely to live significantly longer.

Compared to other mortality indicators, one must note that life expectancy is significantly affected by the deaths of relatively younger people in the reference year. As a rough estimate, one could say that the death of one 20-year-old man during the reference year reduces life expectancy more than the death of more than five 60-year-old men. Although in Estonia the infant mortality rate is quite low, approaching the European average, this is not sufficient to improve the life expectancy at birth.

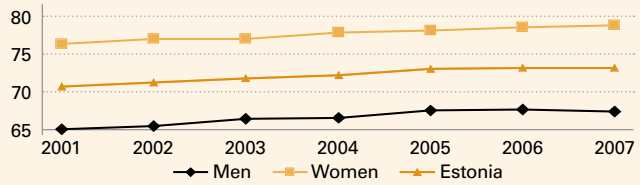
According to this indicator, Estonia continues to be among the last in the European Union; on average, only

Figure 1.2.2. Life expectancy at birth of men and women



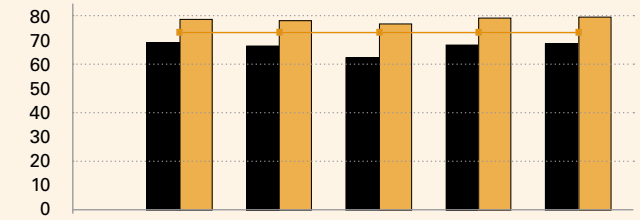
Source: Eurostat

Figure 1.2.3. Life expectancy of men, women and the entire population at birth



Source: SE

Figure 1.2.4. Life expectancy in Estonian regions



	Northern Estonia	Central Estonia	Northeastern Estonia	Western Estonia	Southern Estonia
Men	68.75	67.06	62.21	67.55	68.06
Women	78.22	77.48	76.04	78.77	79.21
Estonia	72.82	72.82	72.82	72.82	72.82

Source: SE

men in Latvia and Lithuania die earlier than in Estonia (Figure 1.2.2.). In 2004, the life expectancy at birth in the 27 European Union member states was 75.2 years for men and 81.5 for women, while in Estonia it was 66.3 years for men and 77.8 for women in the same year. The reasons for Estonia's low average life expectancy are covered in chapter 2 of this Human Development Report.

The situation is only slightly better among women. In the European Union, in addition to Latvia and Lithuania, the life expectancy of women is shorter than in Estonia only in Bulgaria, Romania, Slovakia and Hungary. The life expectancy of Estonian women has increased by three months per year over several years, while among men, the growth has been limited to one month per year; there have also been setbacks. The difference between the life expectancy at birth of Estonian men and women (almost 11 years) is among the largest in the world. The difference has also not decreased during the last few years (Figure 1.2.3.).

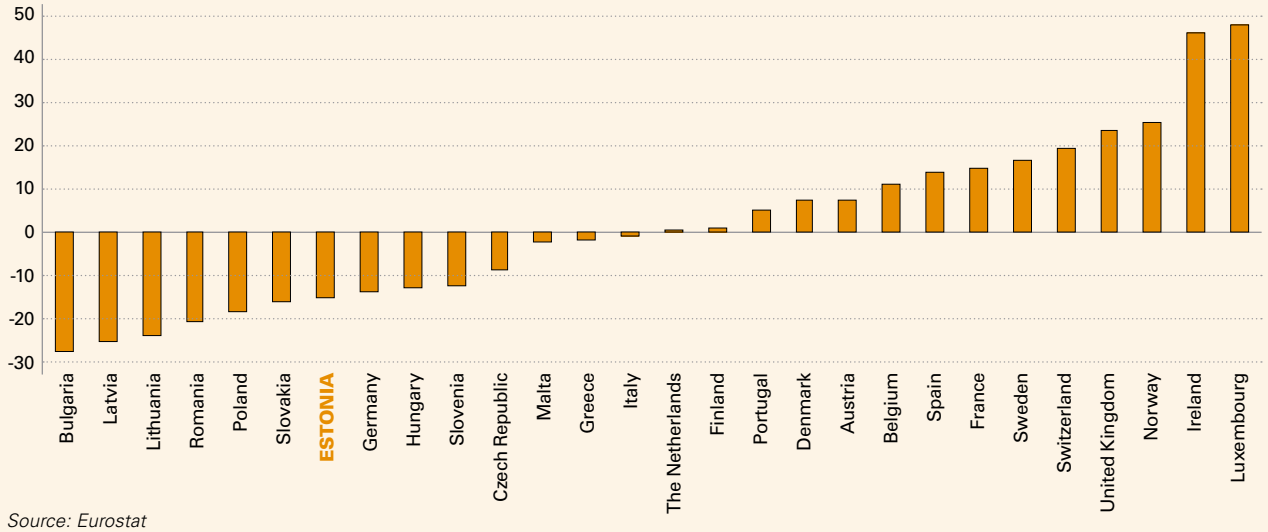
Great differences in life expectancy are related to ethnicity. The average life span of Estonian men is longer and has increased faster than that of men of other ethnicities (Russian-speaking). This also appears as a regional difference, see Figure 1.2.4., where, in Northeast-Estonia with a predominantly Russian-speaking population (79% of men and 81% of women have non-Estonian ethnicity), the life expectancy for men is 5–6 years shorter than elsewhere in Estonia and 2 years shorter for women. The differences caused by education and income are also considerable, but all these reasons have less effect on mortality than do the differences based on gender and ethnicity.

Glimpse of the future. Changes in population

Currently, no European country has a total fertility rate that would achieve a recovery level, the value of which is about 2.1. However, in most countries natural population growth is still positive, one of the reasons being the constant extension of life expectancy. Another effect in most European countries is that population structures have developed historically, where older generations (with the most deaths) are smaller on average than younger generations thanks to earlier demographic development. Therefore there are fewer deaths than births, even when fertility is relatively low. This is the situation in Spain, for instance.

From Figure 1.2.5. we can conclude that the Central and East European transition countries can expect the greatest population decreases during the next half century. The first reason is the low fertility during the last

Figure 1.2.5. Predictable population change 2010—2060 (%)

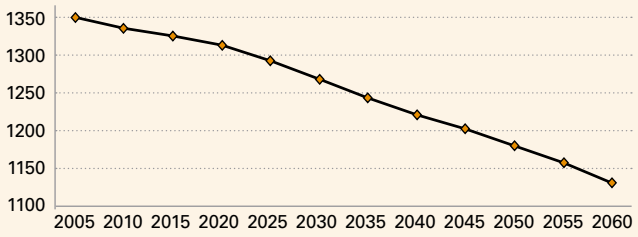


Source: Eurostat

ten-fifteen years. In addition, most of these countries have lower than average life expectancy, which, in other words, means relatively higher mortality. Thirdly, the demographic development of many of these countries has not occurred normally in the past; there have been forced migrations; the post-war baby boom did not occur, etc. All these factors are also significant in Estonia. However, the greatest risk compared to other countries is Estonia's small population.

Compared to some projections made by various international organizations in previous years, the projection shown in Figure 1.2.6. is relatively optimistic. Natural population growth in Estonia will probably soon approach zero, although the number of births will inevitably start to decrease again when the small generations that were born in 1994–2004 reach childbearing age.

Figure 1.2.6. Estonian population projection



Source: Eurostat

Despite the gloom of this projection, one must remember that the Estonian population was no larger at the time the Estonian state was created.

External and internal migration in Estonia

Changes in the distribution and composition of regional population play a great role in migration in today's mobile world. Migration affects the domestic distribution of population as well as the decrease or increase of the population in the country as a whole. Births and deaths often have less impact on the total population and its structure than migration. However, migration may affect the fertility and mortality indicators, since it is young people and people old enough to have families who are most likely to relocate, and their arrival or departure from a region significantly affects other population processes. For Estonia, the current negative emigration balance is worrying; it is important to know where and how may Estonian residents have emigrated and how many will return to Estonia. Internal migration has been dominated by a trend to relocate to Tallinn and its environs, although the environs of other larger centres have also expanded. Regions far from population centres have emptied of population.

Definitions, data and method

Migration is a change in residence that crosses the boundaries of settlement units. International migration is defined as a change in an individual's country of residence. A country of residence is a country where a person has lived for most of the last year or where a person plans to live for at least one year (United Nations 1998: 9). In the case of internal migration, the migration event is a change in residence that crosses the boundaries of towns, rural municipalities or urban settlements within a rural municipality. In order to describe migration, net migration (i.e. the difference between those arriving in and departing from the space unit being examined in 2004–2007), net migration coefficients (i.e. the ratio of the net migration to the average population in the unit during the period in thousands) and migration intensity (number of those changing residence per thousand persons living in the area being examined) are used.

The data being used originates from Statistics Estonia, and its sources are the Population Register and the Citizenship and Migration Board (Tammur et al 2009), which are currently the only possible, but unfortunately not entirely reliable, information sources regarding migration. Studies show that almost one fifth of the residences listed for individuals in the Population Register do not correspond

to reality. The greatest inaccuracy exists among younger people (20–34), and more people live in the environs of the larger cities than is reflected in the register (Tammur et al 2006, Tammur et al 2009). Comparing various information sources, one can say that Estonia foreign migration, especially emigration is underestimated, although the difference between the statistics of Estonia and foreign countries has been decreasing in recent years. The noticeable increase in the number of immigration entries indicates the development of residential registration rather than increased immigration. The registration of emigration has developed more uniformly. Under-registration probably occurred more often in 2000–2004. Here we should consider that emigration cannot be registered for foreigners whose immigration was not registered (Tammur et al 2009).

External migration

Reasons for emigration and its history

After the World War II, massive international migration started from economically less-developed countries to more successful countries, and this trend continues today. In time, only the reasons for migration have changed. During this period, Estonia has changed from a country of destination for migration to a country of dispatch. Before the Second World War, Estonia was one of the ethnically most homogenous regions in Europe (in 1934 Estonians comprised 88% of the population) and immediately after the war, the ratio of Estonians in the population was even 97% (Tiit 1993: 1678). Then, as a result of the annexation period in 1945–1989, the relative importance of the Estonian indigenous population was reduced to 62%. The annual net migration throughout the entire 40 years was 5,000–10,000 people, which is 0.3–0.8% of the population (Tiit 1993).

As a result of the political and economic changes that took place at the end of the 1980s and beginning of the 1990s, migration in Estonia (like most other transition countries) changed direction, and as of 1990, the net migration became negative. In 1989–1994, approximately 80,000 people (i.e. about 5% of the population) left Estonia. Immigrants that had arrived during previous periods from other regions of the Soviet Union, especially recent immigrants, also Russian military personnel and their families as well as Jews, Germans and Finns that repatriated for economic reasons left Estonia. As a result of the emigration, the share of Estonians in their homeland increased to almost 68% in 2000.

In the second half of the 1990s and the beginning of the 2000s, the reason for emigration changed – returning to ethnic homelands started to decrease, while going to work (and also study) in countries with higher developmental levels for economic reasons increased. As before, the majority of emigrants were Russian, although the ratio of Estonians among the emigrants continually increased. The net migration was negative with regards to all important countries of destination. Besides Russia, the second important country of destination for migration was Finland, the importance of which continually increased, and as of 2001, Finland became the primary country of destination for emigration from Estonia. Finland did not become a country that received immigrants until the 1990s (Forsander 2003), which is apparently related to the opening of borders in former socialist countries. Currently, immigrants with Estonian citizenship are the main immigrant group in Finland (Herm 2008). Other countries in Europe and countries further away have been important emigration destinations for Estonia in different years.

Table 1.2.1. Primary emigration destination countries by years

	Emigration year				Total
	2004	2005	2006	2007	
Finland	1960	3513	4451	3163	13 087
Russia	350	353	276	221	1200
Germany	136	148	145	206	635
United Kingdom	45	87	125	164	421
Sweden	70	59	78	108	315
USA	61	60	81	57	259
Ukraine	46	82	38	32	198
Other countries	259	308	333	433	1333
Total	2927	4610	5527	4384	17 448

Source: Statistics Estonia

Emigration 2004–2007

According to Statistics Estonia data, over 17,000 people left Estonia for other countries during the four years being examined, which is more than 1% of the total population. The main country of destination for Estonian emigration is Finland, to which over 13,000 people emigrated within four years. Finland was followed in importance by Russia and Germany (Table 1.2.1.). Since data exchange has occurred between the Estonian and Finnish population registers, which is unfortunately lacking with other countries, the Finnish migration data is notably more reliable than that of other countries. Finland is the primary destination for Estonian emigrants. This fact is not changed by presumed underestimates of the migrants to other countries.

Along with other European countries, the CIS countries, which receive very diverse migration flows, are important countries of destination for Estonian emigration. While emigration from Estonia has generally increased, migration to the CIS countries has decreased almost threefold in 2000–2007. Although only 16% of all Estonian migrants to foreign countries went to CIS countries (primarily, Russia, Ukraine and Belarus), the age and ethnic composition of these emigrants were quite specific. Many relatively older, over-60-year-old people left, whereas 91% of those departing were Russians, Ukrainians and Belarusians (Anniste 2009).

The gender of the emigrants from Estonia in 2004–2007 corresponds to the gender distribution of the Estonian population: men comprised 46% and women 54%. The age distribution of the migrating population was usually significantly younger than the settled population. The average age of those who relocated from Estonia to another country was 35 years and the median age was 33, which reflects the greater migration of younger working-aged people. Older working-age people and pensioners migrate less frequently and the number of immigrants over the age of 60 drops sharply. Connecting the emigration from new member states primarily with work migration and taking into account the greater unemploy-

ment among young people, many researchers have forecast a greater probability for younger working-aged people to look for work abroad (Krieger 2004). This is also confirmed by Estonia's emigration statistics, in which the ratio of 20–30-year-olds is large. According to citizenship, Estonian citizens account for the main group of emigrants – they total 87%. The relative importance of Russian citizens in the four years under examination was 6% and this has decreased uniformly by years. The ratio of those with other citizenships was less than 2%.

Immigration 2004–2007

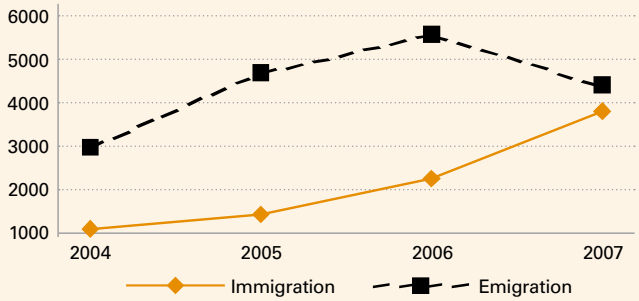
In 2004–2007, 8,508 people immigrated to Estonia, which comprises 0.6% of the total population. The greatest country of dispatch is Finland (31% of immigrants) and Russia (21% of immigrants), and a calculable number of people arrived from Ukraine, Germany, Latvia and Sweden. Year-on-year, immigration from the majority of countries is increasing, which apparently indicates a growth of return migration. This is also indicated by the fact that 39% of the immigrants are Estonian citizens. Russian and Finnish citizens comprise 15% and 12% of all immigrants respectively. Year-on-year, the ratio of immigrants that are Estonian citizens has increased and the ratio of Russian citizens has decreased by half. Numerically, the volume of immigration has increased. Half the immigrants settle in Harju County. The other important destinations include Tartu County and Ida-Viru County (14% and 12% respectively).

Men comprise 55% of all immigrants. Therefore, while women predominate in Estonian emigration, men predominate in immigration (return migration). This fact points to the possibility that women that leave Estonia are more likely to remain abroad or to stay there for a longer period. The average age of immigrants is 34 years (median age is 32), whereas 20–29-year-olds predominate among the women. The age distribution of immigrating men is more uniform, although there are also more young, primarily 20–39-year-old people among them.

Estonia's migration trends have changed somewhat since 2004, when Estonia joined the European Union. The net migration continued to be negative in 2004–2007 for a total of -8,940, which makes an average migration loss of 2,235 people per year. Therefore Estonia's population declines by 0.2% per year due to a negative emigration balance. While immigration has demonstrated a steady growth trend, emigration has decreased slightly in 2007 (Figure 1.2.7.). The high point of emigration to date was in 2006, when a record number of 5,000 people left Estonia for other countries.

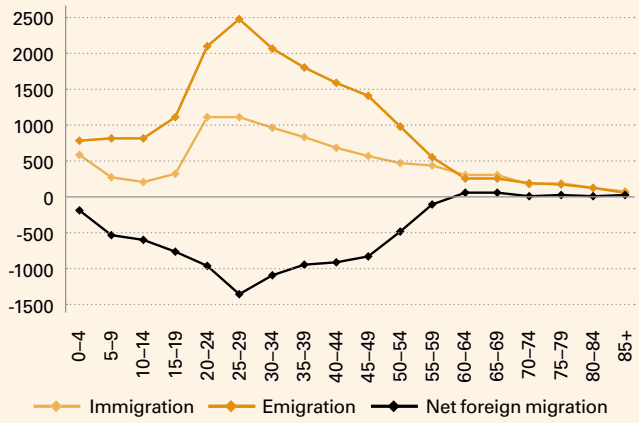
However, by country, Estonia's net migration is no longer negative with all other countries. For the countries of the former Soviet Union, Estonia has become a country of destination. The greatest immigration is from Russia, Ukraine and Latvia. Each year, Estonia loses the largest number of people to Finland and other old European Union member states, such as the United Kingdom, Ireland, and Germany. Domestically, all the counties in Estonia lose population due to emigration, with Harju and Ida-Viru counties losing the most (Anniste 2009). In 2007, when immigration suddenly increased, the larger counties, such as Tartu, Harju and Ida-Viru, all had positive net foreign migration and Lääne-Viru and Pärnu counties lost the most population. The age distribution of the immigrating and emigrating populations is quite similar

Figure 1.2.7. Estonian foreign migration 2004–2007



Source: SE

Figure 1.2.8. Age distribution of the migrating population, 2004–2007



Source: SE

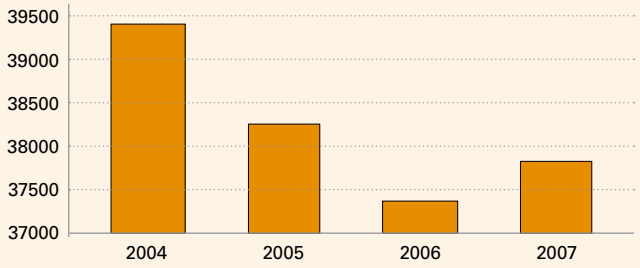
(Figure 1.2.8.). Therefore foreign migration has changed significantly compared to the 1990s. In 2004–2007 the majority of both immigrants and emigrants were Estonians, who go to work in European countries that are economically better developed. A fair number of them return to Estonia.

Internal migration

Reasons for internal migration and its history

Estonia's urbanization, and internal migration more generally, continues to be affected by the Soviet period, when the distribution of the population was organized according the regulations of the planned economy. In Soviet Estonia, the migration from the country to the city was modest, the convergence of the population in the larger cities and their environs was caused to a great extent by foreign migration (between the Soviet Republics) (Katus et al 1999, Tammaru 2002). At the beginning of the Soviet period, the migration was primarily from the country to the cities and on to Tallinn, although in the second half of the 1970s, more people started to relocate from the capital to the rural areas of Harju County (Marksoo 1990). As of 1983, the net migration of the rural population became positive throughout Estonia. It was primarily the rural areas around the larger cities that gained population – this at the cost of the urban population and rural population from outlying areas (Marksoo 1992).

Figure 1.2.9. Internal migration events per year



Source: SE

Table 1.2.2. Distribution of immigrants by age groups (2004–2007)

	15–29	30–49	50+
2004	37%	25%	14%
2005	31%	28%	17%
2006	31%	28%	15%
2007	31%	28%	14%

Source: SE

Table 1.2.3. City-country migration directions 2004–2007

	To cities	To the country	Total
From cities	27%	33%	60%
From the country	25%	15%	40%
Total	52%	48%	100%

Source: SE

After 1991, the natural migration process started to recur. Urbanization occurred that followed a hierarchy of settlements, i.e. population converged from the country and the small cities to Tallinn and regional centres (in Estonia, the regional centres are the cities of Tartu, Pärnu, Jõhvi and Kohtla-Järve). In the internal movement in all the counties, suburbanization took place, i.e. relocation from the centres to the environs. The main destination for all Estonian migration in the 1990s was Tallinn and its suburbs (Tammaru et al 2003). Since 2000, suburbanization has intensified significantly (Leetmaa 2004). The most active migrants are young people (15–29-year-olds) and their migration clearly converges in the larger cities and their environs (Jõeveer 2003, Kulu 2005).

Internal migration 2004–2007

During the four year period, 162,822 migration events that crossed the borders of settlement units occurred in internal migration. There was an average of 38,000 migration events per year (Figure 1.2.9.), i.e. the migration intensity was 114‰, or during four years eleven out of one hundred people in Estonia relocated to another settlement unit. In 1989–2000, only 17% of the population changed residences by crossing the borders of settlement units (Tammaru et al 2003). Thus one can say that the migration intensity was notably lower.

The migration intensity of the various ethnic groups has differed. The majority of those who changed their residence were Estonian citizens (93%). The migration intensity of persons with undetermined or Russian citizenship was much smaller. The intensity of residence changes decreases as age increases (Table 1.2.2.).

In the city-country migration direction, the movement from the city to the country attracts attention (Table 1.2.3.). During the reference period, this has resulted in the number of people living in rural municipalities increasing by 10,500 and the number of city residents decreasing by the same number. Overall, the population in 125 rural municipalities and 39 urban settlements has decreased, while it has increased in 62 rural municipalities and 17 cities. The primary migration destinations are the rural municipalities near Tallinn, where people from all over Estonia relocate, and the net migration coefficient there, and in the environs of Pärnu and Tartu, is also higher. In other places, people also relocate from cities to suburbs. Rural municipalities that are located further from cities and lie on the outskirts of counties have negative net migration as people either relocate to large cities or to rural municipalities that are near cities. The City of Paide and the remote rural municipalities of Pärnu County have the lowest net migration coefficients.

The population of almost half the cities that are county centres has increased, and this is caused by greater emigration from remote areas. This process is occurring in Järva, Lääne-Viru and Valga Counties. Harju, Ida-Viru and Tartu counties stand out because in these counties the outskirts also benefit from population movement. Therefore we can assume that the suburbs of these centres are expanding (Tammur 2009). In the migration between counties, the greatest movement is to Harju County (39%), which is followed by Tartu County (15%) and Pärnu County (7%). Large cities like Kohtla-Järve, Tartu, Tallinn and Narva have lost the most people due to negative net migration. The majority of settlement units with negative net migration are county seats and small towns and rural municipalities located on the outskirts of the counties. Tallinn's net migration has become negative during the period being examined. Positive net migration is experienced primarily by rural municipalities and satellite cities located in the suburbs of the centre. Due to active immigration, populations increased the most in the rural municipalities in the suburbs of Tallinn: Viimsi, Harku and Rae Rural Municipalities.

The migration direction of various age groups differs. Young people aged 15–29 leave the outskirts of counties and their primary destination is Tallinn and its suburbs. People between the ages of 30 and 49 who are likely to have families leave the larger cities and relocate primarily to the suburbs of Tallinn or the regional centres. Older people relocate to areas outside all the larger cities – along with the vicinity of Tallinn, their preferred residential areas also include the outskirts of the counties (Tammur 2009).

As far as the internal migration of Russian citizens is concerned, there are similarities as well as differences with the general trends. Similar to Estonian citizens, they relocate to larger cities and their suburbs, with many going to Tallinn. Unlike Estonian citizens, people with Russian and undetermined citizenship also have positive net migration in the outskirts of rural municipalities. People with undetermined and other citizenship have a negative net migration in Tallinn.

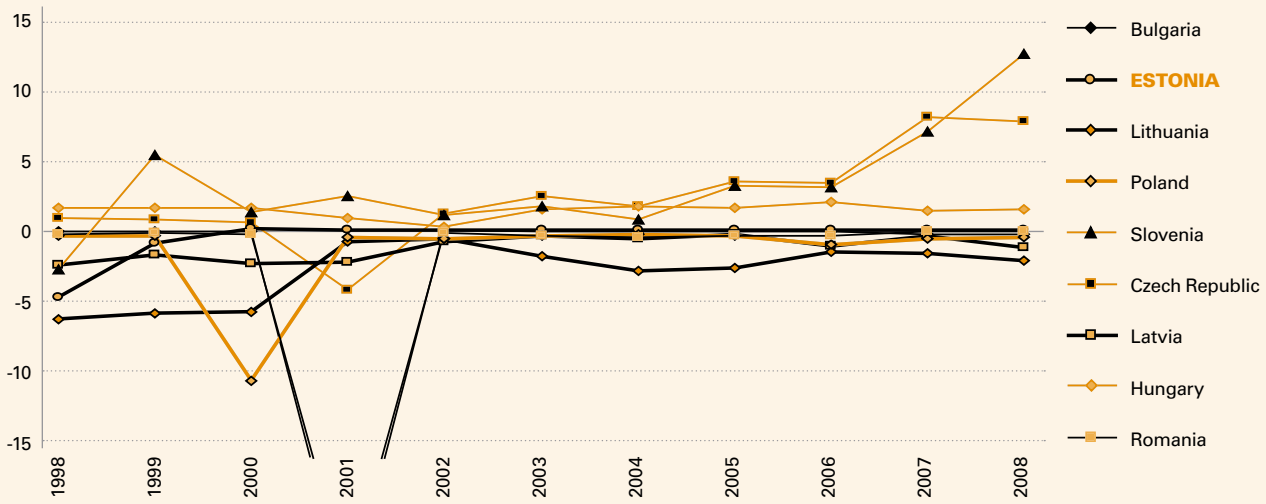
Estonian foreign and internal migration in the European context

According to data from the European statistical centre Eurostat, the net migration of the European Union (along with Iceland, Norway and Switzerland) is positive; in 1998–2008, almost 1.5 million new residents have moved into this region. Intra-European migration has been fairly variable from year to year, although here too one encounters difficulties securing correct information: typically emigration data is greatly underreported, because peoples' departures from a country are not checked, while immigration data is more precise in connection with the formalization of residence and work permits. Inevitably, only official migration data (PR for us) is used in international comparisons, and therefore in Estonia's case, the Eurostat data differs somewhat from the more precise Statistics Estonia data.

Spain and Ireland have been the countries with the largest immigration, where the average net foreign migration per year is over one percent; the same applies to Luxembourg and Cyprus. There has also been large immigration into Italy. At the end of the 1990s, the net migration was negative (e.g. in Bulgaria and Romania even 2.5% in 2001) in the majority of transition countries (except for Hungary), but migration balances have been restored in recent years (at least based on official data) (Figure 1.2.10.). Slovenia and the Czech Republic are notable for their positive development; based on Eurostat data, Estonia's foreign migration is almost balanced, while the net foreign migration of Lithuania, Poland and Latvia continue to be negative.

It will probably not be possible to obtain reliable information about Estonian migration, as well as an evaluation of the entire Estonian population, until the next census is conducted in 2011. However, in order to achieve this, the census must definitely be conducted in the traditional manner, because the register data is too inexact for a register-based census. Furthermore, putting it in order is impossible without a census.

Figure 1.2.10. The foreign migration balance of European transition countries 1998–2008



Source: Eurostat

References

1. Anniste, K. (2009) "Eesti välisränne aastatel 2000–2007". Ränne. Migration. 2000–2007. Eds. T. Tammaru, A. Tammur. Tallinn: Statistics Estonia p.50
2. Bauer, K.T., Zimmermann, K.F. (1999) "Assessment of Possible Migration Pressure and Its Labour Market Impact Following EU Enlargement to Central and Eastern Europe". IZA Research Report, nr 3, Bonn.
3. Forsander, A. (2003) "Inside or Outside Within? Immigrants in the Finnish Labor Market" Yearbook of Population Research in Finland XXXIX, 55–72.
4. Herm, A. "Recent Migration Trends: Citizens of EU-27 Member States Become Ever More Mobile while EU Remains Attractive to Non-EU citizens. Population and Social Conditions". Statistics in Focus 98/2008. Eurostat.
5. Jõeveer, J. 2003. "Siserände vanuserisused". Ränne üleminekuaja Eestis (eds. T. Tammaru ja H. Kulu). Statistics Estonia, pp. 28–47.
6. Katus, K., Kupiszewski, M., Rees, P., Sakkeus, L., Herm, A. and Powell, D. 1999. "Internal Migration and Population Dynamics in Estonia". EKDK Rahvastiku-uuringud, seeria B:3.
7. Kulu, H. 2005. "Siseränne üleminekuajal: mitmetasandiline analüüs". Asustus ja ränne Eestis: Uurimusi Ann Marksoo 75. sünnipäevaks. University of Tartu Publishers, pp 150–169.
8. Kofman, E. (1999) "Female 'Birds of Passage' a Decade Later: Gender and Immigration in the European Union", International Migration Review, 33(2): pp. 269–299.
9. Krieger, H. (2004) "Migration Trends in an Enlarged Europe". European Foundation for the Improvement of Living and Working Conditions, p. 106.
10. Leetmaa, K. 2004. "Eeslinnastumine Tallinna linnaregioonis sotsialismijärgsel perioodil". Master's thesis. Library of the Geography Institute.
11. Marksoo, A. 1990. "Tallinn Eesti rahvarände süsteemis". Eesti Geograafia Seltsi Aastaraamat, pp. 53–66.

12. Marksoo, A. 1992. "Dynamics of Rural Population in Estonia in 1980s". Estonia: Man and Nature (Ed. J.-M. Punning). Tallinn: Valgus, pp 129–153.

13. "Rahvastik 2005–2006", Eesti Statistika, Tallinn 2007.

14. Tammaru, T. 2002. "Universal and Specific Features of Urbanization in Estonia under Socialism: The Empirical Evidence of the Sources of Urban and Rural Population Growth. The Professional Geographer 54:4, pp 544–556.

15. Tammaru, T., Kulu, H. ja Kask, I. 2003. "Siserände üldsuunad". Ränne üleminekuaja Eestis (toim T. Tammaru ja H. Kulu). Statistics Estonia, pp. 5–27.

16. Tammur, A. 2003. "Siserände rahvuserisused üleminekuaja Eestis". Ränne üleminekuaja Eestis (eds. H. Kulu ja T. Tammaru). Tallinn: Statistics Estonia, pp. 66–82.

17. Tammur, A., Tammaru, T. ja Tiit, E.-M. (2006) "Rändeandmete kvaliteet ja rändesuundumused Eestis aastatel 2000–2005". Linnad ja vallad arvudes. Statistics Estonia, pp.8–28.

18. Tammur, A., Herm, A., Pungas, E., Rannala, H. ja Valgma, Ü. (2009) "Rändeandmete metoodika ja kvaliteet". Ränne. Migration. 2000–2007. Eds. T. Tammaru, A. Tammur. Tallinn: Statistics Estonia, p.5

19. Tammur, A., (2009) "Siserände suundumused". Ränne. Migration. 2000–2007. Eds. T. Tammaru, A. Tammur. Tallinn: Statistics Estonia, p35.

20. Tiit, E. (1993) "Eesti rahvastik ja selle probleemid". Akadeemia 8–10.

21. E:-M. Tiit 2006 Suremus Eestis ja selle sõltuvus soost

22. United Nations, (1998) "Recommendations on Statistics of International Migration". Revision 1. Series M, No. 58, New York.

23. http://www.undp.org/publications/annualreport2008/

24. Statistics Estonia website: http://pub.stat.ee/px-web.2001/Database/Rahvastik/databasetree.asp

25. Eurostat: http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1090,30070682,1090_33076576&_dad=portal & schema=PORTAL

1.3. Trends of educational development in Estonia

The HDI education index and gross enrolment ratio

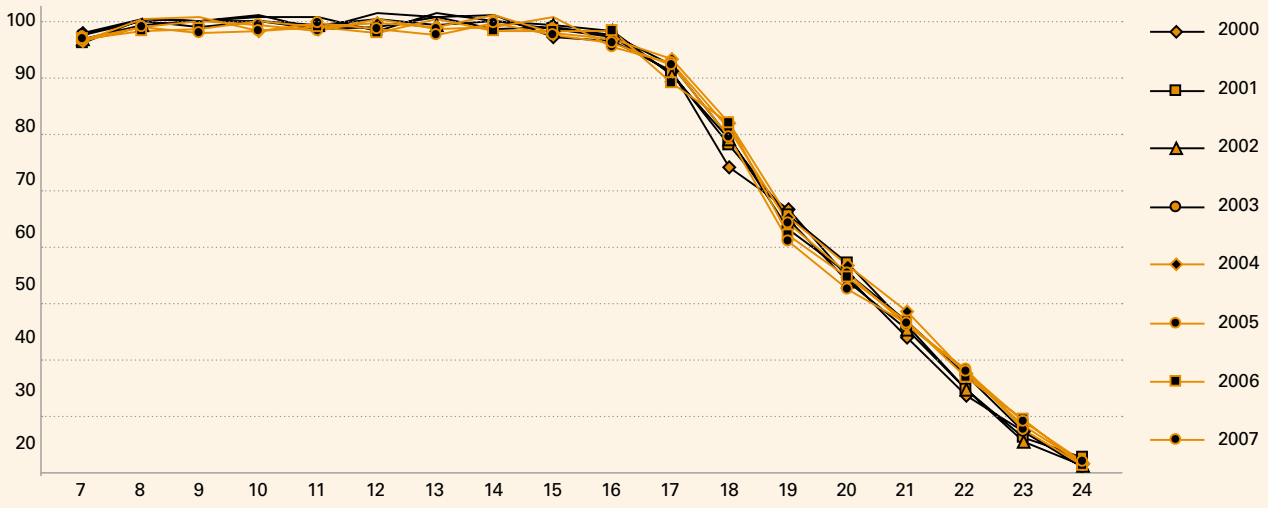
Since the weightiest component of the education index – percentage of adult literacy – is 99% in all developed countries (regardless of where it is measured and a value higher than the threshold is received, or it is not measured), the value of the education sub-index is only affected by the gross enrolment rate.

What is the gross enrolment rate and how is it calculated?

The gross enrolment rate is the share of enrolled students in an age group or the ratio of the number of enrolees and the total population in same age group, expressed as a percentage. According to Statistics Estonia data, in 2000–2007, the average ratio of enrolees among 7–15-year-olds (first level, i.e. basic education) was 99.5%, among 16–18-year-olds (second level or secondary education), 90% and among 19–23-year olds (third level or post-secondary school vocational or higher education), 46% (Figure 1.3.1.).

For the Estonian HDI, the gross enrolment rate for students at the first, second and third level is calculated as quotient of the number of enrolees in the country and the size of the age group that theoretically corresponds to the relevant study level. In all countries, the theoretical age group for the enrolees at the third level is the five-year age group immediately following the completion of second-level education. Therefore in the case of tertiary education, the 19–23 age group is taken into account. However, in Estonia it only takes three years to acquire

Figure 1.3.1. Gross enrolment rate among 7–24-year-olds in Estonia in 2000–2007



Source: SE

a bachelor's degree and in the 19–21 age group, the corresponding rate would be 55%. This indicator provides a comparatively approximate evaluation of the gross enrolment rate because it does not consider the real duration of the educational path in the case of various programmes, and the indicator is also affected by variations or systematic changes in the sizes of the age groups. Education acquired abroad is also not considered.

Despite the given shortcoming, this indicator is well suited for differentiating countries with developed educational organizations from the others. Despite all the problems related to education in Estonia, Estonia is indisputably among the countries with a developed educational organization. However, does this mean that the education provided in Estonia is substantively significant and valuable based on international criteria?

Estonian students' PISA results: an international comparison

In order to obtain internationally weighted feedback on the values and content borne by Estonian schools today, our 15-year-olds participated for the first time in PISA 2006, the Programme for International Student Assessment. The principal questions we sought to answer were: Are Estonian students ready to cope with the information- and knowledge-based society of the future? Are they able to analyze and relate to what is happening around them and are they able to communicate their ideas comprehensibly? How ready are they for lifelong learning? Participation in the study provided Estonia with a valuable comparative database, on which subsequent studies can be constructed. In order to shape future educational policy, it is important to know what differences exist within schools and between schools; how students' achievements are affected by their home life, attitudes toward learning, language of instruction, gender, ethnicity, class size, school administration model; as well as whether and how the money invested in education is correlated to students' achievements, etc. We must consider all these factors if we wish to analyze the advantages and disadvantages of our current educational system and to manage future change.

PISA history

The PISA (Programme for International Student Assessment) was first conducted by the Organisation for Economic Cooperation and Development (OECD) in 2000. This is an international achievement study that measures the knowledge of 15-year-old students and their skill at implementing their knowledge at the end of compulsory education. The PISA evaluates educational success ("literacy" in the PISA vernacular) in three fields of activity: in 2000 the main emphasis was on functional literacy, in 2003 on mathematical literacy and in 2006 on science literacy. In the next PISA cycle (2009–2015) the studies will also be organized every three years.

Forty-three countries participated in the 2000 study and three years later 41 countries participated. In 2006, 57 countries were involved in the study. The PISA sample is formed so that its results can be generalized for the country's entire student contingent of a certain age.

The 2006 PISA study in Estonia

The PISA study was carried out in April 2006 and its random sample included 4,865 students that represented an approximately 19,600-member group of contemporaries (according to the conditions of the study, the age of the participants in the test ranged from 15.3 years to 16.2 years); 49% of the participants were girls, and 51% were boys. Proportionally to the distribution of the language of instruction in the country, 24.3% of the students included in the study were from schools with Russian-language instruction. In total, 127 schools with Estonian-language instruction, 38 with Russian-language instruction and 4 with mixed language instruction participated in the study. Small rural schools were also represented. Almost 85% of the participants were attending eighth or ninth grade of upper secondary schools, the rest were attending basic schools.

The testing was carried out under the auspices of the National Examination and Qualification Centre, which was supported by local coordinators and school directors. The testing was monitored by independent observers. The contribution and dedication of Estonian teachers was very important; a stress-free atmosphere during the testing helped to unblock the knowledge and creativity of the students (including those with special needs). The study also included a questionnaire for school directors in order to evaluate the quality of the learning environment.

Results of PISA 2006

In PISA 2006, the main emphasis was placed on the natural sciences and the students' performance results were presented in two ways: as an average score and by ranking. In both cases, the Estonian students demonstrated excellent results in sciences. The PISA study helped to disprove a myth about Estonian education – supposedly, our curricula are too focused on factual knowledge and students do not know how to use their knowledge in everyday life. From the results, it turned out that in solving the assignments, the students were able to identify problems, scientifically explain phenomena, and interpret and implement

Figure 1.3.2. Countries participating in PISA 2006

Source: PISA website: www.pisa.oecd.org

Table 1.3.1. PISA 2006 study results and average point scores and comparison with 2003 results

Position	Country	Score 2006	Position 2006*	Score 2003	Position 2003
1	Finland	563	1	548	1
2	Hong Kong (China)	542	2	539	3
3	Canada	534	3	519	11
4	Taiwan	532	-	-	-
5	ESTONIA	531	-	-	-
6	Japan	531	4	548	2
7	New Zealand	530	5	521	10
8	Australia	527	6	525	6
9	The Netherlands	525	7	524	8
10	Liechtenstein	522	8	525	5
11	South Korea	522	9	538	4
12	Slovenia	519	-	-	-
13	Germany	516	10	502	18
14	United Kingdom	515	-	-	-
15	Czech Republic	513	11	523	9
16	Switzerland	512	12	513	12
17	Macao (China)	511	13	525	7
18	Austria	511	14	491	23
19	Belgium	510	15	509	14
20	Ireland	508	16	505	16
21	Hungary	504	17	503	17
22	Sweden	503	18	506	15
23	Poland	498	19	498	19
24	Denmark	496	20	475	31
25	France	495	21	511	13
26	Croatia	493	-	-	-
27	Iceland	491	22	495	21
28	Latvia	490	23	489	25
29	USA	489	24	491	22
30	Slovakia	488	25	495	20
31	Spain	488	26	487	26
32	Lithuania	488	-	-	-
33	Norway	487	27	484	28
34	Luxembourg	486	28	483	29
35	Russia	479	29	489	24
36	Italy	475	30	486	27
37	Portugal	474	31	468	32
38	Greece	473	32	481	30
International mean		473			
39	Israel	454	-	-	-
40	Chile	438	-	-	-
41	Serbia	436	33	436	34
42	Bulgaria	434	-	-	-
43	Uruguay	428	34	438	33
44	Turkey	424	35	434	35
45	Jordan	422	-	-	-
46	Thailand	421	36	429	36
47	Romania	418	-	-	-
48	Montenegro	412	-	-	-
49	Mexico	410	37	405	37
50	Indonesia	393	38	395	38
51	Argentina	391	-	-	-
52	Brazil	390	39	390	39
53	Colombia	388	-	-	-
54	Tunisia	386	40	385	40
55	Azerbaijan	382	-	-	-
56	Qatar	349	-	-	-
57	Kyrgyzstan	322	-	-	

** Here only the countries that participated in 2003 were taken into account.*

Source: PISA website: www.pisa.oecd.org

the results. Based on the average score, Estonian students were positioned along with Japan at 5–6 position in the general PISA scale (see Table 1.3.1.).

Another means of assessment is grouping by achievement scores. For this, the PISA test assignments are grouped into six levels of difficulty and the students are also divided into six groups according to their performance. The first- and below-first-level group includes students that were not able to implement their knowledge to solve the simplest PISA assignments. It was considered that basic science proficiency had been acquired if the students achieved at least the second level. The highest or sixth level presumed that the students were able to use their knowledge in real life situations, were able to associate various information sources and demonstrate reflection and argumentation skills.

Figure 1.3.3. shows the achievement scores of students from Estonia and its neighbouring countries, compared to Germany (known for its differentiated educational system) and the US (known for its high educational costs).

On the general scale of students' achievement scores in natural sciences, Estonia's students ranked second (after Finland). From the study, it appeared that, compared to the international average, Estonia has significantly few students whose knowledge about natural sciences is below the level of basic proficiency. This is confirmed by the results of the comparative TIMSS 2003 study, from which it became clear that 99% of students in Estonia surpassed the lowest level, while the international average was 78% (The Trends in International Mathematics and Science Study TIMSS 2003, 143). This demonstrates that in Estonia the share of poor students is very small when compared internationally. Unfortunately, however, very talented students that form a brilliant apex are also lacking. Students that achieved the highest scores, or the sixth level, in Estonia comprised 1.4%, which lagged behind such countries as Finland, the United Kingdom, Japan, Canada, and Slovenia.

The average percentage of students with high achievement scores (total of the fifth and sixth levels) in the OECD was 9%, while in Finland and Estonia it was 21% and 11.5% respectively. From this, one can conclude that Estonia has future challenges in its work with gifted children – current subject Olympiads and science schools have inspired too few of our students. Our neighbouring countries (Latvia, Lithuania and Russia) were distinguished by relatively low average results. It turned out that the format of the PISA questions differed significantly from their usual methods for testing knowledge, and the study also screened out a large number of students in these countries who lack basic knowledge and proficiency in natural sciences.

The United States is known for its high educational costs per student. It is quite natural to expect that this would result in good general results and a low ratio of poor students, since large amounts have been invested in various support systems. However, the PISA showed that high educational costs do not always entail effective educational organization and good results. In Germany, students are divided into types of schools according to their abilities with the assumption that this will allow the individual talents of each child to be taken into consideration. Yet, this was not confirmed by the PISA studies. A differentiated school system produces even greater differences between students, and in Germany, there is also a high correlation between the students' socio-economic background and their results. In Germany, the

social context explains 19% of the variance in the results of the students, while in Estonia and Finland these indicators are 9.3% and 8.3% respectively. Thus, the PISA shows unequivocally that a good educational system can compensate for the impact of low income and problematic home situations. In the best educational systems, monitoring and intervention has been brought to the school level, where it is possible to detect students who need help and to consistently support their needs (Barber; Mourshed, 2007: 48).

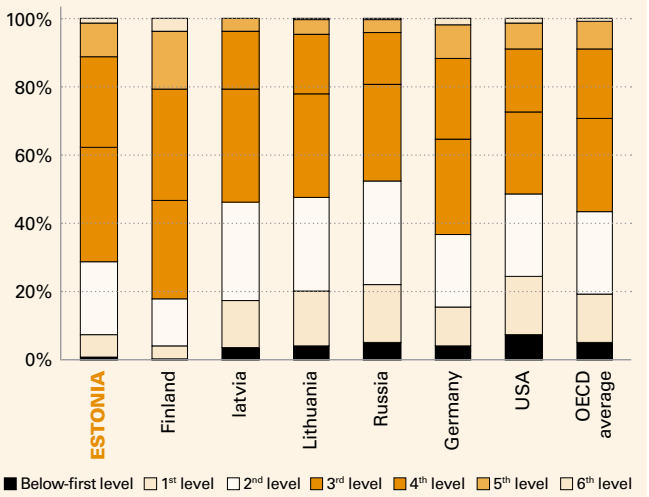
As the final report of the PISA study (OECD 2007) emphasizes, the social and monetary price of educational failure is very high. Young people who lack the necessary competence to cope in today's society give rise to great expenditures for health care, welfare and care institutions, and are detrimental to the security of the society as a whole. Therefore it is very important to analyze the factors that cause the differences in the results of schools and students, and thereby to mitigate the inequality of learning opportunities.

Challenges for Estonian education based on PISA

The PISA 2006 study confirms that in the field of natural sciences Estonia's students have sufficient knowledge and proficiency to recognize and explain natural phenomena, and they also managed well with searching for proof and using it in everyday situations. The current natural sciences curriculum and teaching methods as well as the basic and in-service training of the teachers have provided fertile ground for this. However, a series of problems also appeared that await fast and effective solutions, as well as subsequent in-depth studies.

In the analysis of the results, the small ratio of *talented students* has already been discussed. In addition, the regrettable but expected fact appeared that Estonian students have *very low interest in professions related to sciences*. The students' answers show that 26% of our students want to work in professions related to natural sciences (this included all fields of activity related to natural sciences, such as engineering and medicine), 22% wish to continue studies in the natural sciences after completing secondary school and only 14% would like deal with scientific research work. All these indicators are lower than the average among the participating countries. A somewhat surprising general trend was that the motivation to study natural science subjects and to tie one's future to them was highest in countries where the general level of achievement was lower. On the other hand, a relatively negative attitude toward natural sciences was characteristic of countries that ranked among the top ten. The interest in natural science specialization in universities has also suddenly decreased in these countries. This presents a challenge to the schools: to find new teaching methods in order to *make the study of natural sciences more attractive.*

Figure 1.3.3. Percentage of students according to proficiency level in the PISA 2006 natural sciences test



Source: PISA website: www.pisa.oecd.org

The third challenge for Estonian education resulting from the PISA is related to the *future of the local Russian-language schools*. A uniform national curriculum, textbooks, teacher training, school financing, etc. create equal expectations for both Estonian- and Russian-language schools. Nevertheless, the PISA study revealed a statistical difference depending on the language of instruction in both the average results and the achievement scores. Of Estonian-language school students, 5% were included in the first- and below-first-level group in natural sciences (non-acquisition of basic proficiency), while 13.6% of Russian-language students were in this group. Of Estonian-language students, 14% attained the highest score (fifth and sixth level), while only 6.3% of Russian-language students did so. This points to differences in the schools' teaching content and form and narrows the choices of Russian-language students after the completion of basic school. Numerous studies confirm that the expertise of teachers affects learning results more than any other factor. The students of top-quality teachers develop faster than those of ineffective teachers (Barber; Mourshed, 2007: 12). The quality of Estonia's Russian-language educational system can also not be better than the teaching quality of the teachers. The key to this lies in the initial and in-service training of the teachers at schools with Russian-language instruction.

The 2009 graduates are our first generation to have completed the PISA test and their choices and careers will demonstrate the effectiveness of our education and ability to cope with the circumstances that have changed during the last decade. We can only include ourselves among the top educational systems when the educational success of Estonia's students is matched by increased interest and joy of learning.

Higher and technical education in Estonia

A very topical indicator (% of students specializing in science and technology among students at the tertiary level) has been highlighted by the Human Development Report's statistical table dealing with education. The value of this indicator in Estonia was 23%, while at the same time this indicator was highest – 40% – in North Korea. This indicator was higher than Estonia in exactly half the EU states: Finland (38%), Greece (32%), Spain (30%), Czech Repub-

Table 1.3.2. Number of students in Estonia's higher education schools

	2000	2001	2002	2003	2004	2005	2006	2007	Average	%
Bachelor's studies										
Teacher Education, Educational Science	5247	5681	5126	4722	3930	3292	2744	2546	4161	7.9
Humanities and Arts	5647	6027	6274	6273	6525	6551	6366	6596	6282	11.9
Social and Behavioural Sciences	3090	3266	4157	4585	5157	5372	5549	5288	4558	8.6
Business and Administration	12449	13012	12707	13064	12854	12829	13051	13135	12888	24.3
Law	4696	4465	4022	3774	3604	3664	3730	3631	3948	7.5
Natural and Environmental Sciences	2459	2619	2984	3111	3391	3135	3054	3067	2978	5.6
Engineering and Computer Sciences	8566	9175	9402	9683	9965	9123	9196	8547	9207	17.4
Agriculture	1097	1179	1256	1259	1224	1078	989	880	1120	2.1
Health	3295	3576	2425	2454	2485	2426	2465	2421	2693	5.1
Service	4105	4761	5176	5452	5938	5719	5143	4753	5131	9.7
Total	50651	53761	53529	54377	55073	53189	52287	50864	52966	
Master's studies										
Teacher Education, Educational Science	529	666	1121	1298	1477	1817	1940	1922	1346	13.3
Humanities and Arts	643	742	816	848	873	1009	1132	1233	912	9
Social and Behavioural Sciences	450	516	661	823	877	983	1033	1033	797	7.9
Business and Administration	1263	1429	1995	2188	2563	2801	2819	3043	2263	22.4
Law	130	170	227	307	375	537	675	743	396	3.9
Natural and Environmental Sciences	355	430	500	575	613	865	923	918	647	6.4
Engineering and Computer Sciences	563	701	1302	1680	2014	2849	3426	3592	2016	19.9
Agriculture	126	154	233	276	426	515	578	586	362	3.6
Health	165	183	1427	1397	1357	1352	1369	1397	1081	10.7
Service	115	149	227	237	312	398	443	456	292	2.9
Total	4339	5140	8509	9629	10887	13126	14338	14923	10111	
Doctoral studies										
Teacher Education, Educational Science	33	42	51	61	69	73	83	83	62	3.7
Humanities and Arts	155	180	215	241	284	342	372	452	280	16.7
Social and Behavioural Sciences	87	116	154	185	228	279	339	360	219	13
Business and Administration	51	67	79	72	85	93	87	88	78	4.6
Law	18	21	27	33	43	47	56	72	40	2.4
Natural and Environmental Sciences	323	347	380	414	432	472	492	521	423	25.1
Engineering and Computer Sciences	185	217	244	305	356	399	448	533	336	20
Agriculture	71	79	97	103	112	110	113	110	99	5.9
Health	104	106	112	118	125	117	121	128	116	6.9
Service	19	24	28	30	34	38	31	34	30	1.8
Total	1046	1199	1387	1562	1768	1970	2142	2381	1682	31.3
Achievement of doctoral degree										
Teacher Education, Educational Science	0	0	0	2	6	2	2	8	3	2.2
Humanities and Arts	10	14	15	17	28	17	26	33	20	17.6
Social and Behavioural Sciences	4	5	8	11	4	8	14	8	8	6.8
Business and Administration	3	5	4	3	6	5	2	2	4	3.3
Law	0	4	2	2	3	4	2	2	2	2.1
Natural and Environmental Sciences	31	21	29	33	48	34	46	50	37	32.1
Engineering and Computer Sciences	11	10	11	18	19	30	22	24	18	15.9
Agriculture	6	2	5	8	5	7	5	5	5	4.7
Health	7	1	10	27	27	16	18	19	16	13.7
Service	0	0	1	1	4	1	6	2	2	1.6
Total	72	62	85	122	150	124	143	153	114	20.7

Source: SE

lic and Portugal (29%), Bulgaria (27%), Sweden and Slovakia (26%), Lithuania and Romania (25%), Austria and Italy (24%). Ireland was at the same level as Estonia, while data was not presented for Germany and France. In order to understand the content of this indicator, let's compare the distribution of specialisation at the different study levels of Estonia's higher education schools.

At the first higher education level, the largest specialization group is administration and business management (almost a quarter of the students), about a tenth study service as well as arts and social studies. Those interested in engineering sciences consistently comprise one sixth, and the number of students dedicated to the sciences (mathematics, physics, natural sciences and the environment) has increased from 5% to 6% during the reference period.

At the master's studies level, the situation changes slightly. The proportion of graduate students specializing in natural sciences and engineering sciences grows somewhat, and the increase in the fields of teacher education and health is noteworthy, while the decline in the service sector is to be expected.

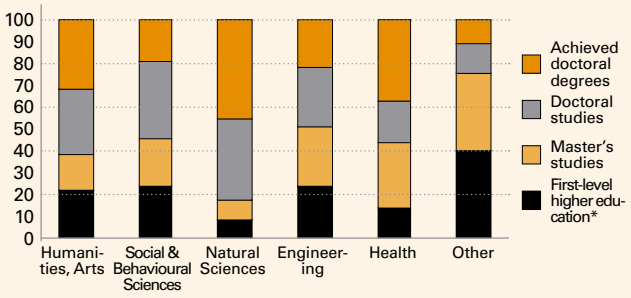
However, at the doctoral level the situation has changed radically. The share of students specializing in the natural and environmental sciences (including mathematics, physics, and chemistry) has increased fourfold com-

pared to master's studies. The share of the humanities has almost doubled (compared to master's studies), while the engineering field have remained the same, and all other specialties have declined, including the health field. Actually, the number of doctoral degree awarded is the highest in the natural science field: almost a third of all those who have been awarded doctoral degrees during the last eight years have done so in the field of natural sciences. On the other hand, in the engineering sciences the number of doctoral degrees has declined in comparison to the number of students. Doctoral studies have also been effective in the health field, where more than an eighth of all doctoral degrees were awarded. Since the number of those being awarded doctoral degrees in Estonia is quite small, it is not possible to track the dynamics by speciality.

Do the specialities of those acquiring higher education correspond to Estonia's needs? Unfortunately they do not. Although more young people than ever are currently studying at higher education schools in Estonia, the number of students majoring in technical subjects – on average a sixth of all students – is insufficient for the innovative development of the economy. Obviously, the roots lie in the specialization choices made in secondary school – since scientific subjects, including mathematics, are not popular, insufficient competence in these subjects closes the door for talented students to continue their studies in these fields. However, there is no sense blaming the young people, who mostly finance their own studies in the "soft" specialities – higher education in these subjects is also useful for the development of the students and the society as a whole. It must be recognized that the abilities and propensity of all secondary school graduates is not suited to the acquisition of engineering and scientific specialities.

As far as scientific education is concerned, there continues to be serious problems with the effectiveness of doctoral studies. This is demonstrated by the ratio of those who have studied in doctoral programs in 2000–2003 and those who defended their doctoral theses in 2004–2007: 5,194:570 = 9.1, i.e. on average every ninth student was awarded their doctoral degree during the normal period. The meagre productivity of doctoral studies is harmful to the sustainability of science and of higher education itself. On the whole, it also hinders the development of the entire country in its aspiration to become a knowledge-based society. It would be natural that, similar to the United States, Japan and the countries at the top of the European economies, we would start to have more people with doctoral degrees among Estonia's top civil servants, as well as among company managers and top specialists.

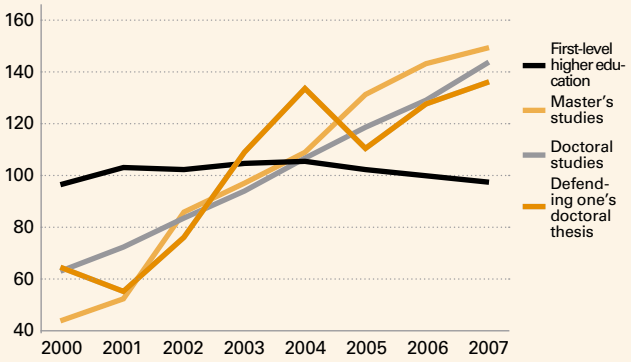
Figure 1.3.4. Representation of various specialties (%) at higher education levels (2000–2007 levels)



** Includes bachelor's, diploma and applied higher education levels*

Source: SE

Figure 1.3.5. The number of students studying on different levels of higher education and defending their doctoral theses in different years compared to the average level for the period (%)



Source: SE

The career study of those with doctoral degrees (Estonian Study, 2008) proved that the most successful were the students in strong schools with intensive foreign relations – most specialized in natural sciences and the humanities. In many fields a generation of younger scientists is developing who, unlike their older colleagues, are more strongly oriented towards international cooperation and collective research and who prefer to publish their work in high-quality publications. Unfortunately, there are few such strong scientific schools in the field of engineering, including information technology, which should be one of Estonia's main priorities.

References

1. Barber, M. & Mourshed, M. (2007) How the World's Best-Performing School Systems Come Out On Top (Understanding and using the OECD comparative PISA study of learning success.) McKinsey & Company.
2. Ministry of Education and Research (2007). Rahvusvaheliste haridusalaste uuringute tutvustus – PISA. http://www.ekk.edu.ee/valdkonnad/uldharidusvalishindamine/pisa
3. OECD (2005). First Results from PISA 2003. Executive Summary.
4. OECD (2005). School Factors related to Quality and Equity. Results from PISA 2000.
5. OECD (2006) Assessing Scientific, Reading and Mathematical Literacy: A Framework for PISA 2006
6. OECD (2007) PISA 2006 Science Competencies for Tomorrow's World.
7. The Trends in International Mathematics and Science Study TIMSS 2003 (2006). Compiler K. Mere. Ministry of Education and Research.
8. http://www.undp.org/publications/annualreport2008/
9. Statistics Estonia website, http://pub.stat.ee/px-web.2001/Database/Sotsiaalelu/databasetree.asp
10. Estonian Survey on Careers of Doctorate Holders. Transition Facility 2005, Agreement number 19100.2006.002-2006.640, Final Report. Statistics Estonia 2008

1.4. The gross domestic product and people's standard of living

The gross domestic product as a measurement of economic activity

A country's gross domestic product (GDP), which is the basis for evaluating economic activity, plays an important role in the calculation of the Human Development Index. One of the three components of HDI is GDP per capita, which measures economic activity and the income generated per capita.

In an increasingly integrated world, the statistics characterizing the economic development of various countries must be comparable. Four conditions must be met for an international GDP comparison:

- The definition of GDP must be the same
- GDP must be measured in the same way
- The value or currency in which the GDP is expressed must be the same
- GDP must be expressed at the same price level

Definition of GDP and its measurement

GDP (in market prices) is the sum of the added value produced by the residents[1] throughout the gross national economy, to which net taxes on products are added. Generally the accounting of GDP by European Union and OECD member states corresponds to the first and second conditions, since the accounting of the national economy is based on the System of National Accounts 1993 (SNA 93) and the European System of Accounts 1995 (ESA 95) based thereon. The system for national accounts includes definitions, classifications and accounting rules. Since Statistics Estonia is part of the European statistical system, we must guarantee the conformity of our accounting methods with the methodology and accounting principles that apply to all of Europe. Statistics Estonia has compiled national account statistics based on ESA 95 since 1996.

At the same time, the measurement of GDP in all the EU member states does not cover the entire national economy to the same extent. Thus in countries with large exhaustiveness GDP may be underestimated depending on how well the non-observed part of the economy is reflected in the country's accounting of GDP. Therefore the second conditions may not be fulfilled to the same extent in all countries. In Estonia, the -exhaustiveness is measured using methodology accepted by Eurostat and therefore its measurement should be comparable to that of the other member states. In national accounting, regular GDP recalculation takes place upon changes in regulations, definitions and classifications. At the same time, recalculations are also made for previous periods upon improvements in methodology or the implementation of new methodologies. As an EU member state, it is Estonia's obligation to bring its methodology of national accounting into full conformity with EU requirements that guarantee the comparability of the accounting of the member states.

Accounting methodology

Estonia, like the other countries that acceded to the European Union in 2004, had to fulfil pre-accession criteria established for the methodology of national accounting by the European Commission. The fulfilment of these criteria guaranteed the better comparability of statistics with the remaining EU member states. Statistics Estonia updated its accounting methodology for the 2006 GDP based on a system of tables for supply and demand and adjusted its GDP measurement. To express economic growth, GDP change has been used as an agreement. In order to assess the change in GDP over time, and to procure information about its real growth, the impact of price changes must be eliminated. In simple terms, the value of real GDP in current prices is found by dividing the GDP value by the price index for goods and services. The growth of the GDP deflator[2] shown in Table 1.4.1. indirectly expresses the average price change in goods and services included in accounting of GDP. The faster prices increase, the slower real GDP growth is in the case of identical GDP nominal growth.

As of the fall of 2008, Statistics Estonia uses the chain-linking method to measure real GDP growth. In this method, the base year is not fixed, but the previous year of the accounting period is used as the base. Therefore calculations must be made in the prices from the previous year, and thereafter a chain is formed to compare various periods. This allows real changes to be measured more accurately than using a fixed base year (2000) as was done previously. The implementation of the chain-linking method guaranteed better international comparability for GDP and its components. Almost all European Union and the majority of the world's developed countries (e.g. US, Canada, Japan, Norway and Switzerland) use the chain-linking method to measure real GDP growth. In 2007, Estonian real GDP growth had the fastest drop in the European Union, from 10.4% in 2006 to 6.3% in 2007. However, here too GDP is measured in the local currency or common currency of the Community, based on the price levels of individual states, and therefore all the countries cannot be compared unequivocally.

Accounting of GDP based on a common currency and uniform price level

The third condition for guaranteeing the international comparability of GDP, by using a common currency, is

[1] Resident — an institution having economic interests in given state and being committed with economic territory of it.

[2] Deflator – price index used for transforming prices from one time-period to another.

Table 1.4.1. Nominal and real GDP growth in Estonia 2000–2007

	Current prices, in millions of EEK	Chain-linked volume by 2000 reference year, in millions of EEK	GDP deflator	Growth of GDP deflator, %	Nominal GDP growth, %	Real GDP growth, %
2000	95491.0	95491.0	1.000			
2001	108218.3	102808.2	1.053	5.3	13.3	7.7
2002	121372.2	110847.5	1.095	4.0	12.2	7.8
2003	136010.2	118736.5	1.145	4.6	12.1	7.1
2004	151012.2	127682.2	1.183	3.3	11	7.5
2005	173530.2	139373.2	1.245	5.3	14.9	9.2
2006	205038.1	153835.9	1.333	7.0	18.2	10.4
2007	238928.9	163578.1	1.461	9.6	16.5	6.3

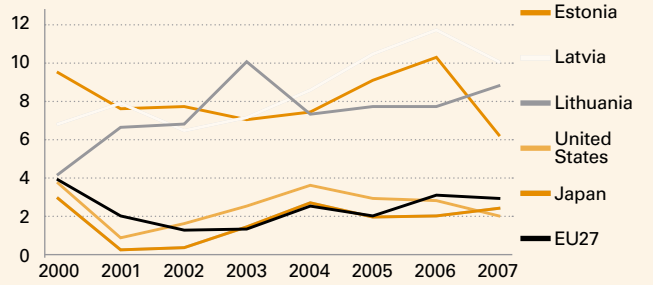
Source: Statistics Estonia

fulfilled only by the countries in the euro zone. The third condition is also partially fulfilled by accounting GDP according to a common value by using exchange rates. The adoption of the European Union's common currency, the euro, was compulsory for all EU member states (the only exceptions are Denmark and the United Kingdom). The Government of the Republic and the Bank of Estonia have set a goal of adopting the euro at the first opportunity, once Estonia is able to fulfil the necessary requirements. According to the Bank of Estonia's assessment in 2008, accession to the euro zone will be possible in 2011 or 2012 [Ross, 2008], although this projection may change due to the economic downturn.

In order to compare the real GDP of a country by time period, for instance by year, one must eliminate price changes. Likewise, in order to compare the GDP of a group of countries at a specific point in time, the differences resulting from their price levels must be eliminated. Since GDP is measured according the price levels of a specific country, the fourth condition is not fulfilled. While general price indices are used to eliminate the GDP price changes measured in a country at various times, Purchasing Power Parities (PPP)[3] are used to eliminate the impact of various price levels in groups of countries (e.g. the European Union),. With the help of PPP, the impact of international price differences is eliminated in GDP measurement. As a result of PPP conversion, the GDP in Purchasing Power Standards (PPS)[4] is arrived at. Expressed as PPS, we can arrive at a real international comparison of GDP. In other words, international value and price differences are eliminated and a "pure" GDP volume can be compared.

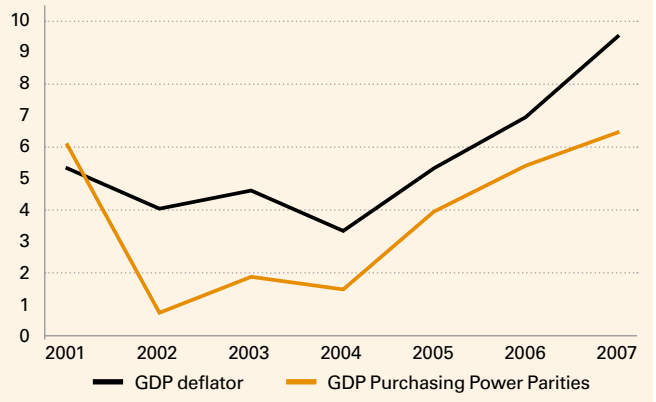
Estonian GDP per capita in Purchasing Power Standards increased to 68% in 2007 in comparison to the average of the EU 27 member states. In comparison, the corresponding indicator for Latvia was 55% and for Lithuania, 60%. According to PPS, GDP change increases with rapid GDP growth compared to the EU and the decrease in Estonian population, while price increases in Estonia reduce this indicator.

Figure 1.4.1. Comparison of GDP growth in Estonia and selected other countries in 2000–2007 (%), calculated by the chain method



Source: Statistics Estonia, Eurostat

Figure 1.4.2. Increase of the Estonian GDP deflator and PPP in percentages in 2000–2007



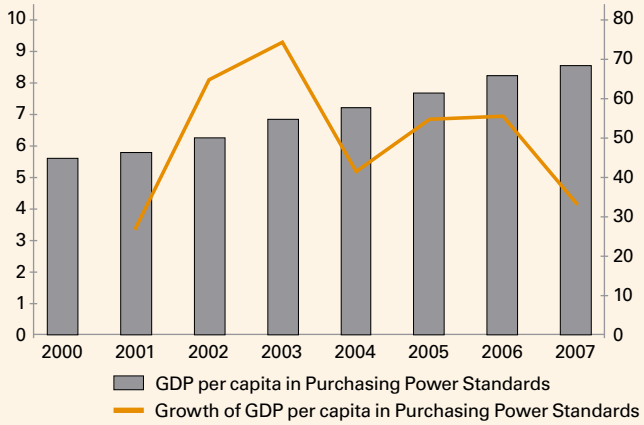
Source: Statistics Estonia, Eurostat

As a result of the sudden deceleration of real GDP growth and the acceleration of price increases, the GDP growth in PPS also slowed in 2007. While this indicator increased by 6.8% and 6.9% in 2005 and 2006 respectively, in 2007 it was only 4.1% (see Figure 1.4.3.).

[3] Purchasing Power Parities are exchange rates for currencies that equalize the purchasing power of various currencies.

[4] The Purchasing Power Standard is an "artificial" unit of currency that equalizes the prices of all identical goods and services in comparable countries.

Figure 1.4.3. Estonian GDP (right axis) and GDP growth (left axis) per capita in PPS 2000–2007 (EU 27 = 100)



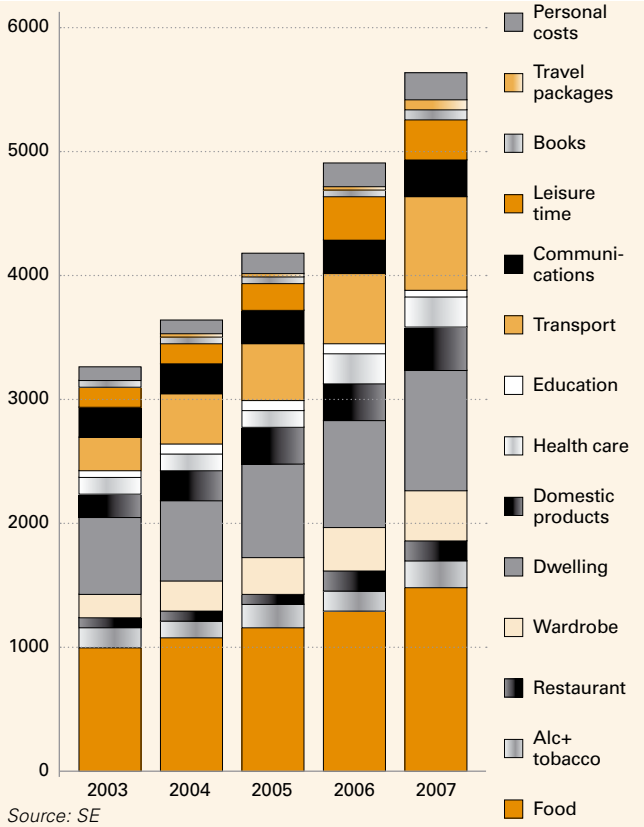
Source: Eurostat

The Purchasing Power Parities, like the majority of statistical indicators, include assessment and therefore also statistical errors. Therefore when comparing countries, one must keep in mind that the difference in GDP values calculated on the basis of PPP that are under 5% are statistically insignificant [Methodological…, 2006]. The PPP errors depend on the reliability of the weight of the cost groups and the prices related thereto, and on how precisely the goods and services used in the measurement reflect the consumer model of an individual country and its price level.

Standard of living of Estonian families in 2003–2007

Considering the fact that in 2003–2007 Estonia experienced rapid GDP growth, reaching 68% of the European Union average, it is quite natural to ask whether Estonian families perceived the economic growth that took place in 2003–2007 through an improvement in their standard of living. In other words, how much are increases in general economic indicators related to increases in the standard of living?

Figure 1.4.4. Structure of Estonian families' consumption 2003–2007



Source: SE

Incomes

Tracking the dynamics of the economic condition of families [Tiit, 2008], it turns out that in those years incomes grew in all types of households. During the four year period, the nominal income per household member in Estonia increased by 94% on average and the real income by 63%. The greatest increase was in double-income families with several children (2.35 times), as well as in single-income (two-parent) families with two children (2.28 times) and one child (2.06 times). This is probably caused by the impact of family policies because parental benefits had the greatest impact on such families. Relatively smaller income increases (71%) were experienced by single-parent families and the impact of parental benefits was not great (presumably children are not often born into single-parent families, although single-parent families develop upon the departure of one parent). The impact of parental benefits (as a portion of income) has continually increased. Child benefits comprise an important part (at least 15%) of the income of families with at least two children and one working parent. Pensions increased during the reference period by slightly less than the average, by 77%; whereas the real pension growth was only 49%.

Expenditures

Increases in income have a positive impact on the quality of life, if they provide people with greater opportunities to satisfy more diverse needs. In 2003–2007, the non-food expenditures (in nominal value) of Estonian families increased by 61% on average. Considering the increase in the consumer price index, one can conclude that the real expenditures increased by 40% during the same period. In the structure of non-food costs, the differences in the expenditure levels of different household groups are almost two times greater than in the case of food products (2.7–3.3 times). Transport costs experienced a relatively large increase – to a great extent this was caused by the rise in transport and fuel prices, as

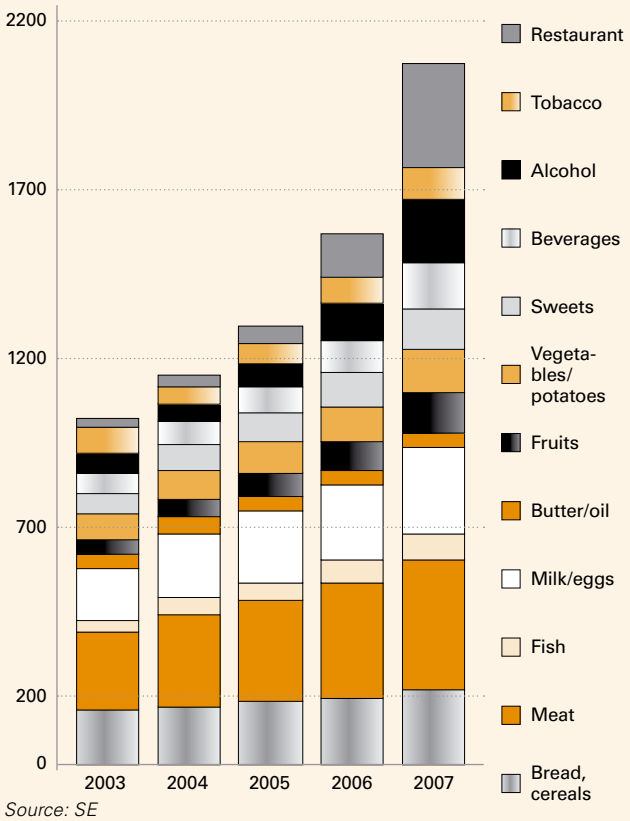
well as the increase in the number of cars and the trade-in of old cars for new ones. Wardrobe and leisure costs also increased considerably, as did expenditures for personal items and personal services. The greatest increase was in travel packages. The increase in food products and housing was lower than average. Household differences in the cost structure and volume continued to be large, although there was no clear trend towards the differences increasing or decreasing. All financial costs (taxes, fees, investments, loan repayments and interest, insurance, social taxes) combined comprise less than quarter of all expenditures on average. It is important to know how families' budgets will be affected by the existence of loans. The average volume of loan repayments (nominal value) increased by 78% in the years being examined.

Food expenditures

At their nominal value, food expenditures increased by 49% on average, which means a real cost increase of 23% (considering the 21% inflation of food prices).

Still the structure of food expenditures has not changed significantly in this period. What did occur was a small shift to higher quality and more expensive foodstuffs. Meat and meat products comprise an average of one-fifth of all food expenditures; 13.5% is spent on milk, milk products and eggs, although during the year under observation, the consumption of cheese increased; 12.4% is spent on bread and other grain products. Similar amounts were spent on fruits, vegetables and potatoes (6.5%) and alcohol (6.4%, although this is probably underestimated). The amounts spent on fruits and berries increased significantly (by 85% in nominal value). Even larger was the 2.25-fold increase in the consumption of juice (nominal value). Of the total food budget, 5.7% was spent on both non-alcoholic beverages and sweets. The food consumption structure is very similar by type of household (Figure 1.4.5.), while the same does not apply to single households. Greater differences between types of household exist in the volume of eating out (10%, 2.4%–12.5% by type of household). Therefore, one can confirm that in 2003–2007, the living standard of Estonian households improved, especially in the area of nutrition in a financial sense. In Estonian history, there has probably never been another period when the economic standard of living improved so quickly.

Figure 1.4.5. Volume and structure of food costs in cost quintiles[5], average for 2003–2007



Source: SE

References

1. Märten Ross. Eesti Panga majandusprognoosist ja rahapoliitilisest olukorrast. Presentation to the Riigikogu Finance Committee 04.12.2008
2. European System of Accounts, ESA 1995. Luxembourg, 1996.
3. Global Purchasing Power Parities and Real Expenditures. 2005 International Comparison Program. 2008 by the International Bank for Reconstruction and Development/The World Bank
4. Methodological Manual on Purchasing Power Parities. European Communities/OECD, 2006
5. System of National Accounts 1993, Commission of the EC, IMF, OECD, UN and World Bank, 1993.
6. Ene-Margit Tiit. Perede sissetulekute ja tarbimise struktuur 2003–2007. Contract report. Office of the Minister of Population Affairs, 2008
7. Human Development Reports, http://hdr.undp.org/en/humandev/

[5] Cost quintiles are calculated by dividing the sequential range of households into five equal parts. Those with the lowest income comprise the first fifth or quintile, the highest ones – the fifth quintile.

1.5. Changes in the Estonian Human Development Index

Since 1998, the Estonian Human Development Index has continually increased, although its ranking has not always improved, because our index growth has not been as rapid as other countries belonging to the same group (Figure 1.5.1.).

The life expectancy at birth remains practically unchanged, while the education index (shown in percentages) has changed quite a lot. The main reason lies in the objective increase in the gross enrolment rate. However, since this index is an approximate assessment, which is affected by the assessment method and different sizes of the age groups, the fluctuations may not be objectively justified. GDP changed the most during the observation period, and apparently this indicator is the reason for the relatively large changes in the Estonian Human Development Index (HDI). The relatively high level at the beginning of the 1990s was caused by differing calculation rules and the lower level of all indicators throughout the world; at that time, Estonia has a higher ranking than at any subsequent time.

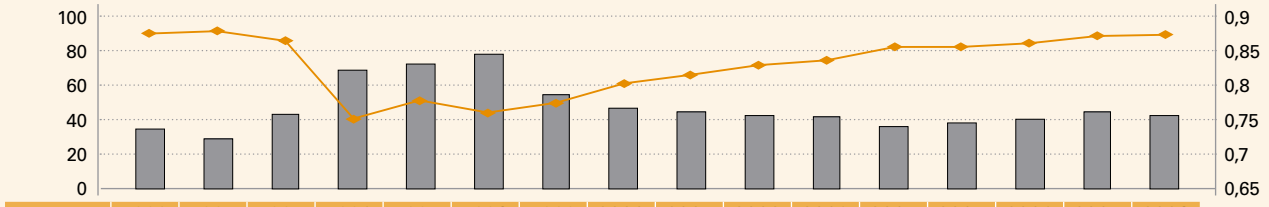
The decline in the middle of the 1990s was related primarily to a decrease in GDP, while at the same time life expectancy and the education index were also at a low point.

As far as future development is concerned, one can assume a small increase for Estonia during the next two years (in 2007 and 2008 based on increased GDP). However, in subsequent years, there will probably be a decline along with a decline in GDP, since life expectancy inevitably increases very slowly and tends to decline in years of economic downturn. In the education index, Estonia has practically no room to improve.

With respect to Estonia, one can say that it has the greatest difference between the education index and the life expectancy index in the entire world: Estonians are relatively well educated, but they are in poor health, resulting in shorter life spans. It is clear that Estonia's possible rise in the human development ranking is unavoidably related to an improvement in life expectancy, especially for men. Without this, we can expect a reversal, because life expectancy at birth in practically all developed countries is not only considerably higher than in Estonia, but it is also increasing faster – especially for men.

The reasons for low life expectancy of Estonia's population can be sought in our history and in our climate, and maybe even in our genes, but the example of our northern neighbours confirms that the state's consistent policies to shape lifestyles and to place greater value on healthy lifestyles can improve this indicator considerably and guarantee the country a high ranking with respect to human development.

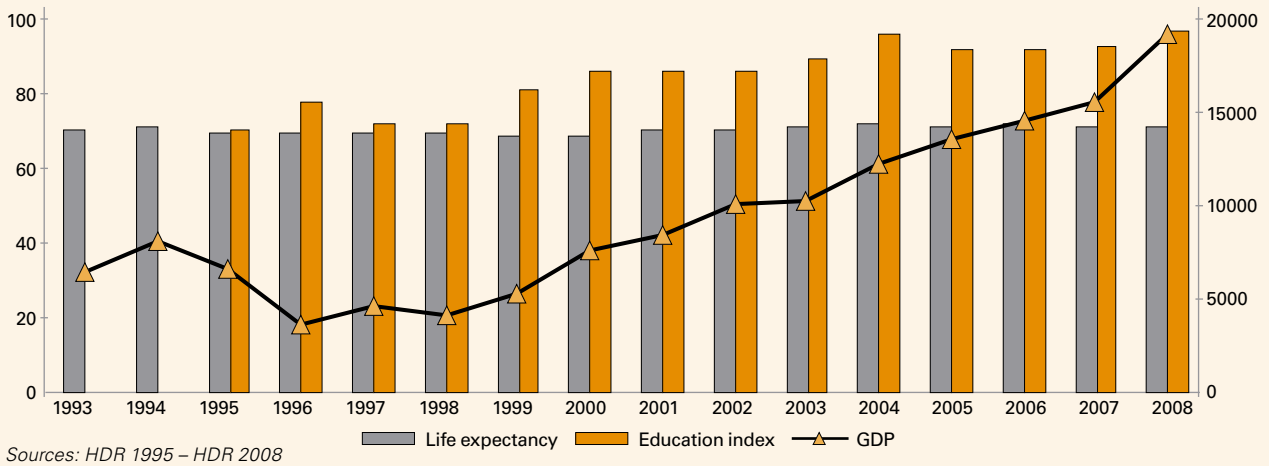
Figure 1.5.1. Changes in the value and ranking of Estonian Human Development Index



	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rank	34	29	43	68	71	77	54	46	44	42	41	36	38	40	44	42
HDI	0.872	0.876	0.862	0.749	0.776	0.758	0.773	0.801	0.812	0.826	0.833	0.853	0.853	0.858	0.868	0.871

Sources: HDR 1995 – HDR 2008

Figure 1.5.2. Changes in the indicators that are the basis for the Eesti Human Development Index



Sources: HDR 1995 – HDR 2008

CHAPTER 2

Health and quality of life

2.1. Introduction

Health is one of the fundamental human rights and important to anyone's development and well-being. The importance of health has been stressed in many agreements and charters, including the 2008 Tallinn Charter: "All the Member States of WHO in the European Region share the common value of the highest attainable standard of health as a fundamental human right; as such, each country shall strive to enhance the performance of its health systems[6] to achieve the goal of improved health on an equitable basis, ..." (Tallinn Charter 2008). The health ministers of the European Union have also emphasized the importance and central role of health systems in providing the residents of member states with a feeling of safety and increasing social cohesion and social justice, thereby promoting sustainable development. The health systems are characterized by generally recognized European values, such as universality, accessibility of quality services, fairness, and solidarity (EU common principles 2006).

The connection between health and wealth is complicated and has been the subject of much research. While better health facilitates the growth of wealth at the level of the individual and society, wealth is also a factor in attaining better health. The connection is reciprocal, as a bad state of health affects people's affluence, and poverty, in turn, does not allow them to attain their full potential for health. Empirical studies confirm that the good state of health of a country's population is not only a natural by-product of economic growth, but that the health of the population also influences economic development, competitiveness and productivity (CMS, 2001, Suhrcke M, 2007). This is also reflected in the recent agreement: "Beyond its intrinsic value, improved health contributes to social well-being through its impact on economic development, competitiveness and productivity. High-performing health systems contribute to economic development and wealth." (WHO, 2008).

This fact has a significant implication on policy making: health investments should be seriously considered with regard to promoting national economic development as they can have an influence on the achievement of countries' economic policy goals. In other words, health and wealth amplify each other; well-functioning health systems contribute to both health and wealth, which, in turn, increase social well-being (J Figueras, 2008).

On the basis of the information provided above, we can draw the conclusion that a significant connection exists between the state of health of a country's population and its society's potential for development. The necessity for increased health investments was also recognized by the European Commission in 2004, who issued a statement that health is a prerequisite for economic welfare as it leads to a longer, better and more productive life (*European Commission & Parliament 2004*). In the Tallinn Charter signed by the ministers of Member States of the WHO European Region in June 2008, the political leaders of European countries recognize, for the first time, the impact of well-functioning health systems on both the improvement of people's health as well as economic growth. The leaders gathered in Tallinn were convinced that by investing in health, we also invest in human development, social well-being and prosperity (WHO, 2008).

In general, the state of health of Estonian residents has improved in recent years. In 1990–2007 the average life expectancy of men increased by nearly three years and women's life expectancy grew by nearly four years (Statistics Estonia 2008). Since this period also comprises years when the state of health of Estonian residents deteriorated rapidly, it is worth mentioning that the fast increase in life expectancy has taken place in the 21st century. Compared to most European countries, however, Estonia is still lagging behind significantly in terms of the aggregate indicators reflecting the population's state of health. Furthermore, the increase in average life expectancy in Estonia remains faster in the case of women, resulting in a situation where the average life expectancy of men was 11 years shorter in 2006 than that of women. Young people in Estonia are generally healthier now than ever before. Mortality rates indicate that children and young people aged up to 20, but especially children aged 0–5 have enjoyed a stable decrease in mortality for several decades, contrary to the working population. However, there are several causes for concern, including, for example, increasing mental stress, smoking at an early age, the tendency to abuse alcohol, insufficient physical activity, the spread of dangerous infectious diseases (primarily HIV and venereal diseases), and injuries and poisonings (HBSC 2005/2006).

The following section provides a more detailed analysis of various indicators related to the health of Estonia's population and our healthcare administration, with the aim of arriving at a better understanding of our development potential.

[6] According to the definition provided by the World Health Organization (WHO), health services are a set of all public and private organizations, institutions and resources devoted primarily to improving, maintaining and restoring health. Health systems include services aimed both at private individuals and the public, as well as activities for influencing the policies and arrangements of other fields in order for the latter to take into account social, environmental and economic health factors (WHO 2008).

2.2. Health of Estonian residents in international comparison

According to the 2005 Human Development Report, Estonia occupied the 88th position in terms of its population's life expectancy at birth. Despite the different methods used for preparing the rankings, Estonia always stands out among other countries for the considerable "backwardness" of its health indicators compared to the general standard of living, level of education or other development indicators.

For example, compared to its level of economic development (GDP per capita), Estonia probably has the worst health indicators in the world. Among countries more "prosperous" than us, only Trinidad and Tobago and Equatorial Guinea have a lower life expectancy than Estonia. Both countries are smaller than Estonia and their fast growth of national wealth is based primarily on the increase in oil and gas prices over the recent years, which has not brought about an equally fast improvement in the quality of life of the countries' residents. A similar dissonance between economic success and health indicators is also characteristic of Latvia and Lithuania as well as all other countries that were formerly part of the Soviet Union.

At more than 5,000 USD/PPP per capita, the unequivocal connection between economic wealth and average life expectancy disappears (CSDH 2008). With its GDP of 20,000 USD/PPP per capita, Estonia has far surpassed the level at which the mechanical increase in wealth would automatically improve the population's life expectancy. Instead, the main influence stems from the choices made by individuals and the society (ibid).

Estonia also has the largest difference between its ranking in the overall human development table (44th in 2005) and its ranking related to the average life expectancy (88th in 2005) (see Table 2.2.1.).

Table 2.2.1. presents a comparison between Estonia and ten countries that were placed immediately before or after us in the ranking according to the Human Development Report, while also including Iceland, the top country according to the 2007 report and our closest role model, Finland. A comparison of life expectancy at birth reveals that during the past 30 years Estonia (along with Latvia and Lithuania) has experienced the slowest improvement in terms of health, whereas only countries that export oil are ahead of us with regard to wealth. What is more, in relation to Finland, Estonia's life expectancy was at the same level during the 1970s. In addition, in 2000–2005, the likelihood of dying at a younger age than 60 was the highest in Estonia among the countries included in the comparison, even if we take into account countries with a considerably higher rate of infant mortality. Table 2.2.2. illustrates Estonia's situation in terms of the main indicators of public health.

Life expectancy at birth and the mortality rate for children under five or infants are the health indicators most frequently used in international comparisons. Since children's mortality rates have quite a strong effect on life expectancy at birth, we have added life expectancy at 45 years of age as an indicator in order to provide a more accurate description of the health situation of the working age and elderly population. The data provided in Table 2.2.2. on the four indicators of life expectancy all show that the average state of health of the Estonian population is (a) always lower than that of the other new EU countries and (b) far below even the lowest of the EU-15 indicators. It is also obvious that Estonia's relatively poor indicators are especially clearly pronounced in the case of men's life expectancy (both at birth and at 45) – compare, for example, the 8.5-year difference for men and 3.6-year difference for women in life expectancy at birth between Estonia and the EU-15 country with the lowest indicators (see Fig-

Table 2.2.1. Comparison of health indicators between Estonia and the countries close to it according to the Human Development Report ranking

Country	HDI 2007 ranking	Life expectancy (LE) index ranking	HDI – LE index ranking	Probability of dying before the age of 60	Average life expectancy at birth (1970–75)	Average life expectancy at birth (2000–05)	GDP per capita (USD PPP)
Iceland	1	3	-2	5.9	74.3	81.0	36510
Finland	11	21	-10	9.4	70.7	78.4	32153
United Arab Emirates	39	27	12	2.1	62.2	77.8	25514
Chile	40	28	12	3.5	63.4	77.9	12027
Bahrain	41	45	-4	3.4	63.3	74.8	21482
Slovakia	42	53	-11	14.6	70.0	73.8	15871
Lithuania	43	68	-25	20.0	71.3	72.1	14494
ESTONIA	44	88	-44	21.4	70.5	70.9	15478
Latvia	45	75	-30	19.8	70.1	71.3	13646
Uruguay	46	41	5	4.3	68.7	75.3	9962
Croatia	47	44	3	12.7	69.6	74.9	13042
Costa Rica	48	25	23	3.7	67.8	78.1	10180
The Bahamas	49	71	-22	10.6	66.5	71.1	18380

Source: HDR 2007/2008

Table 2.2.2. A selection of Estonia's health indicators compared to EU member states (2006)

		Life expectancy at birth (men)	Life expectancy at birth (women)	Life expectancy at 45 (men)	Life expectancy at 45 (women)	Under-five mortality rate	Infant mortality rate
EU-15	Worst	75.8	81.8	34.5	38.0	5.9	5.0
	Average	76.8	82.7	34.0	38.8	4.9	4.0
	Best	77.8	83.2	34.40	39.3	3.3	2.8
CEE-8	Worst	65.3	77.2	25.0	33.8	9.3	7.6
	Average	68.72	77.98	27.34	34.74	8.42	6.72
	Best	74.0	80.9	31.2	37.2	3.9	3.4
	ESTONIA	**67.3**	**78.3**	**26.2**	**35.1**	**5.4**	**5.4**

Source: WHO/EURO (2005) European health for all database (HFA-DB), January 2009 version

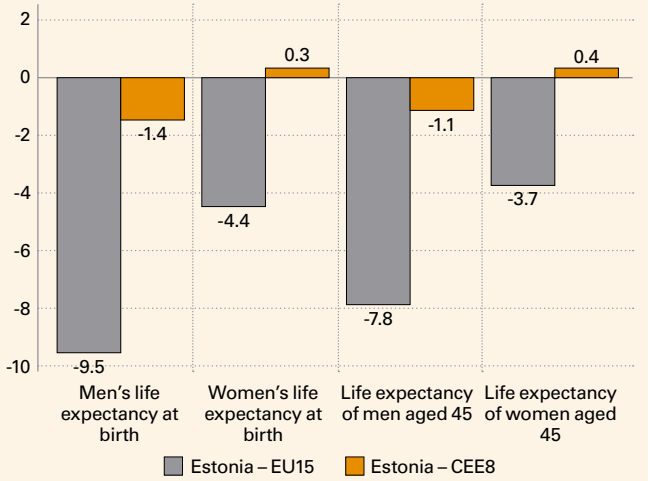
ure 2.2.1). Estonia seems to be less underdeveloped with regard to the mortality rates of children and infants than the other life expectancy indicators.

In 2006, the life expectancy of Estonian men was one of the shortest (after Lithuania and Latvia) in the entire European Union (67.4 years) (Eurostat 2008). Finland stood out among the Nordic countries as having the lowest life expectancy for men, although with a life expectancy of 75.9 years, Finnish men live an average of 8.5 years longer than Estonian men. Estonian women had a life expectancy of 78.6 years in 2006, which was also comparable to the levels of countries with a lower life expectancy. With regard to women's life expectancy, Latvia, Lithuania, Hungary, and Slovakia had even lower indicators than us. In the ranking of women's life expectancy the country closest to us is our Northern European neighbour Denmark where the average life expectancy for women was 80.7 years.

A comparison of differences in the population's health by ethnic groups showed that especially after the restoration of Estonia's independence, there were significant differences in the development of the life expectancy of Estonian and non-Estonian men. During the first decade, the life expectancy of non-Estonian men decreased noticeably (by 3.2 years), while the corresponding decrease in the case of Estonian men was much smaller (-0.8 years), and the women experienced a small improvement (an increase of 0.6 years) across both ethnic groups (Sakkeus 2009). Over the last ten years, the development of health of both male populations has been comparatively similar and both groups have added nearly three years to their low life expectancy during the period 1998–2006 (ibid). All in all, the average life expectancy of women in Estonia had increased by more than three years, regardless of ethnicity, while the life expectancy of Estonian men had increased by two years and was still 0.5 years shorter for non-Estonian men in 2006 than in 1989 (Table 2.2.3., Sakkeus 2009).

Table 2.2.4. compares the differences with regard to life expectancy between the old EU member states (EU15) and the countries that acceded in 2004 (EU10) as well as Estonia by age groups. The comparison of life expectancy in terms of different age groups (based on 2002 data) reveals that in the case of men 74% of all differences fall between the ages of 20 and 65. In the case of women, most differences occur after the age of 65. Interestingly, the difference between the life expectancy indicators of Estonian women and the women of EU15 countries are even bigger in this age group (2.38 years) than the differences among men (2.1 years).

Figure 2.2.1. The difference between the life expectancy of men and women in Estonia in the international context



Source: WHO/EURO (2005) European health for all database (HFA-DB), January 2009 version

Table 2.2.3. Changes in the average life expectancy of Estonians and non-Estonians in 1959–2006

	Estonian men	Estonian women	Non-Estonian men	Non-Estonian women
1959–70	1.34	3.02	3.02	1.89
1970–79	-1.29	-0.11	-0.11	-0.13
1979–89	1.83	1.01	1.01	-0.17
1959–1989	1.88	3.92	3.92	1.59
1989–1998	-0.8	0.65	-3.2	0.59
1998–2006	2.86	3	2.74	2.73
1989–2006	2.06	3.65	-0.46	3.32

Source: Sakkeus L. (2009). Eesti rahvastiku tervise areng. Eesti arst, 2009 Forthcoming

Table 2.2.4. Differences in life expectancy as of 2002 by age groups: comparison between Estonia and EU10 and EU15

MEN				
	Estonia vs EU15		EU10 vs EU15	
Age group	Difference in life expectancy (years)	Effect on the difference	Difference in life expectancy (years)	Effect on the difference
0–1	0.16	1%	0.4	6%
1–19	0.51	5%	0.2	3%
20–44	3.24	30%	1.1	16%
45–64	4.69	44%	3.0	45%
65+	2.10	20%	2.0	30%
Total	10.69	100%	6.8	100%
WOMEN				
	Estonia vs EU15		EU10 vs EU15	
Age group	Difference in life expectancy (years)	Effect on the difference	Difference in life expectancy (years)	Effect on the difference
0–1	0.04	1%	0.4	8%
1–19	0.10	2%	0.1	3%
20–44	0.69	14%	0.3	6%
45–64	1.59	33%	1.2	26%
65+	2.38	49%	2.6	56%
Total	4.81	100%	4.7	100%

Source: HealthGAP 2008

At the same time, the mortality rates of children and young people (ages 0–19) in Estonia are significantly lower than those of other Central and Eastern European countries. Compared to EU15, this age group constituted, respectively, 9–11% and 3–6% of the entire difference. The same is true for the elderly – in comparison with EU15, the relative importance of men is 30% and that of women is 56% in EU10 countries, and 20% for men and 49% for women in Estonia.

As of the 21st century, men's average life expectancy in the Baltic states was approximately 12 years shorter than, for example, in Sweden. Within the 20–64 age group, the number of fatal injuries suffered by men in the Baltic states was approximately 7–9 times higher than in the Netherlands and the United Kingdom. Premature adult mortality (deaths between ages 20 and 64) reached its highest level in Estonia in 1994. There was a significant decrease in premature mortality during the following years and the rate stabilized both among men and women in 1997–2002. In order to understand the causes of the shortness of life expectancy in Estonia and the other Baltic countries, we must look at our situation in the context of fundamental changes that occurred in the causes of mortality in developed Western countries.

2.3. The socio-economic background of health

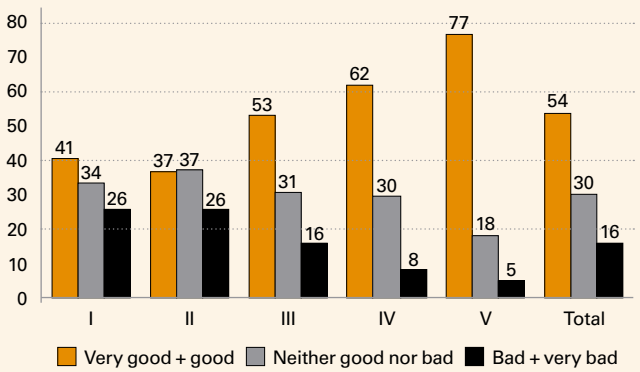
Different data indicate that inequality is characteristic of Estonia in terms of health, health behaviour, as well as the availability of health care services. During the period following the restoration of Estonia's independence (1990–2000), there was a significant increase in inequality with regard to different social groups. For example, mortality rates increased among people with a lower than secondary education but decreased in the case of people with a higher education. The gap between the mortality of Estonian and non-Estonian residents also grew, while the proportion between the mortality rates among inhabitants of rural and urban areas remained constant in favour of city-dwellers (Kunst et al. 2002).

In practice, the differentiation of inequality as an objective inevitability and injustice as an ethically reprehensible phenomenon can be based on Whitehead's 1990 treatment of various forms of inequality (Whitehead 1990). According to this approach, directed activities allow us to avoid: (1) freely chosen health behaviour that is harmful to one's health, (2) the faster use of factors facilitating the improvement of health by those with better access to information, (3) social environment-related activities hazardous to health, (4) mental and physical environments harmful to health, (5) the unavailability of elementary health care, and (6) downward movement on the social scale as a result of a bad state of health (Mackenbach et al. 2002).

One of the best indicators of quality of life is people's self-assessment of their state of health. According to the Estonian Social Survey (ESU) conducted in 2005, 77% of the wealthiest quintile of the Estonian population rated their state of health as either good or very good, while only 41% among the poorest quintile considered their state of health to be good. Also, 5% of the wealthiest quintile and 26% of the poorest quintile rated their health as bad or very bad (Figure 2.3.1.), clearly reflecting the convergence of bad health in poorer social strata.

In addition to the inequality in terms of state of health, the reasons for people's inability to receive health care services are usually (in over 50% of the cases) economic (Habicht et al. 2008). Taking into account the fact that the

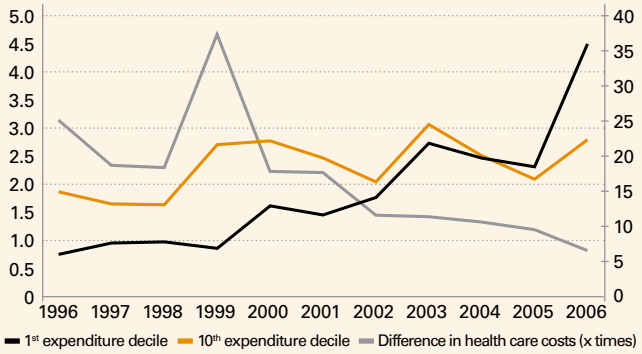
Figure 2.3.1. Self-assessment of health by income quintiles (% of respondents)



Source: Estonian Social Survey (ESU) 2005.

expenditures of the private sector on health care services have increased considerably in recent years (24%), mainly in terms of patients' co-payments, it is also important to recognize that the relative importance of health care services in total expenditures has grown in recent years especially among groups with lower incomes. By 2005, the relative importance of health care services in total expenditures had become equal in the case of the poorest and the richest income decile (see Figure 2.3.2.). It is important to note, however, that while poorer (and usually older) residents spend their money primarily on buying medicine, the health care expenses of wealthier (and usually younger) residents are mainly related to dental care and spa services.

Figure 2.3.2. The percentage of people's health care expenses related to their total expenses in the case of the first and tenth expenditure deciles and by years, including the actual difference in the health care expenses of people belonging to those deciles (in the form of a coefficient)



Source: Statistics Estonia. http://www.stat.ee

2.4. Health as an indicator of the quality of life

During the first half of the 20th century, the average life expectancy in developed industrial countries grew by more than 50% – more than during the entire human history before that. This great change is associated with the decrease in infant and child mortality related to contagious diseases. People's longevity began to be determined mainly by mortality related to non-contagious diseases, i.e. illnesses resulting from their behaviour (Omran 1971). After World War II, the causes of death and average life expectancy were similar in most European countries – there was an average difference of only 1–2 years (HealthGAP 2008). Starting from the 1960s, there was a slow but constant reduction in mortality rates in almost all of the Western countries. In the context of the decrease in general mortality, there was an increase in the prevalence of illnesses related to people's individual health behaviour, and resulting from the longer average life expectancy, as causes of death (primarily cardiovascular diseases and malignant tumours) (Omran 1971). Meanwhile, in developed countries, parallel with the increase in the value of human life, a constant decrease in the proportion of illnesses and deaths caused by external factors (mainly injuries) also occurred. As a result of the decrease in general mortality, or the "postponement" of illnesses, an aging society came into being in the developed Western countries. Notably, the significant improvement in men's life expectancy began only in the 1970s when the considerable effect of people's behavioural changes (regarding eating, smoking, physical activity, alcohol consumption) on their health started to be recognized (Caselli 1995, Vallin, Mesle 2005).

Due to these changes, the state of health of the public could no longer be measured only by mortality rates. In addition to the lengthening of people's lives, the number of years they lived healthy, high-quality lives became an important criterion of the health-related quality of life.

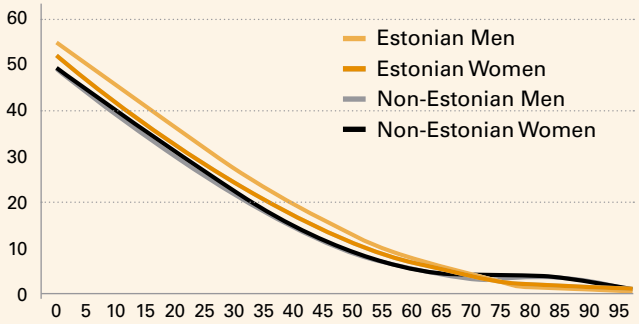
Healthy life years

"Healthy life years" is one of the simplest concepts that combines data regarding mortality and illness, thus allowing us to measure the health-related quality of life (Eurostat 2008). One of the first examples of this type of indicator was a set of calculations of disability-free life expectancy published in 1969 by the United States Department of Health, Education, and Welfare (HEW, 2008). Healthy life years are conventionally calculated in the European Union using the so-called Sullivan method, which was developed in the 1970s for the purpose of calculating disability-free life expectancy. The method is based on adding the dimension of good health to the life table. In other words, the method indicates an individual's life expectancy in years adjusted by the degree of "good health" based on self-assessment with regard to different age groups (Eurostat 2008).

The concept of healthy life years is relatively easy to understand as it comprises the population's subjective assessments of their limitations to performing daily activities arising from their state of health by different age groups. As of 2004, the definition of "good health" has been agreed upon across the EU as the absence of limitations on daily activities and data is being gathered on this subject through the pan-European EU-SILC survey. Since this indicator is sensitive to interventions aimed at improving a population's state of health, it is also suitable for measuring the success of health-related policies (Perenboom RJ, 2004). If the measurement of people's state of health is based on limitations on daily activities or the lack thereof, the number of healthy life years also serves as a good gauge of the state of health of a population. In addition, it can be used in the comparison of a population's state of health with others in terms of economic potential and competitiveness.

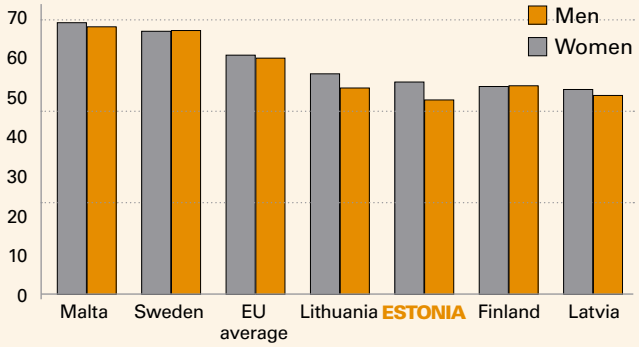
In order to assess "good health" in different age groups in Estonia, we have used the Study on Health Behaviour of the Estonian Adult Population 1990–2004 and Esto-

Figure 2.4.1. Healthy life years of Estonia's male and female population in the case of Estonians and non-Estonians



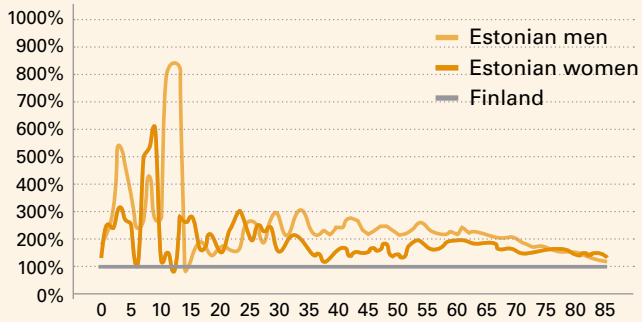
Source: Sakkeus 2009

Figure 2.4.2. Healthy life years in 2006 in Estonia and some EU countries



Source: Eurostat

Figure 2.4.3. Probability of death in Estonia as percentages related to probability of death in Finland in 2006 (by gender and age)



Note: 100% means that the probability of death in Estonia and Finland is equal in that age group.

Source: Eurostat, Internet database, table Probability of dying by sex and age, http://europa.eu.int/comm/eurostat/ browsed on January 12, 2009.

nian Health Surveys conducted in 1996 and 2006. With a healthy life expectancy of 52 years at birth according to 2006 data, Estonia ranks among the worst-performing countries in Europe with regard to both men and women. However, both in the case of genders and age groups, the differences in healthy life expectancy are smaller than in the case of life expectancy in general (see Figure 2.4.1.).

Although the difference in women's and men's life expectancy is more than 11 years, there is a comparatively small gap of barely three years between men and women in terms of healthy life years (Figure 2.4.1.). On the one hand, this points to the different pattern of illness among men and the large effect of premature mortality. On the other hand, women's increased life expectancy means that they live longer with illness-related factors limiting their ability to cope. The fact that as people grow older, the difference between the healthy life expectancy of both men and women as well as Estonians and non-Estonians decreases is determined by the state of health of those who have lived to the given age. (Sakkeus 2009).

In 2006, the average number of healthy life years for men was 49.4 and according to this indicator, the health of men in Estonia has been at the lowest level among the EU member states throughout the past three years (Eurostat 2008). In terms of healthy life years, Estonian men are preceded, over short intervals, by Latvian, Lithuanian, and Finnish men (see Figure 2.4.2.). The average healthy life expectancy of Estonian women was 53.7 years in 2006. This indicator has fluctuated between 52 and 54 years over the period 2004–2007. Latvia, the European country with the lowest healthy life expectancy in the case of women, has been preceded in second to last place alternately by Estonia and Finland.

An additional assessment of the distribution of people's state of health over various ages can be made based on a comparison with the probability of the death of people living in countries with a better state of public health over their entire life span. Figure 2.4.3. allows us to compare the relative difference in the probability of death in the case of every male and female age group in Estonia and Finland The figure displays two peaks that indicate a relatively high level of mortality in Estonia, including one in the 5–10 age group (5–15 age group in the case of men), which is associated, however, with the very low absolute mortality figures in that age group. On average, the mortality rate of boys during childhood and youth is four times higher in Estonia than in Finland, while that of girls is three times higher. Another significant difference in the two countries' mortality rates occurs during the prime working age, among Estonia's male population aged 25–65, whose death is two to three times more probable than that of their Finnish counterparts.

The main source of the above described difference with regard to men aged 25–64 is the relatively large difference in mortality related to circulatory system diseases (2.6 times higher in Estonia), external causes, i.e. injuries and poisonings (2.2 times higher in Estonia) and tumours (2.0 times higher in Estonia) (see Table 2.4.1.).

Life years lost due to the burden of disease

In addition to the concept of healthy life years, there exists a similar approach to assessing the overall state of health of the population called the burden of disease or DALY (disability adjusted life years) method, which was used widely in 1990 by the WHO upon preparing a global comparison (Vals K, 2005). Measurements of the population's health loss based on the burden of disease method also try to take into account the decrease in the "(full) value" of life years due to disease, in addition to life years lost as a result of deaths. The difference between the burden of disease method and the

healthy life years method consists in using epidemiological studies or databases instead of self-assessments in researching the spread of disease. As a subjective component, a so-called disability weight is assigned to every diagnosis, i.e. an assessment of the time spent living with a certain disease or disability that reflects the comparative social significance of various states of health (Lai T, 2004).

According to the DALY method, we first calculate the number of years of life lost (YLL) due to premature death and the healthy life years lost due to disability (YLD). Subsequently, both indicators are summarized (Lai T, 2004):

DALY = YLL + YLD

The total health loss of the Estonian population in 2000 was 341,164 years. This figure decreased somewhat during the next two years (340,968 in 2001 and 338,242 in 2002). No significant dynamics occurred during this period with regard to social groups based on age and gender (see Table 2.4.2.).

In 2002, the summarized loss of life years in Estonia according to the DALY method amounted to 338,224 years – 170,736 in the case of men, and 167,506 years in the case of women (Lai T, 2004).

Although men and women lose an approximately equal number of years in total, the loss of years is mainly the result of deaths in the case of men and illnesses in the case of women (see Table 2.4.3.). Of the entire burden of disease, 8% is borne by children and young people (aged 0–19), 39% by pensioners (aged 65+), and over half of the burden is borne by the working age population (20–64) (58% in the case of men and 43.6% in the case of women). The three main groups of illnesses that cause loss of health (cardiovascular diseases, tumours, and external causes) make up 65% of the total burden of disease. HIV/AIDS is not yet represented in this list, although according to the burden of disease study conducted in Estonia, the loss of life years resulting from the contraction of AIDS may be as substantial in 2012 as the mortality rate related to cardiovascular diseases in 2002 (Lai T, 2004).

Women's burden of disease is twice as high as that of men in the field of muscle and joint diseases, while men's loss of health is triple that of women with regard to external causes. The majority of women's burden of disease is constituted by cardiovascular diseases (35%), tumours (22%), and muscle and joint diseases (8.5%).

Table 2.4.1. Principal reasons of death among Estonian and Finnish men aged 25–64 in 2005

	Estonia	Finland	Estonia/Finland ratio
Tumours	204	104	2.0
Circulatory system disease	358	136	2.63
External causes related to injuries and poisonings	280	129	2.17

Note: standardized mortality coefficients per 100,000 people

Source: European detailed mortality database (DMDB). Copenhagen, WHO Regional Office for Europe, updated in January 2009

Table 2.4.2. Health loss in years due to mortality and morbidity in 2000–2002

	Men			Women		
	2000	**2001**	**2002**	**2000**	**2001**	**2002**
Years of life lost (YLL)	108 458	112 483	111 573	89 954	88 585	86 781
Years lost due to disability (YLD)	59 620	59 026	59 163	82 072	80 872	80 725
Disability adjusted life years (DALY)	168 078	171 508	170 736	172 023	169 458	167 506

Source: Lai T, Maakondlik haiguskoormus Eestis 2000–2003. Tallinn: Ministry of Social Affairs; 2006

The largest differences between men and women in terms of loss of life years appear in age groups 5–19 and 20–44. In these age groups, men lose three times as many life years as women. Boys and young men experience accidents several times more frequently than girls; in this age group external causes are the main reason for the loss of life years in the case of 60% of men and 40% of women. The loss of life years is 2.3 times higher among Estonian men than among women before the age of 65 (72,642 and 32,002 years, respectively) and 61% of the life years are lost by working age men.

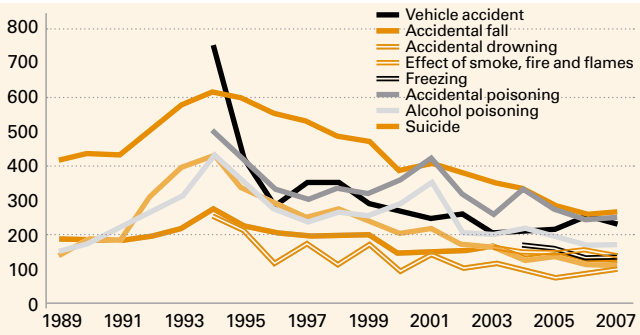
Of Estonian men, 13% die before they reach the age of 45, and 25% of lost life years can be attributed to this group. Meanwhile, although only 4% of women die before the age of 45, they make up 11% of the lost life years. In the case of men, external causes have a dominant role in causing loss of life years from birth until the age of 50, after which cardiovascular diseases assume a prominent role. Women are

Table 2.4.3. Summarized loss of health (DALY) – men and women

	Men						Women					
	0–4	**5–19**	**20–44**	**45–64**	**65+**	***Total***	**0–4**	**5–19**	**20–44**	**45–64**	**65+**	***Total***
Respiratory organ diseases	512	902	2067	4562	3360	*11402*	240	656	1773	2882	2748	*8299*
Tumours	243	1057	2616	1164	14319	*29889*	393	1138	5637	13843	15872	*36883*
Genitourinary organ diseases	17	64	254	701	1072	*2108*	22	235	1041	953	1179	*3430*
Joint and muscle diseases	152	910	2260	2935	1512	*7770*	134	1064	3148	5903	4114	*14363*
Other diseases and conditions	554	1364	2492	3386	3009	*10804*	843	1569	2640	3377	6726	*15156*
Infectious diseases	54	272	1082	798	191	*2398*	54	206	583	227	184	*1253*
Neurological diseases	2335	888	1425	1196	539	*6427*	2158	733	960	889	871	*5610*
Psychiatric diseases	145	1176	2721	1823	616	*6481*	66	770	2567	2223	1638	*7263*
Digestive organ diseases	61	107	1816	3163	1450	*6598*	46	151	1070	2005	1822	*5093*
Cardiovascular diseases	59	317	5110	21701	26214	*53402*	51	344	2585	12044	43745	*58769*
External causes	433	2831	14831	10503	2078	*30676*	254	917	3185	3758	1590	*9705*
Deformities and birth-related conditions	2042	465	178	46	11	*2742*	1017	394	209	47	17	*1684*
Total	**6627**	**10353**	**36852**	**62478**	**54425**	***170737***	**5278**	**8176**	**25397**	**48151**	**80504**	***167507***
%	**3.9**	**6.1**	**21.6**	**36.6**	**31.9**		**3.2**	**4.9**	**15.2**	**28.7**	**48.1**	

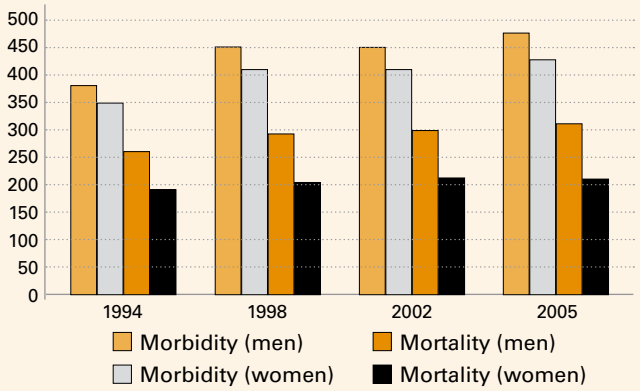
Source: Lai T, Kiivet R. (2004). Haiguskoormuse tõttu kaotatud eluaastad Eestis: seosed riskifaktoritega ja riskide vähendamise kulutõhusus. Ministry of Social Affairs, University of Tartu.

Figure 2.4.4. Various accidents, traumas and poisonings resulting in death



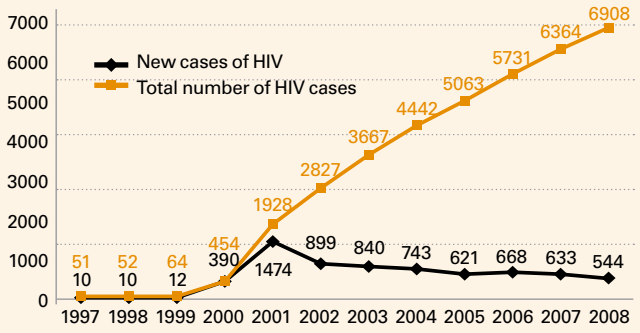
Source: Statistics Estonia

Figure 2.4.5. Cancer morbidity and mortality per 100,000 residents by men and women



Source: Statistics Estonia 2008

Figure 2.4.6. New HIV cases and total HIV cases, 1997–2008



Source: Health Protection Inspectorate

mainly subject to loss of life years due to external causes from birth until the age of 45. Loss of life years resulting from tumours is predominant among women aged 45–59, and cardiovascular diseases are the most common cause of loss of life years in the 60+ age group (Vals & Lai 2005).

Cardiovascular diseases

While cardiovascular diseases account for 50% of the total mortality rate in Estonia, their share of the mortality rate in developed European countries is closer to one third of the total. However, the prevalence of cardiovascular diseases as a cause for loss of life years among women has decreased significantly during the past decade, while mortality related to malignant tumours has increased (Sakkeus 2009).

Injuries

Deaths resulting from injuries are one of the leading factors in the loss of life years among men in their prime working age. In 2006, deaths resulting from injuries constituted 9.4% of all deaths in Estonia (the respective percentages in Finland and Sweden were 11.2% and 7.7%) (Kaasik et al. 2008). Injury-related deaths occur, on average, 3.3 times more often among men than women (in some age groups, there are even eight times as many injury-related deaths among men). The most frequent causes of deaths resulting from injuries among both men and women are suicide, poisoning (including alcohol poisoning), and deaths related to motor vehicle accidents. Of all men who died between the ages of 1 and 49, 50% perished as a result of an accident (the corresponding percentage among women was 30%) (Kaasik et al. 2008).

Since 2001, the number of deaths resulting from accidents, poisonings and traumas has fallen by 30%. The biggest decrease occurred in the case of deaths resulting from alcohol poisoning (see Figure 2.4.4.).

Cancer

Cancer is the second most important cause of death in Estonia after diseases related to the circulatory system and causes 20% of all deaths. According to the Estonian Cancer Registry, the number of first-time cancer patients is increasing constantly. In 1994–2005 malignant cancerous tumour incidence increased by 25% among men and 22.4% among women, while mortality increased by 20% among men and by 11% among women during the same period (see Figure 2.4.5.). According to data from 2003, men were most frequently diagnosed with lung cancer (nearly 20% of all new cancer cases among men), followed by prostate cancer, and colon and rectal cancer. Women are most often in danger of developing breast cancer (20% of all cases), followed by skin cancer, and colon and rectal cancer. Morbidity related to these forms of cancer has exhibited a continuous trend of growth over the years.

HIV and tuberculosis

By the end of December 2008, 6908 HIV cases had been registered in Estonia over the years, but UNAIDS estimates the probable number of infected individuals to be more than 10,000 (UNAIDS, 2008). The explosive spread of HIV began in 2000 in Ida-Viru County. The highest HIV incidence yet was diagnosed in 2001 – 1474 new HIV carriers were diagnosed during the year (see Figure 2.4.6.).

Estonia's registered HIV incidence rate is still the highest in Europe, although the number of new infections has decreased and stabilized compared to the peak level of 2001. The percentage of women among people who are first diagnosed with HIV has shown a trend of stable growth, increasing from 20% in 2000 to 36% in 2006 (Rüütle, 2008). This, however, can be explained by the decrease in the number of men diagnosed with HIV instead of an increase in HIV incidence among women. Since there is no evidence to the contrary, it is likely that the abovementioned women are

almost exclusively sexual partners of male injecting drug addicts and that the HIV epidemic has not yet spread outside the risk groups (Drew et al. 2008).

HIV has not yet had a significant effect on the comparative indicators of Estonia, but it is likely that the number of people who suffer from or have died of AIDS will increase significantly in the near future as the victims of the concentrated HIV epidemic[7] that started at the beginning of this century will reach the final phase of the illness. According to the worst scenario, the contribution of HIV to the burden of disease may equal that of cardiovascular diseases in a few years (Lai T, 2004), due to the fact that the Estonian epidemic has predominantly affected very young people. In Estonia, people under 25 made up 61% of all newly registered HIV cases in 2004, 57% in 2005, 45% in 2006, and 38.4% in 2007. The number of children to have contracted HIV from their mothers is 25 (Rüütle 2008).

The incidence of tuberculosis became more frequent in Estonia during the 1990s. In 1997, 51 new cases of tuberculosis were diagnosed per 100,000 residents – an incidence rate ten times higher than that of the Nordic countries. The danger of the recurrence of a tuberculosis epidemic came into being in Estonia due to inadequate care and the use of incorrect treatment regimens, which were, in turn, caused by a decrease in vigilance regarding tuberculosis in the health care system and the society as a whole (TAI, 2004). In 2006, there were 24.5 cases of tuberculosis diagnosed in Estonia per 100,000 residents (see Figure 2.4.7.) and by 2007 the number had grown to 29.8. In 2007, the tuberculosis incidence rate per 100,000 residents was lowest in Iceland (3) and highest in Lithuania (66.12) (Health Protection Inspectorate, 2008).

Although the incidence of tuberculosis has fallen in recent years, multiresistant forms of tuberculosis still pose a serious problem. Along with the halt in the decrease of 2007 infections, there has been a considerable increase in the frequency of HIV and tuberculosis coinfection.

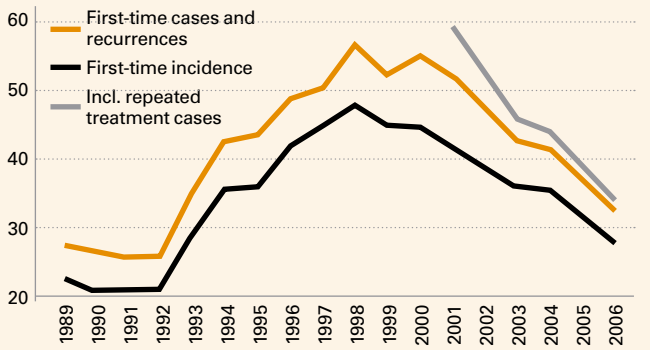
According to the Tuberculosis Registry, a tuberculosis patient was first diagnosed with HIV in Estonia in 1997. As of 2007, a total of 183 people with tuberculosis infections have been diagnosed with HIV. The tuberculosis patients who have contracted HIV have been 20–44 years old. The average age of a tuberculosis patient in Estonia is 45, so the risk groups do not overlap significantly based on age (Rüütle 2008).

Mental health

According to data gathered by WHO, mental disorders are the most important cause of loss of healthy life years all over the world, constituting 37% of the burden of disease among adults (people aged 15 and older) (WHO, 2008). According to the WHO, 9% of West and South European adult men and 17% of adult women suffer from severe lifelong depression. Although depression is the most common cause of mental disorders among both women and men, the latter are characterized by a much more frequent use of addictive substances (alcohol and narcotics).

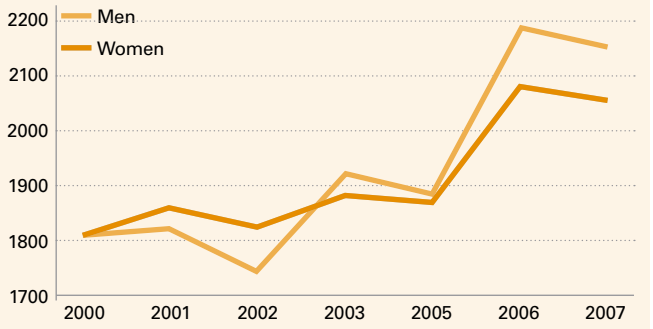
During the past five years, there has been a constant increase in the number of mental and behavioural disorder cases in Estonia, especially among men (see Figure 2.4.8.).

Figure 2.4.7. Tuberculosis incidence rate per 100,000 Estonian residents in 1998–2006 (including home care cases)



Source: Health Protection Inspectorate

Figure 2.4.8. Mental and behavioural disorders per 100,000 residents in the case of women and men



Source: Ministry of Social Affairs, 2007

Among men, the most common mental problems are mental and behavioural disorders caused by the use of psychoactive substances (917 cases per 100,000 residents). The most frequent mental disorders in the case of women are stress-related, neurotic, and somatoform disorders (871.4 cases per 100,000 residents) (Ministry of Social Affairs, 2007).

Suicides are an important cause of premature death in Europe. In 2006, an average of 10.7 suicide-related deaths per 100,000 residents occurred in the European Union (Lithuania had the highest suicide-related mortality rate with 28.9 deaths per 100,000 residents, while Cyprus had the lowest rate with only 2.4 deaths per 100,000 residents) (WHO). In 2008, there were 18.4 suicide-related deaths per 100,000 residents in Estonia (30.9 deaths per 100,000 residents among men and 7.7 deaths per 100,000 residents among women) (Statistics Estonia, 2008).

Compared to adults, the use of addictive substances by young people has increased recently (for more on this subject, see the next subchapter). The most common mental disorders among children and young people are disorders related to psychological development, behavioural and emotional disorders originating from childhood (including communication disorders and fears), and stress-related somatoform disorders (anxiety, adjustment disorders, mental retardation, etc.) (Saame, 2008).

[7] Estonia is characterized by a concentrated HIV epidemic, where the percentage of injecting drug users infected with HIV is higher than 5%, but remains lower than 1% in the case of pregnant women (National Institute for Health Development, *HIV-nakkus ja AIDS arvudes 2006*).

2.5. Lifestyle and behaviour as a source of health risks

As stated above, there has been an increase in the prominence of causes of death related to lifestyles and behaviour, characteristic of industrial countries. The most common among these factors are obesity, smoking, and alcoholism. Estonia is no exception in this regard. However, risks related to the use of narcotics and sexual behaviour are becoming more dangerously frequent in Estonia, especially among young people. In discussing these problems below, we will be paying special attention to the health and risk behaviour of youth.

Physical activity

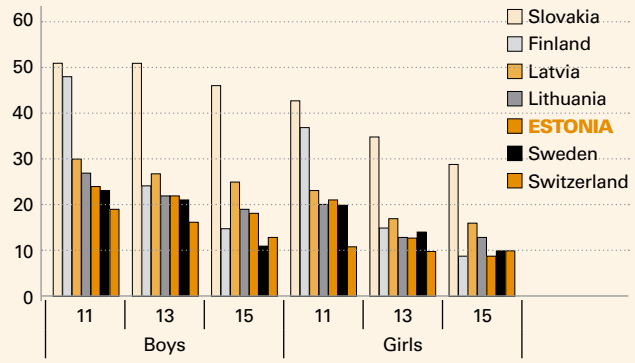
The main cause of excessive weight gain and obesity is insufficient physical activity. In 2006, 32% of adult men (ages 16–64) and 30% of women engaged in sports at least once a week for 30 minutes or more. Of the entire adult population, 43% engage in sports very rarely or not at all (Tekkel et al. 2007). These indicators have not changed significantly during the past ten years, although there has been a change in the preferred sports (Arvisto et al. 2004).

In youth, physical activity is related, on the one hand, to good academic results and, on the other hand, to a greater likelihood of also engaging in sports as an adult. According to the ESPAD survey, there are fewer drug users among people who engage in sports (ESPAD, 2008).

In Estonia, a total of 70,000 children aged 7–18 (approximately 1/3 of all children) are included in the activities of sports clubs and schools. According to a study conducted in 2003, 69.4% of boys and 55.6% of girls were engaged in physiologically sufficient sports training activities (2–3 hours a week or more). It is worth noting that the level of activity rose by ten per cent in the case of girls over the previous decade, while the level of activity among boys remained the same (Arvisto et al. 2004).

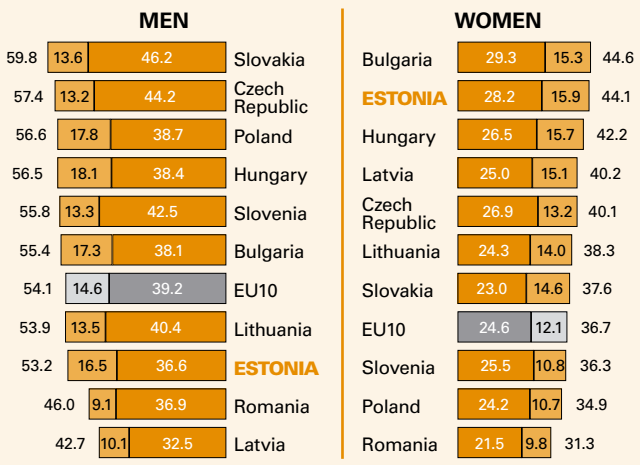
There are considerable differences between the daily levels of children's physical activity between countries. The highest level of activity was characteristic of children in Slovakia, while children in Switzerland tended to be the most passive (Figure 2.5.1.). In all of the countries, however, boys and young children are much more physically active. According to the survey, 24% of 11-year-old boys and 21% of 11-year-old girls play sports on a daily basis. By the age of 15, this percentage drops to 19% among boys and 9% among girls (HBSC 2005/2006). The last ESPAD survey shows, however, that more than 80% of young people aged 15–16 engage in sports at least once a week, although the most common way of spending free time is using the computer and the Internet (ESPAD, 2008).

Figure 2.5.1. Moderate engagement in sports (at least an hour a day) by age and country



Source: HBSC 2005/2006

Figure 2.5.2. Excessive weight (BMI>25) among people aged 20–64 in new EU member states (%)



Source: HealthGAP

Nutrition and obesity

The share of overweight people in the society has increased gradually since 1998 when 31% of adult (ages 15–64) men and 24% of women were overweight and 12% of men and 15% of women suffered from obesity. According to a 2006 survey, 36% of men and 25% of women were overweight, while 15% of men and 16% of women suffered from obesity.

In international comparison, excess weight is a serious problem for the population of Estonia: in 2002, Estonian women were the 5th most overweight and men the 11th most overweight among EU countries, with both groups well ahead of the EU15 average indicators (Figure 2.5.2.).

Overweight is not yet as significant a problem among Estonian children and young people. In 2006, 15% of 13-year-old boys and 6% of 13-year-old girls were overweight, while the corresponding percentages among 15-year-olds were 10% and 4%, respectively (HBSC 2005/2006).

The nutrition habits of the Estonian population have improved significantly over the past decade. The most important change has occurred with regard to the consumption of food fats. While only 28% of all Estonian residents aged 16–64 used vegetable oil as the main cooking fat at the beginning of the 1990s, by 2006 this percentage had increased to 92% (Tekkel et al. 2007).

Also, daily fresh fruit consumption has increased from 11% among men and 22% among women in 1992 to 18% and 36%, respectively, in 2006. A similar increase has occurred with regard to the consumption of vegetables (ibid).

Alcohol consumption

Europe has the highest alcohol consumption levels in the world, and the use of alcohol is deeply ingrained in many of the region's cultures. Alcohol is one of the principal global risk factors in terms of social damage and deterioration of health. According to data from 2002, the excessive consumption of alcohol caused the Estonian population to lose 22,248 life years, constituting 6.7% of the total burden of disease. Men account for 99% of the life years lost due to alcohol and the majority of the burden consists of losses due to premature deaths (Lai T, 2004). Taking into account the increase in alcohol consumption in Estonia as described below, it is likely that the damage caused by alcohol to people's quality of life is even more serious today.

Alcohol consumption has grown steadily throughout the past decade: the amount of alcohol consumed per resident has increased from 9.9 litres in 2002 to 12 litres by 2006 (see Figure 2.5.3.). The percentage of people who consume alcohol at least several times a week has grown from 37% to 46% among men and from 6.6% to 13.6% among women. The increase has affected all age groups, excluding young men (aged 16–24), whose indicators have vascillated between 32% and 37% in recent years (Tekkel et al. 2007). Consumption has grown in the case of both light and strong alcoholic drinks (Estonian Institute of Economic Research 2008). Women's alcohol consumption has doubled, and there has also been a growth in the percentage of women aged 15–64 who consume large amounts of alcohol (6 or more alcohol units[8]) which was 9.8% in 2000, compared to 12.5% in 2006.

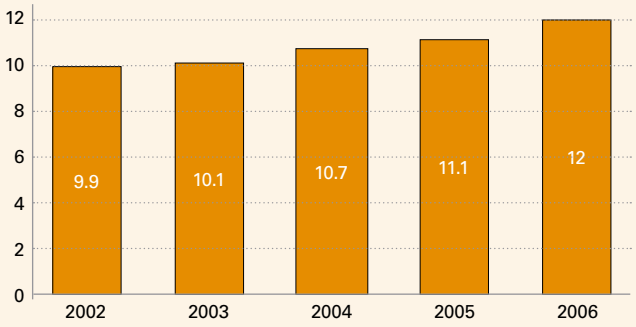
Although the rate of alcohol-related mortality is highest in the 45–54 age group, deaths resulting from alcohol use do occur at younger ages also. Young people's deaths are usually caused by injuries and many deaths resulting from injuries can be connected to alcohol use. Alcohol consumption is also related to suicidal behaviour and homicide.

The overall level of alcohol use among young people in Estonia is average in the European context (Figure 2.5.4.).

Young people's alcohol consumption varies significantly from country to country. In all age groups, the highest percentage of youth had consumed alcohol during the past week in Bulgaria and the lowest percentage in Norway. In most cases, daily alcohol use was more common among boys and increased significantly between the ages of 13 and 15.

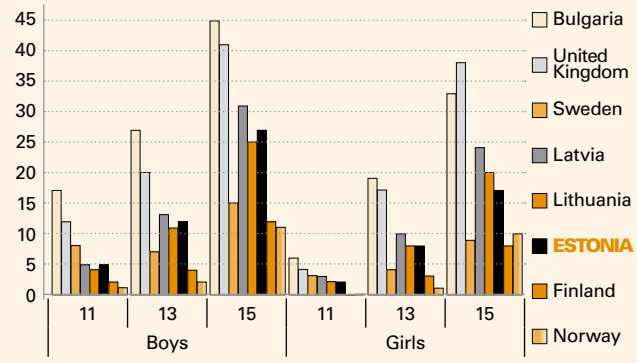
Several studies indicate that in comparison with other countries, the number of young alcohol consumers is higher than average in Estonia. Whereas 55% of Estonian school students had been drunk during the past year in 1999, by 2003 the level of young alcohol consumers had grown significantly and reached 68% (the corresponding European average indicators were 52% and 53%) (ESPAD, 2008).

Figure 2.5.3. Increase in alcohol consumption in Estonia in 2002–2006 (legal sales minus exported alcohol plus illegal alcohol, yearly pure alcohol consumption per capita, litres)



Source: Estonian Institute of Economic Research

Figure 2.5.4. Percentage of respondents who have consumed alcohol during the past week by ages



Source: HBSC 2005/2006

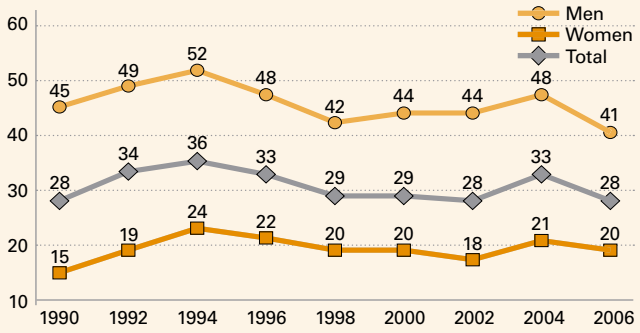
Smoking

The use of tobacco is a risk factor related to six of the eight most common causes of death in the world: respiratory tract cancer, chronic obstructive pulmonary disease, ischemic heart disease, cerebrovascular diseases, respiratory tract inflammations, tuberculosis. In 2002, diseases related to smoking constituted 8.3% of the total burden of disease of the Estonian population. Furthermore, the number of life years lost due to premature death related to smoking was three times higher than the number of healthy life years lost with regard to decreased quality of life. Men lose nearly four times as many life years due to smoking as women. As in the case of alcohol consumption, the 45–54 age group (i.e. working age people) accounts for half of all life years lost due to smoking (Lai T, 2004).

According to a health behaviour study of Estonian adults, the share of smokers among men has remained constant in Estonia since the beginning of the 1990s, while the percentage of smokers has increased somewhat among women. In recent years, however, there has been a noticeable downward trend, as 41% of men and 19.5% of women smoked on a daily basis according to a 2006 survey (Fig-

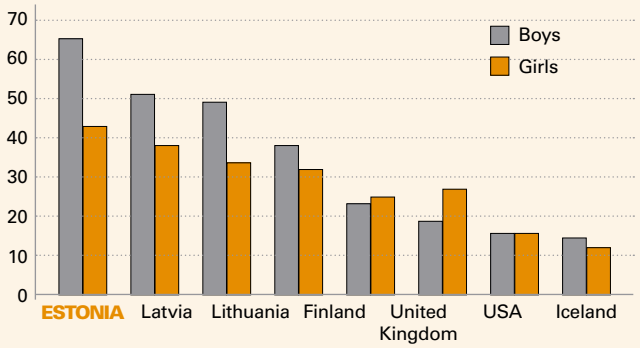
[8] Definition of unit of alcohol – The term drink or unit of alcohol is used internationally. In Estonia, one drink is considered to be 10 g of absolute alcohol. The size of a drink depends on its alcohol content: the stronger the alcohol, the smaller the amount that constitutes one drink.

Figure 2.5.5. Smoking in Estonia in 1990–2006



Source: Health behaviour study of adults 2006

Figure 2.5.6. 15-year-olds who started smoking when they were 13 or younger



Source: HBSC

ure 2.5.5.). In the Eastern European context, this is a middling result, while in developed Western European countries men tend to smoke less (34%) and women more (25%) than in Estonia (WHO 2002).

With regard to the quality of life, a very important change occurred in 2006 which affected the time spent in smoke-filled rooms in the workplace: the percentage of respondents who come into contact with smoke at work has fallen from 54% to 22% among adult men (ages 16–64) and from 30% to 8% among women when compared with 1992 (Tekkel et al. 2007). At home, contact with smoke has decreased during the same time period from 49% to 34% in the case of men and from 47% to 30% in the case of women (ibid). In 2006, 40% of men and 30% of women in Estonia spent time in smoke-filled public spaces on a daily basis, although the amount of time spent in such environments was less than one hour per day in most cases (ibid).

People usually start smoking at a young age. A significant percentage of smokers report that they started smoking and already became addicted in their youth. Health problems caused by smoking are related to the length and intensity of one's smoking habit. It is a public health objective to prevent or at least postpone smoking among young people. The longer smoking can be postponed, the less likely people are to become addicted.

On the one hand, the number of young people in Estonia who are experimenting with tobacco as well as those who are regular smokers has decreased significantly both among both boys and girls compared to the last ESPAD study (ESPAD, 2008). On the other hand, both Estonian boys and girls tend to start smoking earlier than their peers in other countries. In Estonia, 43% of girls and 65% of boys started smoking when they were 13 or younger (Figure 2.5.6.) (HBSC 2005/2006).

Young people themselves consider smoking to be very harmful to their health, and this opinion has become increasingly widespread in recent years. Nearly three quarters of young people thought that if they only smoked cigarettes occasionally, the risk to their health would be low to medium. The health risk associated with regular smoking (a pack a day or more) was considered high by the young respondents. Among girls, 78% considered the risk of regular smoking to be high, while 63% of the boys thought the same. The damage associated with smoking is sometimes considered even more serious than the damage connected to experimenting with illegal drugs (ESPAD, 2008). This is a result not only of a massive explanation campaign, but also of the transference of interest in experimentation, characteristic of young people, to addictive substances other than tobacco.

Drugs

According to data gathered in 2006, 25% of Estonian residents aged 15–64 had experimented with cannabis. Experimentation was most common among the 16–24 age group where 50% of men and 29% of women reported having tried cannabis (Tekkel et al. 2007). According to a study conducted in 2005, there are approximately 13,800 injecting drug users in Estonia, 62% of whom are HIV positive.

Since the 1960s, the use of both legal and illegal drugs has increased among the school students of all developed countries of Europe and most developed countries in the rest of the world. However, the indicators related to young people in Estonia surpass the average European figures in several cases (ESPAD 2008). A large percentage of Estonian youth aged 15–16 smoke, drink, and experiment with illegal narcotics (ESPAD, 2008). The previously fast growth in this trend has slowed in recent years, however. The experimentation with drugs, including alcohol, in Estonia is affected by the comparatively low price of the substances and their easy accessibility. Yet, after the fast increase in 1995–2003, which resulted in young people in Estonia passing the average European indicators with regard to addictive substance use, there has been no further significant growth in the number of users/experimenters according to 2007 study results. To the contrary, the percentage of users of legal drugs as well as some illegal drugs has fallen, despite still being higher than the European average (ESPAD).

The percentage of people experimenting with illegal drugs has increased compared to 2003, but long-term trends indicate that the rate of growth has slowed down. The drug used by the largest share of teenagers is still cannabis, and an increasing number of school students buy their first drug from a friend. Similarly, there has been an increase in tolerance regarding drug use – the percentage of young people who are successful at school and have experimented with illegal drugs has grown. In some Estonian regions, including larger cities and the surroundings of the capital, the percentage of young people experimenting with drugs is even higher than that of excessive alcohol consumers. As an interesting change, the percentage of people who experiment with illegal drugs has decreased

significantly among Russian-speaking youth in recent years, while the corresponding percentage among Estonian-speaking youth has increased noticeably (ESPAD).

In most countries, the percentage of cannabis users among young people falls between 10% and 20%. The indicators of 14 countries fall inside the 20–30% interval (including Estonia, where 31% of boys and 19% of girls have consumed cannabis) (Figure 2.5.7.). Cannabis use is not connected to the wealth of one's family in most countries.

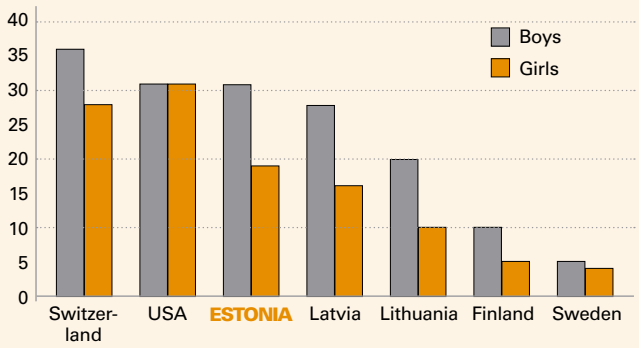
Sexual behaviour

The incidence and distribution of sexually transmitted disease cases shows a growing trend, both among young people as well as other age groups. Young people are also a risk group with regard to HIV/AIDS, as approximately 25% of all new cases are diagnosed among those who are 21 or younger. The use of condoms is widely recognized as an effective method for avoiding the spreading of sexually transmitted diseases (including HIV/AIDS), although the inconsistent use of prophylactics increases the danger of contracting sexually transmitted diseases as well as unwanted pregnancies. Condoms are the most common type of contraceptive among young people.

The tendency for risky sexual behaviour has fallen somewhat in the case of young people in recent years. A comparison of the data for 2005 and 2003, for example, indicates that the percentage of young men who have had sex with more than one partner during the past year has decreased in all age groups (ages 14–29) and the percentage of young women who have had more than one sexual partner in the past years has decreased in the 14–18 age group. Furthermore, condom use has increased across all age groups in the case of both young men and women. Young people in the 16–18 age group were most likely to use a condom when having sex for the first time (nearly 75%), while young people aged 25–29 were the least likely to use one (approximately 40%); about 60% of all respondents used a condom during their first sexual intercourse with a new partner in the 14–15 and 19–24 age groups (Lõhmus & Trummal, 2007).

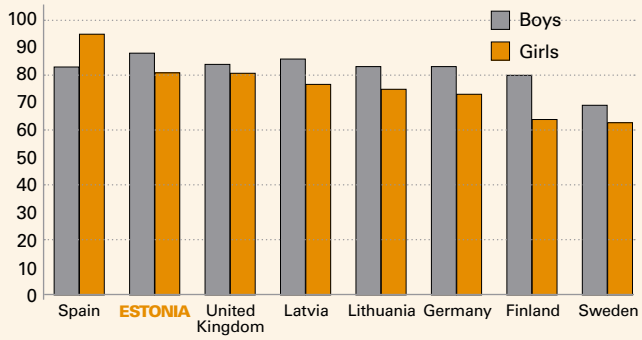
On the other hand, a comparison of the same sets of data from 2005 and 2003 reveals that the number of young people who have had a sexual relationship with a random partner has increased. The percentage of young people who consistently use condoms has increased among the 16–18 age group. However, the percentage of those who always use a condom when having sex with random partners has fallen in the three other age groups. According to the comparison of the two years, the share of 14–15-year-olds who used a condom every time when having sex with their stable partner during the past 12 months has decreased by 12%, while the corresponding figure for young adults (ages 19–29) has remained the same (Lõhmus & Trummal, 2007).

Figure 2.5.7. Percentage of 15-year-olds who have consumed cannabis in Estonia as compared to some other countries



Source: HBSC 2005/2006

Figure 2.5.8. Percentage of 15-year-olds who used a condom during their last sexual intercourse in Estonia as compared to some other countries



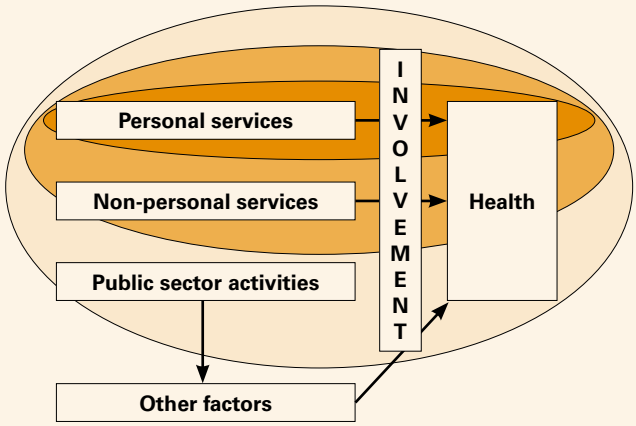
Source: HBSC 2005/2006

In international comparison, young people in Estonia are more rational than most with regard to sexual behaviour (Figure 2.5.8.). The highest percentage of youth used a condom during their last sexual intercourse in Spain (89%) and the lowest percentage used a condom in Sweden (65%). Among Estonian respondents, 88% of the boys and 81% of the girls confirmed having used a condom during their last sexual intercourse. Boys generally report having used a condom during their last sexual intercourse more frequently than girls (HBSC 2005/2006).

2.6. Health services and their availability

Health services are a set of all public and private organizations, institutions and resources devoted primarily to improving, maintaining and restoring health. Health systems include services aimed both at private individuals and the public, as well as activities for influencing the policies and arrangements of other fields in order for the latter to take into account social, environmental and economic health factors (WHO 2007). A graphic depiction of the health system's different levels is provided in Figure 2.6.1. Personal services include both medical and public

Figure 2.6.1. Overview of the components of the health system



Source: World Health Organization. Health systems performance assessment: debates, methods and empricism. Geneva, 2003

health-related services. Hospital care in the case of a serious illness is the most easily understandable type of service, although the category also includes initial medical attention from a family physician as well as vaccination, cancer screening, and syringe exchange services.

Non-personal health care services include, for example, the provision of clean drinking water and all possible sanitary hygiene, as well as information campaigns and other methods of motivating beneficial health behaviour.

A significant part of the public sector activities aimed at influencing health are actually related to the coordination of policies in different fields and the consideration of their impact on health. Economic and social conditions related to people's living and working environment affect their health, as does the limitation of behaviour that damages people's own health as well as that of others close to them, or the facilitation of activities beneficial to people's health. For example, limiting smoking has had a considerable effect on the decrease in cardiovascular diseases and lung cancer. Sales and advertising limitations have also affected alcohol consumption, especially among children and youth.

Thus, in addition to the coordination of the actual provision of services, the role of the health system is also important in inspiring all other sectors to act as beneficially as possible to public health in their policy fields. According to the WHO Tallinn Charter, general responsibility for the joint effect of various policies on health lies with the agency accountable for health in the public sector.

The role of health services in health development

The roles of the provision of medical services and the population's health behaviour in the development of public health are often contrasted. According to the modern approach, both play equally significant and complementary roles in improving the population's quality of life. The Tallinn Charter confirms that the ministers of health and finance in the European region believe in the capacity of strong health systems to save lives (Tallinn Charter, June 25–27, 2008).

The most complete recent approach to measuring the effect of health systems on the population's health stems from the concept of "avoidable mortality" (Nolte & McKee 2004). This is a further development on the method created by Rutstein et al. in the 1970s for measuring the quality of health care services. According to the method, the researchers select a list of diseases which are very unlikely to end in death if there is an effectively functioning health system in place (conventionally, premature mortality is seen as death before the age of 75). It is not expected that all deaths occurring as a result of the chosen diseases be avoided, but the provision of a successful health service is presumed to drastically decrease mortality rates related to those illnesses. Thus, taking into account the interrelation between illness and causes of death, the general effect of health services on public health is more likely to be underthan overrated.

The causes of death selected first are ones that are preventable through medical care as well as secondary prevention and medical treatment (i.e. "mortality avoidable through treatment"), for example cervical cancer, hypertension, appendicitis, etc. In the case of the second diagnosis group, the avoidance of mortality is successful not primarily due to immediate medical help, but rather through inter-sector intervention of outside medical care (i.e. "mortality avoidable through prevention"). For example, this can be observed in the case of lung cancer (avoidable through intervention that decreases smoking) and liver cirrhosis (avoidable through intervention that decreases the misuse of alcohol) (Nolte & McKee 2004). Mortality related to ischemic heart disease – one of the most frequent causes of death in developed countries – is treated separately, since prevention and treatment play an equal role in its avoidance (ibid).

According to a study based on this method, about 20% of men's mortality and 30% of women's mortality (i.e. of total deaths in the population during a certain time) would have been avoidable in Estonia as recently as during the turn of the century through better organization and provision of medical and public health services. These percentages showed no significant decrease during the entire last decade of the 20th century (see Figure 2.6.2.).

A comparison conducted by the same research team on the changes that occurred in EU member states during the 1990s shows that compared to the old EU member states, Central and Eastern European countries had higher mortality rates across all types of mortality by the beginning of the 21st century. Comparing the changes during the last decade of the 20th century, we notice that advancement has been slowest in the Baltic countries (including Estonia) and that the mortality rate even increased during the period with regard to illnesses not directly related to the health system.

What could be the stake of public services in increasing people's quality of life through improving and developing their health? Table 2.6.1. presents a comparison of the distribution of total health expenses calculated according to the OECD method by service type in 2000 and 2006. In keeping with the health service concept described above, this includes the majority of pub-

lic health services, but excludes the activities related to other sectors.

Parallel to the nominal increase in Estonia's GDP, the amount of money involved in the health care system practically doubled during the first six years of the 21st century Most of the funds were invested in medical services and pharmaceuticals, with the relative importance of the former falling and the latter rising somewhat during the six years. With regard to medical services, it is important to note that although care was added as a separate item during the period, this had no significant effect on the total relative importance of different treatment-related services. Prevention costs increased substantially, from 1.8% to 2.5%, reflecting not only the massive increase in HIV prevention, but also the implementation of large-scale national public health programs (see below).

Availability of health services

As of the end of 2008, 1,281,718 Estonian residents or 95.4% of the entire population were insured by the Estonian Health Insurance Fund. A year earlier, the corresponding indicators were 1,287,765 and 96.0%. Of all residents with health insurance, 51% contributed to the accumulation of medical treatment funds through social tax in 2008, compared to 52% in 2007.

Medical services

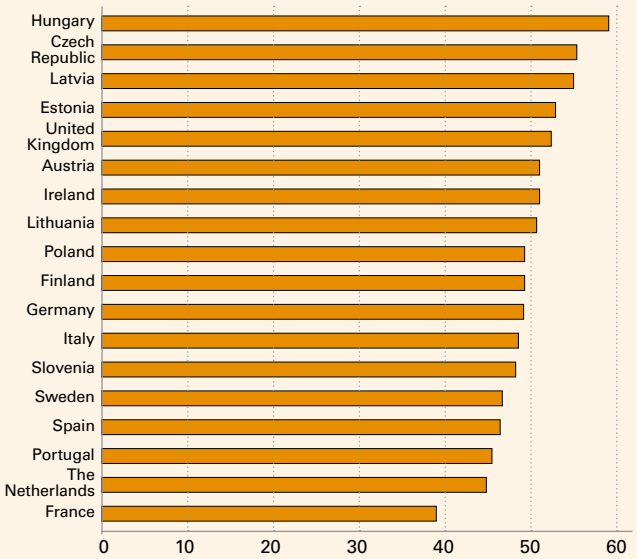
Of all medical services, most people encounter first contact care which should guarantee professional support in both monitoring an individual's health from birth to death as well as intervening quickly in the case of illnesses that do not require immediate hospitalization.

Figure 2.6.3. shows that the number of doctor's appointments has ranged around 7 million visits per year and that most of the appointments are made with family physicians following the implementation of family physician care. According to the 2008 Health Insurance Fund survey, 69% of people who visited their family physicians during the past 12 months were able to get an appointment within 2 days and 34% on the same day that they required first contact care. Meanwhile, 10% of the respondents encountered problems or impediments with regard to meeting their family physicians (Estonian Health Insurance Fund/Ministry of Social Affairs, 2008).

The family physician care network mostly covers the entire country and generally guarantees the accessibility of first contact care in all locations. The most significant problems related to accessibility are connected to the limited choice of first contact care services, where the needs and expectations of the population and the health care system are not met. These include the lack of qualified health care professionals in peripheral areas; the uneven and inadequate accessibility of services that essentially constitute first contact care (home nursing care, physiotherapy); the insufficient accessibility of general medical care outside the working hours of family physicians; the lack of accessibility of services for people without health insurance; and the insufficient availability of non-emergency transportation services (First Contact Care Development Plan, 2008).

Emergency medical care service, which is also included among individual first contact care services, is used

Figure 2.6.2. Avoidable (through treatment and prevention) mortality of total mortality (%), 2000–2001, in chosen EU member states



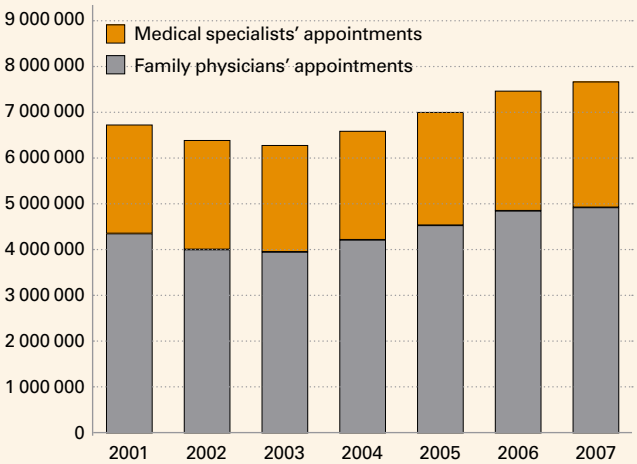
Source: Nolte & McKee 2004

Table 2.6.1. Breakdown of most important health care costs by function (millions of kroons)

Function	2000	2006	2000	2006
Medical services	3003.8	5496.1	58%	53%
Rehabilitation	58.7	118.8	1.1%	1.1%
Long-term care	0.3	369.7	0.0%	3.5%
Health care support services (including emergency care)	367.9	923.1	7.1%	8.8%
Medical products for ambulatory patients (including pharmaceuticals)	1282.5	2877.0	25%	28%
Prevention and public health care	90.9	265.7	1.8%	2.5%
Administration of health care and health insurance	231.4	284.6	4.5%	2.7%
Capital expenditure	110.0	105.7	2.1%	1.0%
Total	**5145.5**	**10 440.9**	**100%**	**100%**

Source: Ministry of Social Affairs 2007

Figure 2.6.3. Provision of family physician and specialized medical care services in 2001–2007



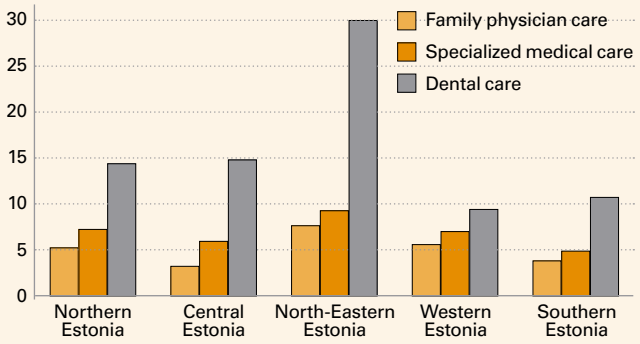
Source: annual reports of the Estonian Health Insurance Fund in 2002–2007

Table 2.6.2. Use of specialized medical care services in 2001–2007

	2001	2002	2003	2004	2005	2006	2007
Number of insured individuals who received specialized medical care	932 021	919 470	914 611	917 227	919 822	980 809	1 000 702
Out-patients	750 533	744 367	740 153			771 070	786 178
Day care						40 036	45 612
In-patients	181 488	175 103	174 458			169 703	168 912

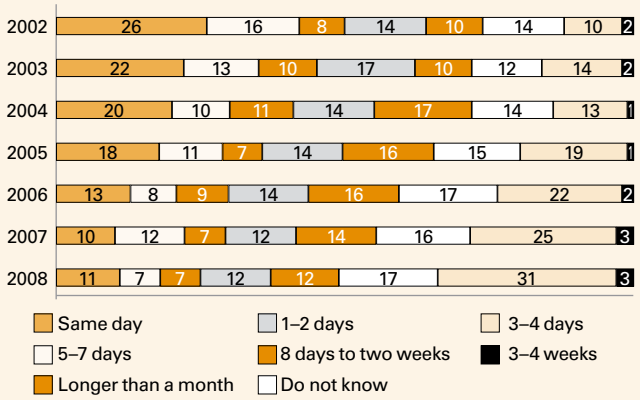
Source: Estonian Health Insurance Fund

Figure 2.6.4. Residents' assessment of the availability of medical care (Deprivation of medical care, %)



Source: Statistics Estonia

Figure 2.6.5 Waiting period for seeing a medical specialist, %



Source: Insured Patients' Satisfaction Survey. Estonian Health Insurance Fund & the Ministry of Social Affairs of the Republic of Estonia 2008

approximately 180 times a year per 1000 residents, while the corresponding indicator in the Nordic countries is about 100 cases per 1000 residents (Health Care Board). Although emergency medical care should mean providing care related to health problems that require immediate medical intervention, people use the service for a significantly wider variety of reasons. According to the Health Insurance Fund survey *Patsientide hinnangud tervisele ja arstiabile 2008. a* (Patients' Evaluations of Health and Medical Care in 2008), 37% of the population prefers to call emergency medical care professionals in the case of an unexpected health problem occurring in the evening, at night, or on the weekend. At the same time, a special family physician consultation hotline (phone number 1220) has been in operation since 2005 and should provide sufficient help in solving problems limited to initial consultation or visiting the doctor on the following day. While 7% of respondents used the hotline service in 2005 and 17% used it in 2007, in 2008, this percentage has dropped to 12% (Aaviksoo & Koppel 2008, Estonian Health Insurance Fund). People often prefer to call an ambulance because they will be certain to receive help and the help will be provided quickly. Among people who used the emergency medical care service within the last 12 months, 85% were satisfied or very satisfied with the ambulance crews.

The number of people who have received *specialized medical care* has increased in recent years, especially with regard to out-patient and day care services (Table 2.6.2.). In 2007, 61% of all insured individuals used out-patient services.

The assessment of Estonian residents regarding the availability of medical care has remained relatively unchanged during recent years. A little over a half of the respondents constantly rate the availability of medical care in Estonia as good or rather good according to the annual satisfaction survey organized by the Health Insurance Fund and the Ministry of Social Affairs (Estonian Health Insurance Fund/Ministry of Social Affairs, 2008).

The availability of medical care in Estonia is affected by one's place of residence, rather than whether one lives in a rural or urban area. The ratio of ambulatory services per person, which has been increasing slowly but steadily, differs by up to 60% in different regions. According to data from 2005, this ratio was 7.9 visits per resident in Tallinn and 4.6 visits per resident in Rapla County. The ratio was higher than average (6.1) only in Harju County, Tartu County, Pärnu County, and Saare County (Statistics Estonia, 2008). There have also been earlier descriptions of a nearly twofold difference in the frequency of hospital care between different counties (Kunst, 2002). According to a 2005 population survey, the highest percentage of Estonian residents did not receive medical care in North-Eastern Estonia (Figure 2.6.4.). Of the people who required treatment in the region, 30% did not receive dental care. The availability of family physician care was best in Central Estonia, where only 3.4% of the respondents reported not being able to receive care from their family physician when they needed it.

Attempts have also been made in recent years to reduce the length of the waiting lists. The general principle of operation of the Health Insurance Fund is to increase the volume of cost-effective services (e.g. family physicians' appointments) within the limited financial means and to reduce the size of waiting lists involving the most serious and noticeable problems (endoprosthetics, cataracts). Meanwhile, the waiting period for "common" doctors' appointments is being gradually lengthened (Aaviksoo & Paat, 2007). For example, the percentage of people who were able to get a doctor's appointment on the same day has fallen by 15% in 2008, or more than twice when compared to 2002. During the same period, the number of people who must wait for a medical specialist's appointment for more than a month has increased 3.1 times, from 10% in 2002 to 31% in 2008 (see Figure 2.6.5.). As a result, most Estonian residents will experience deterioration in the availability of specialized medical care in the short term due to the restrictions in place.

2.7. National public health care services

The majority of preventive activities aimed at the entire population of Estonia are undertaken through the public health strategies supervised by the Ministry of Social Affairs and the National Institute for Health Development. Furthermore, monitoring and supervision regarding infectious diseases and environmental health is performed by the Health Protection Inspectorate which grew out of the Soviet-era Sanitary and Epidemiology Service.

As of 2009, all strategies related to this area are formally combined in the Public Health Development Plan 2009–2020. The development plan includes five thematic categories, which are related to increasing social cohesion and equal opportunities, guaranteeing children a healthy and safe development, creating an environment supportive of health, facilitating healthy lifestyles, and ensuring the sustainability of the health care system. The priorities, strategic objectives, and sets of measures defined for the purpose of achieving the overall goals of the development plan are also broken down according to these categories (Public Health Development Plan, 2008).

Vaccination or immunization is one of the economically most profitable public health measures for protecting residents against infectious diseases. For example, with the help of vaccination, poliomyelitis has been eliminated in Europe and smallpox has been wiped out in the entire world. The rate of immunization of children in Estonia is very high (Figure 2.7.1.) and therefore the incidence of infectious diseases avoidable through vaccination, for example viral hepatitis B, has decreased considerably, or, as in the case of measles, rubella, diphtheria, and tetanus, has remained at a constantly low level.

The majority of the specific applied activities are carried out through categorized *public health strategies* which include:

- The National Strategy for the Prevention of Drug Addiction Until 2010
- Estonian National Strategy for the Prevention of Cardiovascular Diseases 2005–2020
- 2006–2010 Strategic Development Plan for Physical Movement Activities
- HIV and AIDS Strategy for 2006–2015
- National Cancer Strategy for 2007–2015
- 2008–2012 National Strategy for Combating Tuberculosis

Services related to public health

Several strategies directly fund various services. For example, the HIV and AIDS strategy provides funding for different damage reduction services aimed at drug addicts, such as syringe exchange programs and methadone substitution treatment. The strategy related to cardiovascular diseases funds counselling for quitting smoking; the physical activities' development strategy provides financial backing for medical services for young athletes; the cancer strategy supports counselling for giving up tobacco products; the tuberculosis combating strategy funds directly supervised tuberculosis treatment, etc.

Many services aimed at preventing diseases are also funded by the Estonian Health Insurance Fund. The implementation of these programs is part of the public health strategies. In 2007, the Supervisory Board of the Estonian Health Insurance Fund confirmed the long-term priorities for promoting health and preventing diseases. The pertinent projects are implemented based on these priorities.

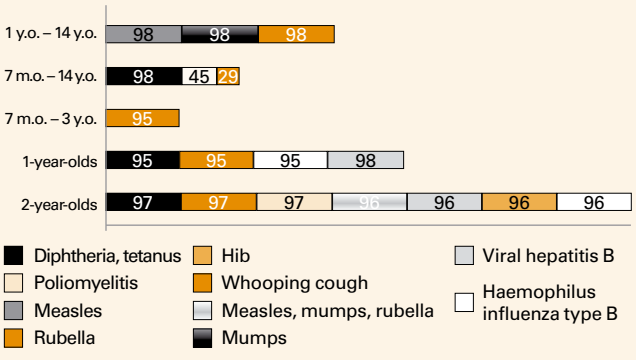
Such projects include the following activities:

- pre- and post-pregnancy counselling;
- counselling during pregnancy crises;
- pre-birth screening for the prevention of chromosome diseases;
- screening related to the hearing of newborn children in larger maternity hospitals;
- phenylketonuria and hypothyroidism screening among newborn children;
- rehabilitation of children who have lost a close family member;
- provision of school health care services in all general education schools and vocational schools which operate on the basis of basic education;
- counselling of young people regarding reproductive health and the prevention of sexually transmitted diseases;
- screening for the early detection of cervical cancer among women aged 30–59;
- additional study and testing of high-risk people who are aged 30–60 and have insurance for the prevention and early detection of cardiovascular diseases;
- screening for the early detection of breast cancer among women aged 50–62;

In the case of services aimed at the entire population of specific target groups it is important for them to reach all of those concerned, regardless of their socio-economic status, place of residence or level of education.

An important flaw in many public health services is their insufficient reach and uneven coverage. The availability of services aimed at small and clearly defined target groups is usually very good, for instance in the case of services directed at pregnant women and newborn chil-

Figure 2.7.1. Rate of immunization of children by age (%)



Source: Health Protection Inspectorate

dren. The majority of services are also available at least in all county centres. Meanwhile, in the case of the school health care service which was established to develop children's health and which reaches all schools, children who do not comply with compulsory school attendance do not receive the attention they need. Moreover, based on the Health Insurance Act, the Estonian Health Insurance Fund can only provide services to people who are insured, which automatically leaves out a very vulnerable 5% segment of the society. In the case of large-scale projects, the volume and coverage of the services is often planned beforehand based on the budgetary means of the Health Insurance Fund instead of the needs of the population (Aaviksoo, 2007) (Aaviksoo, 2008).

Many services are provided by non-profit association that depend on national or external funding and sponsorship, due to which the long-term development of such services is insecure and their sustainability is weak. An interesting recent development is the rise in social enterprise (Terve Eesti SA, MTÜ Convictus, MTÜ Käi Jala, etc.) where innovative business models allow for the better targeting of services and thereby the inclusion of more varied funding (including contributions from the private sector) which, in turn, facilitate growth and the elimination of risks.

Publicity and training related to public health

The activities related to the national strategies are largely aimed at changing the residents' behaviour through the public information provided by professionals dealing with the general population or certain problems. This includes the financing of media campaigns and mass events, as well as the development and publication of informational material and advice, and the organization of training.

The projects for preventing damage to health related to injuries incurred at home and during free time, including injuries related to alcohol consumption, which were organized in all counties are characteristic and successful examples of this. One of the most important results of these projects was the creation of regional cooperation networks that include not only agencies dealing with the different aspects of injuries (the police, the Rescue Board, educational institutions) but also the local decision makers and the media. The readiness to engage in promoting health has been increased at the national government and local government levels with relatively modest financial means. The political support of local governments for the expansion of health promotion activities has been achieved, with the result that local governments actively participate in developing and implementing safety-related activities.

As a result of an important structural change, so-called health councils have been established as a result of the public health strategies in all counties as well as larger cities. The objective of these councils is to coordinate the activities of the health care sector and outside fields in a more health-friendly manner (Public Health Development Plan, 2008). Successful inter-domain cooperation has a potentially very significant effect on the health of all residents of the region, for example, through the organization of the planning process and the public transport system, but also through the mutual provision of information.

Another activity that deserves separate attention is the development of various health consciousness networks which are also funded through public health programs. This includes networks of healthy schools and kindergartens, healthy workplaces and healthy hospitals. The aim of all of these measures is to promote awareness regarding options for benefiting one's own health and that of one's loved ones through planning basic daily activities.

A very important activity at the national level involves situation monitoring and analysis, which provides an adequate overview of the situation, allowing the country itself as well as other organizations and private individuals to better coordinate their activities and avoid risks. This has been stressed in every single one of the evaluation reports prepared by the WHO on national strategies (Drew 2008/ Farrington 2006).

Cooperation between sectors and the opportunities of local governments

International evaluation reports highlighted positively the integral approach taken by Estonia's newer public health strategies and the engagement of various parties and sponsors in accomplishing common goals. For example, the evaluation report on the strategy for the prevention of cardiovascular diseases advised us to develop further the campaigns aimed at the community as a whole. Adding transport policies (e.g. promoting walking and riding a bicycle and creating the opportunities to do so) to school-based intervention and individual programs aimed at changing health behaviour allows us to achieve considerably better results (Farrington, 2006). For example, areas with pedestrian-friendly streets encourage people to make walking an enjoyable part of their daily lives. However, achieving this might require cooperation between various sectors and the greater empowerment of local governments with regard to decision making.

One of the positive factors influencing young people's physical activity is the improvement in the availability of sports facilities and equipment to schools, which has coincided with the overall successful development of the country. In 2008, 62% of Estonian schools had stadiums (compared to 49% in 2003), 85% had a gym or the option of using one (compared to 75% in 2003), and 11% had the option of using a swimming pool (compared to 4% in 2003) (Raudsepp et al. 2008).

The examples provided above are just some of the ways in which health has been influenced positively by decisions made on the national and local level. Although more than half of Estonia's school pupils still consider both alcohol and tobacco to be readily available, the level of availability has decreased in recent years according to them (ESPAD, 2008). This can be seen as the result of the more stringent tobacco and alcohol policies adopted in Estonia. Positive results have also been achieved with the ban on smoking in establishments serving food, which was established in June 2007, making Estonia the 11th country in the world to enforce such a ban. A study conducted a year later revealed that the overwhelming majority of Estonian residents were in favour of keeping public spaces smoke-free. According to the study, a total of 86% of the respondents were satisfied with the ban on smoking in establishments that serve

food. No less than 70% of smokers were content with the smoking ban and 40% reported that they had considered giving up smoking after the restrictions were enforced (Klaster 2008).

2.8. The effect of health on macroeconomics

Health is determined by genetic, economic, social, cultural, and environmental factors. However, health can, in turn, have an effect on the economy.

Figure 2.8.1. provides a simplified overview of how health affects economic results in developed countries mainly through four channels (both on the individual and national level): improved productivity, a larger supply of labour force, better skills attained through higher education and better training, and more savings for investment in physical and intellectual capital. These four channels are depicted on the right hand side of the figure.

The left side of the figure introduces the factors that influence health: genetic background, lifestyle, living and working conditions (including access to health services and the use thereof, education, wealth, residence, profession), as well as more general socio-economic, cultural, and environmental conditions.

It is important to keep in mind the positive feedback from income to health when analyzing the effect of health on economic development. Wealth can affect health in two ways: directly through material circumstances which facilitate the development of health and also through its influence on social involvement, the opportunity to exercise control over the situations encountered in one's life as well as one's sense of security. If an individual's income is higher than a certain base level, its importance may lie primarily in its connection to other social and psychological factors, especially in societies where social involvement relies heavily on one's income (Marmot 2002).

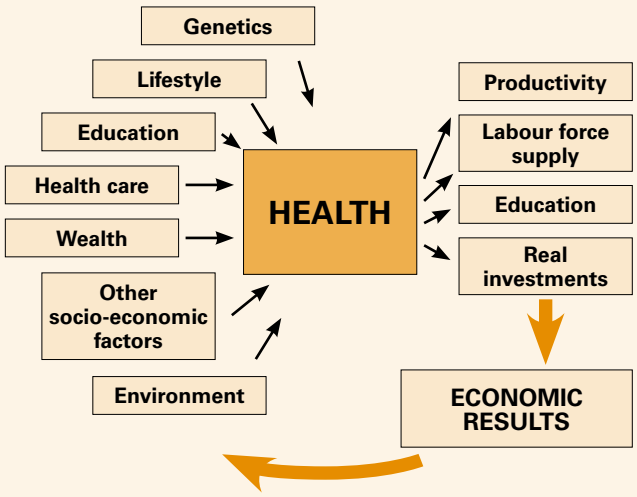
The ties between health and macroeconomics in Estonia were studied in a 2006 research project conducted jointly by the PRAXIS Center for Policy Studies, the World Health Organization, and the Ministry of Social Affairs of the Republic of Estonia (Suhrcke at al. 2006). The results of the analysis published in the study indicate that the state of health of adults affects economic productivity at the level of the individual, the household, and the national economy. The main conclusion of the analysis is that a bad assessment of one's health has a negative effect on all three of the labour market results.

First of all, the likelihood of people *offering their labour force* is smaller if their state of health is satisfactory. In Estonia, 40,000–50,000 people, i.e. 6–7% of the labour force (aged 15–74) are inactive due to an illness, injury or disability. Since 1997, this percentage has remained relatively stable with a slight upward trend. Naturally, the largest percentage of the inactive segment falls into the 50–74 age group (Statistics Estonia 2008). Men with a bad state of health are almost 40% less likely to participate in the labour market than men whose state of health is good. Among women, the corresponding indicator is 30% (Table 2.8.1.).

The same study also revealed a strong connection between the state of health and leaving the labour force in the case of both men and women. Thus, bad health increased the likelihood of a person leaving the labour force in the next couple of years by 6.4% among men and 5.6% among women, compared to those respondents who did not characterize their state of health as bad.

However, according to economic theory, health does not have an unambiguous effect on the supply of labour force. On the one hand, smaller salaries paid due to bad health and lower productivity can lead to a smaller supply of labour force as staying home becomes relatively more attractive due to the low income. On the other hand, the decrease in income due to lower productivity may motivate people to compensate by supplying

Figure 2.8.1. Connections between health and the economy



Source: Suhrcke et al. 2006

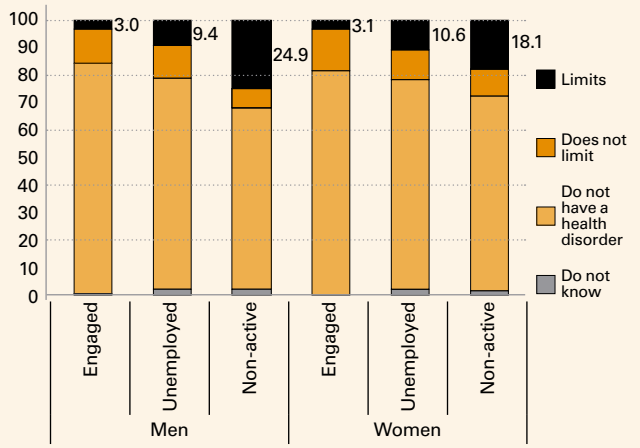
Table 2.8.1. The connection between participation in the labour force and state of health, compared to people with a good state of health (marginal effects)

	Men	Women
Satisfactory health	-10%***	-15%***
Bad health	-39%***	-29%***

*Note: *** significant at 1%*

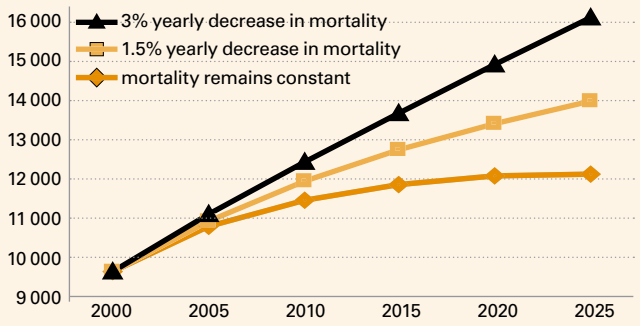
Source: Suhrcke et al. 2006

Figure 2.8.2. How much a health disorder limited (or "would have limited" in the case of unemployed persons) the type of work the respondents did in 2002



Source: Suhrcke et al. 2006

Figure 2.8.3. Simulated change in GDP per person in the case of different mortality rate scenarios (USD)



Source: Suhrcke et al. 2006

more labour force. The income effect probably increases in importance when the system of social benefits does not alleviate the impact of decreased productivity on one's earnings. The result of the contrary influences of the substitution effect and the income effect is ultimately an empirical issue (Currie & Madrian 1999).

The negative effect of a bad state of health is also confirmed by the smaller *number of working hours* and lower *income*. In the case of a bad state of health, the weekly number of working hours decreases by an average of 12 hours in the case of men and 8 hours in the case of women compared to people whose health is good (Suhrcke et al. 2006). Bad health reduces the net monthly income of working men by nearly 1300 kroons (i.e. approximately 30% of the average income of men in the given sample) and that of working women by about 600 kroons (i.e. approximately 20% of the average income of women in the given sample) (Suhrcke et al. 2006).

Bad health also affects the economy due to the *drop in productivity*, assuming that healthy people are more productive per working hour. Productivity is increased directly by improved physical and mental activity, while people who are more active physically and mentally are also able to make better and more effective use of technology, machines and appliances. A healthier labour force is presumed to be more flexible and adaptable to changes (e.g. changes in work assignments and the organization of work), thus decreasing labour turnover and the related costs (Currie & Madrian 1999). According to the Estonian Labour Force Survey, 21% of men and 23% of women aged 15–64 had experienced a health disorder in 2002. The percentage was 17% among working respondents, 24% among unemployed respondents, and 31% among inactive respondents. In general, a health disorder "considerably or somewhat limits" the type and amount of work done in the case of 3% of employed respondents, 9% of unemployed respondents, and 21% of inactive respondents (Figure 2.8.2.).

Health also has a presumable effect on a population's *level of education*. According to the theory of human capital, better educated people are more productive (and earn more). If children with a better state of health and a better diet obtain a better education, are absent from school less frequently, and do not drop out of school early, the improved health of young people will affect their productivity in the future. Furthermore, if good health is connected to longer life, healthy people have a stronger incentive for investing in education and training as their skill depreciation is smaller (Strauss & Thomas 1998).

Savings and investment. The health of an individual or a population affects not only the level of income, but the distribution of income between consumption, saving, and investments. People with a good state of health are more likely to lead longer lives, which is why they may save more than people whose state of health is bad. Thus, a greater collection of savings can be expected from a population whose life expectancy is rising fast. This should also facilitate investments into physical and human capital (Bloom, Canning & Graham 2003).

What, however, could the aggregated effect of the population's health be on the economic development of an entire society? Countries' experiences indicate that the health of the population has a clear impact on economic growth. Bhargava, Jamison and Murray (2001) use panel data regression to show that the speed of a 5-year GDP increase per person depends, among other things, on the mortality rate of a country's adult population and that the direction of causality is clearly from adult mortality to economic growth.

The results of a similar economic simulation conducted by Suhrcke, Võrk and Mazzuco indicate that the reduction in the rate of adult mortality would have a potentially significant positive effect on Estonia's economic growth. The authors of the study emphasize that the value of the results does not lie primarily in predicting the absolute GDP level, but instead in comparing relative changes in the case of different scenarios. In the case of the three scenarios analyzed (see Figure 2.8.3.), a yearly 1.5% decrease in mortality would increase Estonia's GDP per person by 14% in 25 years when compared to a situation where there is no drop in adult mortality. Accordingly, in the case of a 3% yearly drop in mortality, Estonia's GDP per person could be 30% higher. Since a reduction in mortality rates is also accompanied by a decrease in morbidity, the actual positive effect on the economy could be even greater.

A comparison with Finland shows that while the Estonian mortality coefficient (in the 15–64 age group) in 2000 was 641 (per 100,000 residents), the corresponding Finnish coefficient was 307 (WHO DMDB 2009). In the case of a 1.5% yearly decrease in adult mortality, it would take Estonia 49 years to reach the level Finland had attained by 2000. If our mortality rates dropped 3% on a yearly basis, we would reach Finland's level by 2025. Figure 2.8.3. indicates, among other things, that the growth of GDP per person halts or may be replaced with a downward trend if Estonia's adult mortality rate remains at its current high level (the constant mortality scenario). Thus, economic growth cannot last if the health of the population does not keep up with economic success.

2.9. Summary

In 2006, Estonia ranked 93rd in the world in terms of life expectancy, with people in only 86 countries living shorter lives than us. However, during the first years of the 21st century, life expectancy in Estonia has increased very quickly and the life expectancy of men and women has grown by 2.6 and 4.1 years, respectively (Statistics Estonia). This means that the increase in life expectancy has been quicker than at any time during the last half century and that Estonians live longer today than ever before.

A stagnation trend began in the life expectancy of the populations of the entire Soviet Union, and also in all of the other so-called socialist Eastern European countries around the 1960s. Estonia was no exception. As a result, in forty years the life expectancy of men has not changed at all and the life expectancy of women has grown by only two years (Katus 2009). In the 1960s, Estonian and Finnish women had the same life expectancy, while our men's life expectancy was one year less than that of the men living in what was one of the most backward Nordic countries at the time. The difference has constantly increased ever since (see Caselli 1995, Katus 2009).

In Estonia, the average life expectancy of 1980 was surpassed only in 1996. We have worked hard to reach the level that Europe's wealthiest countries were at 20 years ago and despite our great spurt during the past five years, the other countries have kept increasing their lead over Estonia throughout the time following our restoration of independence. The development in women's health has been more stable; the difference between the life expectancy of Estonian and Finnish women was nearly 5 years in 2006. In the case of men, however, the difference was already 9 years (WHO 2009). Why is that?

Overall, the shortness of Estonia's average life expectancy can be attributed to both the self-destructive health behaviour of the population along with the environment and values that promote such behaviour as well as the inefficient health system that has not been capable of implementing measures that improve health with the necessary speed (Nolte & McKee 2004).

Empirical studies indicate that the good state of health of a population is not only a natural by-product of economic growth, but that the health of the population also affects economic development. With an aim of a yearly 3% decrease in mortality, we could reach Finland's current level by 2025 and the GDP per person could potentially increase by 30% compared to a scenario where the mortality rate remains at its present level (Suhrcke et al. 2006).

There is potential for the development of public health in both the improvement of health behaviour as well as the more extensive and effective operation of the health system. While relatively good results have been achieved in improving the healthiness of the population's diet, taking into account our latitudinal position and purchasing power, the rate of engagement in movement activities of Estonian residents is still as insufficient as it was at the beginning of the 1990s, despite the significant improvement in opportunities. Moreover, risk behaviour, especially among working age men, has not changed considerably, as alcohol use is constantly growing and the reduction in smoking is slow.

Estonia's relative backwardness in comparison with other European countries is smallest in the case of children's and young people's health. It is true that Estonian youth cannot be set up as an example for their health behaviour, but during the last couple of years their rationality has increased with regard to several aspects and there have been changes for the better. Examples of such improvements include the decrease in risky sexual behaviour and even a halt in the increase of alcohol and tobacco use. However, compared to other countries, Estonian children's problems include early experimentation with addictive substances and more frequent cases of alcohol-induced intoxication.

Health behaviour can be affected directly through the provision of relevant information and the creation of a favourable environment. This also applies in the case of Estonia. Practical examples include the improvement of people's diet through the increase in the availability of vegetable cooking oil and fresh fruits and vegetables since the 1990s, but also the improvement in the sexual practices of young people as well as the changes in attitudes towards smoking among both Estonia's youth and adults. In addition, regardless of the unjustifiably fast spread of HIV, the occurrence of an epidemic among the general public has been so far successfully avoided. According to the latest analyses, this can be associated with the prevention measures implemented (Drew et al. 2008).

There still exist considerable inequalities in Estonia between men and women, between Estonia's different regions and between different ethnic groups or groups based on income and education. Women's mortality indicators are still improving faster than those of men in all age groups (Statistics Estonia 2009). The average life expectancy of ethnic Estonian men is comparable to the European average in the 1970s, while the life expectancy of non-Estonian men is three years lower and thus comparable to the average of the rest of the Europe in the 1950s (Sakkeus 2007). People with lower incomes and those who are ill more frequently contribute more of their own resources to health care (Habicht et al. 2006) and specialized medical care is not equally available. In addition, there are manifold differences between the use of, for example, hospital care in different regions (Kunst et al. 2002).

2.10. Policy recommendations aimed at improving quality of life related to the health of the Estonian population

An important key to developing people's health and improving it, if necessary, is their own *behaviour*. However, health-related quality of life can also be improved by *creating favourable conditions for making healthy choices* and by adding capital through *involving responsible private enterprises*.

A good example of this, in addition to constructing sports facilities, is simply creating the conditions for physical movement in the form of light traffic roads, well-lit paths, parks, etc. It is very important to support the physical environment with active publicity and the activation of business and social organizations. Estonia has a number of *good examples that should be presented to a wider public*. This would allow us to achieve the desired results more quickly through learning from each other and engaging in cooperation.

The best level for merging various fields and interests is the community which, in many cases, can mean the local government, the village or the city district. An important achievement that should be reinforced is the *creation of local health networks* between various parties who wish to coordinate their activities in a health-conscious manner.

The propensity of people to emulate life around them makes *leadership and the creation of examples* very important. At the national level, for example, much has been achieved with the technically simple but ethically multifaceted decision to limit smoking in public spaces, which is supported by the overwhelming majority of residents and most smokers themselves. In addition to the changes in the physical environment, such decisions send important signals that help people make voluntary changes in their behaviour. Fighting against the use of tobacco is also a good example of international cooperation supported by the WHO Framework Convention on Tobacco Control.

Dealing with the *HIV epidemic* will continue to be a topical issue in Estonia. On the one hand, increasingly more attention must be devoted to patients who have reached the AIDS phase, meaning an *increase in the treatment burden*, but also the necessity of *increasing our ethical level* to attain the capacity for unbiased relations with fellow-Estonians diagnosed with this disease. Since Estonia continues to be the European country with the fastest growing HIV infection rate, *preventive activities must be continued* as strongly or even more forcefully than before in order to ensure that the positive trend achieved in recent years persists. Among other preventive measures, the efforts of the local governments in Tallinn and Ida-Viru County in solving the health problem specific to them deserve recognition and encouragement as well as to be set up as an example for other local governments.

Health services paid for by public funds in order to improve people's quality of life should be *universally and freely available to all* members of the target group, not only those who are most accessible. This should be especially closely monitored in the case of people who are worse off economically, since poorer members of the society may have very many risks competing with their health-related choices. In this case, the professional approach means finding solutions aimed at *specific target groups* rather than the middle ground. This type of judicious policy requires a *significant investment in analysis* focusing on everything from the causes to the effects.

Previous economic recessions have shown that Estonian residents are very sensitive to changes in the economic environment and that it is usually the most vulnerable social groups that are in danger of deterioration in their state of health. In order to guarantee the successful and sustainable development of society it would be important to guarantee *basic first contact medical care to the entire population*, regardless of their social status (including their insurance status).

Taking into account the particularities of the funding of the Estonian health care system and its reliance on just half of the population, compensatory measures should be implemented. Additional funding could be gained through a *more equitable distribution of the burden of financing* as well as through *increasing the range of options* in areas where the interests of less capable members of the society would not be hurt, thus guaranteeing a wide basic service coverage. In relation to the suggestions above, it is very important to ensure that the *financial risk involved in using the services does not increase*, as this has been a growing danger in Estonia during recent years.

In addition to the monitoring of contribution sizes, successful risk management also requires us to guarantee the deliberate interaction of various policies. In an economically difficult context, residential policies, transport, education and tax policies as well as regional policies can be used to increase the health and life expectancy of the population. In any case, analyses indicate that investment in health is profitable.

References

1. Aaviksoo et al. (2007). Rinnavähi varajase avastamise projekt aastateks 2002–2006. Tallinn: PRAXIS Center for Policy Studies.
2. Aaviksoo A, Paat G. (2007). Tervishoiuteenuste kättesaadavus . Sotsiaaltrendid 4/2007, Statistics Estonia.
3. Aaviksoo et al. (2008). Noorte reproduktiivtervisealane nõustamine ja sugulisel teel. Tallinn: PRAXIS Center for Policy Studies.
4. Abdel R. Omran The Epidemiologic Transition: A Theory of the Epidemiology of Population Change The Milbank Memorial Fund Quarterly, Vol. 49, No. 4, Part 1 (Oct., 1971), pp. 509–538
5. Arvisto M, Noormets J, Paju K, Piisang M, Roosalu M. (2004). Noorte spordiharrastuse struktuur ja arenguvõimalused, Estonian Sports Information Centre.

6. Caselli Graziella (1995). The key phases of the European health transition. Polish Population Review, No. 7, pp. 107–125.

7. CSDH (2008). Closing the gap in a generation: health equity through action on the social determinants of health. Final Report of the Commission on Social Determinants of Health. Geneva, World Health Organization.

8. Drew et al. (2008). EVALUATION OF FIGHTING HIV/AIDS IN ESTONIA. World Health Organization.

9. Drew R, Donoghoe M, Koppel A, Laukamm-Josten U, Politi P, Rotberga S, Sarang A, Stöver H. Evaluation of Fighting HIV/AIDS in Estonia, World Health Organization 2008.

10. Estonian Institute of Economic Research. (2008). Alcohol market, consumption and harms in Estonia. Yearbook 2008, Estonian Institute of Economic Research.

11. Esmatasandi arengukava. (2008). Esmatasandi tervishoiu arengukava aastateks 2009–2015. Tallinn: Ministry of Social Affairs.

12. ESPAD. (2008). KOOLINOORED JA UIMASTID: 15–16-aastaste õpilaste legaalsete ja illegaalsete narkootikumide tarvitamine Eestis. Tallinn: TLÜ Kirjastus.

13. Estonian Health Insurance Fund. (2008). PATSIENTIDE HINNANGUD TERVISELE JA ARSTIABILE. Tallinn: Estonian Health Insurance Fund.

14. EU Common Principles. (2006) Council Conclusions on Common values and principles in European Union Health Systems (2006/C 146/01)

15. European Commission and Parliament (2004). Building our common Future: Policy challenges and Budgetary means of the Enlarged Union 2007–2013. Communication from the commission to the council and the European parliament. COM (2004).

16. Eurostat. (2008). Retrieved 01 12, 2009, from http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1090,30070682,1090_33076576&_dad=portal&_schema=PORTAL

17. Farrington et al. (2006). to evaluate the Estonian National Strategy for the Prevention of Cardiovascular Diseases 2005–2020. World Health Organization.

18. Habicht J, Xu K, Couffinhal A, Kutzin J. Detecting changes in financial protection: creating evidence for policy in Estonia. Health Policy and Planning (2006); 21 (6): 421–31

19. Habicht J, Lai T, Aaviksoo A. (2008). Ebavõrduses tervises – lahendamata väljakutse. Sotsiaaltrendid 3/2008. Statistics Estonia.

20. HBSC. (2005/2006). Inequalities in young people's health. Health policy for children and adolescents. no. 5.

21. HDR. (2007/2008). Human development reports . Retrieved 01 06, 2009, from 21. http://hdr.undp.org/en/

22. HealthGap. (2008). Closing the health gap in European Union. HEM-Closing the Gap.

23. Health Protection Inspectorate. (2008). Nakkushaigused. Retrieved 01 08, 2009, from www.tervisekaitse.ee

24. HEW. (2008). US Department of Health Education and Welfare. Retrieved 01 12, 2009, from http://flagspot.net/flags/us_hew.html

25. Kaasik et al . (2008). Eesti vigastuste ennetamise strateegia alusdokument. Tallinn: PRAXIS Center for Policy Studies.

26. Katus, Kalev (2009). Data on population mortality in the Baltic countries. Vallin, Jacques; Hertrich, Veronique; Jasilionis, Domantas; Katus, Kalev; Krumins, Juris; Mesle, France; Shkolnikov, Vladimir; Stankuniene, Vlada. (Eds) Mortality and the causes of death in the Baltic States. Paris, INED (to be published in 2009).

27. Klaster (2008). Hinnangud tubakaseaduse mõjule. National Institute for Health Development / Klaster, Tartu 2008

28. Kunst, A. H. (2002). Social inequalities in health in Estonia. Tallinn.

29. Kunst A, Leinsalu M, Kasmel A, Habicht J. Social inequalities in health in Estonia. Main report. Tallinn: Estonian Ministry of Social Affairs; 2002.

30. Lai T, K. R. (2004). Haiguskoormuse tõttu kaotatud eluaastad Eestis: seosed riskifaktoritega ja riskide vähendamise kulutõhusus. Ministry of Social Affairs, University of Tartu.

31. Lõhmus & Trummal. (2007). HIV-i TEMAATIKAGA SEOTUD TEADMISED, HOIAKUD JA KÄITUMINE EESTI NOORTE HULGAS. Tallinn: National Institute for Health Development.

32. Mackenbach J, Bakker M (eds). Reducing inequalities in health: a European perspective. London: Routledge, 2002

33. Ministry of Social Affairs. (2007). Health statistics. www.sm.ee.

34. National Institute for Health Development. (2004). Riiklik tuberkuloosiprogramm aastateks 2004–2007. Tallinn: National Institute for Health Development.

35. Nolte E, McKee M. (2004). Does health care save lives? Avoidable mortality revisited. The Nuffield Trust 2004

36. Public Health Development Plan. (2008). Public Health Development Plan. Tallinn: Minsitry of Social Affairs.

37. Raudsepp L, Veskimets E. Võsaste A, Kaljurand A (2008). Kehalise kasvatuse õpetamise tingimused ja olukord Eesti koolides. Estonian Sports Information Centre 2008.

38. Rüütel, K. (2008). HIV, AIDS ja seotud nakkused arvudes. Seisuga 31. detsember 2007. aasta. Tallinn: National Institute for Health Development.

39. Saame, I. (2008). Laste ja noorte tervis 2003–2008. Valdkonna arengud. Tallinn: Ministry of Social Affairs.

40. Sakkeus, L. (2007). Rahvastiku areng sidusrühmade kaudu. A. Purju (ed.) Sotsiaaltrendid 4, (11–38). Tallinn: Statistics Estonia.

41. Sakkeus L. (2009). Eesti rahvastiku tervise areng. To be published in 2009.

42. Statistics Estonia. (2008). Statistics Estonia database. Retrieved 01 03, 2009, from www.stat.ee

43. Statistics Estonia. (2009). Statistics database. (12.01.2009) www.stat.ee

44. Suhrcke M, Võrk A, Mazzuco S. The Economic Consequences of Ill-health in Estonia. WHO Regional Office for Europe, Ministry of Social Affairs of Estonia, PRAXIS Center for Policy Studies. Tallinn, May, 2006.

45. Tallinn Charter. (25–27 June 2008). The Tallinn Charter: Health Systems for Health and Wealth. Tallinn: WHO European Ministerial Conference on Health Systems.

46. Tekkel M, Veideman T, Rahu M. (2007) Eesti täiskasvanud rahvastiku tervisekäitumise uuring, National Institute for Health Development, 2007

47. UNAIDS. (2008). 2008 Report on the global AIDS epidemic. XVII International AIDS Conference held in Mexico City August 2008.

48. UNAIDS (2008), 2008 Report on the global AIDS epidemic http://www.unaids.org/en/KnowledgeCentre/HIVData/GlobalReport/2008/2008_Global_report.asp (12.01.2009).

49. Vallin J. (2005). Diseases, deaths and life expectancy. Genus, vol. LXI (Nos. 3–4), 279–296

50. Vallin, J., Meslé F. (2005). Convergences and divergences: an analytical framework of national and sub-national trends in life expectancy. A new approach to health transition. Genus, LXI (No.1), 83–124.

51. Vals K, Lai T. (2005). Rahvastiku tervisekaotus ehk haiguskoormus: hindamise metoodika. Eesti Arst , 84 (7): 473–480.

52. Whitehead M. The concepts and principles of equality and health. Copenhagen: World Health Organization, 1990

53. WHO (2002), World Health Report 2002, World Health Organisation

54. WHO. (2007). Boundaries of the health system. Retrieved 01 08, 2009, from http://www.euro.who.int/healthsystems/20070323_2

55. WHO. (2008). The global burden of disease: 2004 update. World Health Organization .

56. WHO/EURO Health for All Database; http://www.euro.who.int/HFADB (12.01.2009)

CHAPTER 3

Quality of life and life satisfaction in Estonia in international comparison

3.1. Introduction

The concept and nature of quality of life

Not long ago it was thought that social development meant a rise in the living standard. However, a new approach, which adds a qualitative dimension to the concept of quantitative growth, was developed in the 1970s (Zapf 2000). According to the new approach, having an income, a car or a house cannot be automatically equated with leading a good life, or, in other words, having more possessions does not necessarily improve one's quality of life. Based on this logic, the slogan for social development became "qualitative growth instead of quantitative growth", or "quality of life is more important than living standard". Today, the concept of "quality of life" is used not only as a scientific term or a political concept, but also in colloquial language.

What is quality of life? In the broadest sense, quality of life characterizes the general well-being of people and shows how well people cope with the various areas of daily life that reflect the significant values and goals of the society (Land 2001). First, the quality of life indicates the resources used by an individual and the result of their use (Erikson 1993), while "resources" and "results" do not only mean economic resources or material living conditions, but are also equally indicative of non-material and non-economic resources. Using resources and achieving results is, to a greater or smaller degree, dependent on the environment surrounding the individual – the family, community, and society on a broader scale. Thus, the general social environment should correspond to people's needs and abilities, guaranteeing their equal access to various goods and services (education, health care, income maintenance, etc). The social, political and cultural context of an individual's life determines the extent to which people are able to achieve the goals they have set for themselves. It is assumed that if there is a balance between individual needs and the opportunities provided/afforded by the environment, the general quality of life of a society tends to be higher.

Quality of life cannot be objectively described through objective living conditions alone (e.g. income, state of health, size of individual social networks, or working conditions). The subjective assessment provided by a person (good – bad, satisfied – not satisfied) regarding their life as a whole and other so-called objective conditions are equally important in terms of determining quality of life. Wolfgang Zapf (1984) has defined quality of life as "*good living conditions which correspond to positive subjective well-being*". According to Erik Allardt (1993), people have three main needs in having, loving and being, which are, in turn, divided into objective and subjective needs (Figure 3.1.1.).

Figure 3.1.1. Conceptualization of the quality of life (adapted from Allardt (1993))

QUALITY OF LIFE OF THE SOCIETY

(social resources and barriers of the general quality of life, e.g. the quality of institutions: education, healthcare, institutions guaranteeing security, etc.)

INDIVIDUAL QUALITY OF LIFE

MATERIAL	NON-MATERIAL	
HAVING (material needs)	**LOVING** (social needs)	**BEING** (needs related to personal development)
Indicators for the living standard and environmental conditions	Objective indicators for social relationships	Objective indicators that show the relationship between people, society and nature
Satisfaction with living conditions	Happiness, subjective feelings related to social relationships	Feelings related to alienation and personal development

Measuring the quality of life

According to Ruut Veenhoven (1996), the influence of the social environment on the well-being and quality of life of a person can be viewed as the livability of societies, a concept that can be understood in terms of the living con-

ditions of a society, which should meet the needs and abilities of people (wealth, political freedom, equality, access to education, etc.). Such an understanding can be conditionally termed as "input-based" measurement of quality of life, where an assessment is made of the opportunities provided by a society for leading a high-quality life. This approach has been criticized for the unconfirmed presupposition that better social conditions can be automatically equated with a higher level of individual well-being. Another problem results from determining individuals' needs and abilities to which the social conditions should correspond. (Noll 2002).

The "output-based approach" studies people's quality of life through subjective well-being (e.g. assessments of their state of health, satisfaction with life, happiness or satisfaction with their living environment (school system, healthcare services, infrastructure, etc.)) (Veenhoven 1996). According to this approach, the quality of life of a society is determined by the average quality of life of its members. In the temporal or spatial comparison of the general quality of life, it is important to combine the two approaches, taking into account that an increase in the general affluence of a society does not mean that people's happiness increases at the same rate. Cummins (2000) believes that general economic growth is only expressed in general subjective satisfaction if there is a decrease in the percentage of the population living below the poverty line.

In addition to the quality of life derived from the general environment, the quality of life is also determined by the resources and abilities of the individual. Resources related to the quality of life include, first of all, income, i.e. the material welfare of an individual or a household, followed by the state of health, work, relationships with friends and family, involvement in the community, personal safety, emotional well-being (Cummins 1996). Personal free time is another important resource in the context of current lifestyles.

Resources related to the quality of life provide the opportunity to satisfy basic needs; the satisfying of basic needs creates individual quality of life which is expressed in the individual's feeling of satisfaction and positive assessments regarding their way of life. This means that in addition to objective indicators, subjective individual satisfaction must be taken into consideration when measuring quality of life. Subjective satisfaction with life comprises satisfaction with various spheres of life: satisfaction with family life, relationships with friends, health, personal success, economic situation, etc. (Campbell 1981). Subjective indicators not only reflect the objective situation, but also point to the gap between expectations and the actual situation. Subjective assessments thus reveal the problematic spheres of life where barriers prevent the achievement of goals (e.g. the improvement of living conditions or family relationships). Individual satisfaction assessments are formed through various social comparisons (compared to a reference group, an earlier situation, or a situation considered ideal or suitable).

The following chapter measures the quality of life based on the Erik Allardt's approach to well-being, according to which the quality of life consists of objective resources and subjective assessments in the dimensions of having, loving and being.

Three aspects are taken into consideration in analyzing the quality of life of the population of Estonia: the current state of the quality of life, the trends in individual quality of life in 1994–2006(8), and the comparison of the general living standard of Estonian society to similar indicators reflecting the performance of other European countries.

The analysis of the quality of life applies data from various social studies. The data for 1994 and 1999 has been taken from two living conditions surveys (NORBALT I and II) conducted in Estonia in cooperation between the University of Tartu, the Ministry of Social Affairs, the Statistical Office of Estonia and the Institute for Applied Social Studies FAFO (Norway). The sample for both studies consisted of 5000 households[9]. The indicators characterizing quality of life in 2004 and 2006 have been taken from the European Social Survey which studied 26 countries in 2004 and 25 countries in 2006; the Estonian sample consisted of 2000 respondents in the 2004 survey and 1500 respondents in the 2006 survey[10]. The most recent data have been taken from the document entitled Integration of Estonian Society: Monitoring 2008 (sample 1500 respondents). In addition to the aforementioned material, the report also uses data from the European Union Survey on Income and Living Conditions (EU-SILC) and current statistics.

3.2. Development of individual quality of life, 1994–2008

Living conditions

Living conditions are primarily defined through dwellings and their surrounding infrastructure. In terms of the general quality of life, important aspects related to living conditions include the size of the dwelling, the availability of amenities, as well as the characteristics of the surrounding environment (access to various infrastructural objects, noise levels, pollution of the living environment, etc.).

In 2007, 70% of Estonia's population lived in apartment buildings, while 30% of the population lived in farmhouses, single family or terraced houses. At the same time, living conditions differ by region – nearly half of the people liv-

[9] A more detailed overview of the study of living conditions in Estonia see http://www.fafo.no/norbalt/index.htm

[10] See www.http://europeansocialsurvey.org

Table 3.2.1. Characteristics of living conditions in Estonia, 2007 (%)

		Northern Estonia	Incl. Tallinn	Central Estonia	North-Eastern Estonia	Western Estonia	Southern Estonia	Estonia (total)
Type of dwelling	Farmhouse	...	...	16.4	...	16.5	18.9	**9.4**
	Single family dwelling or terraced house	11.9	6.3	33.5	9.6	35.4	25.3	**19.6**
	Apartment building or other dwelling	85.7	93.6	50.1	88.3	48.1	55.8	**71.0**
Number of rooms per family member	Less than one room	23.2	22.9	21.4	24.9	21.1	20.9	**22.4**
	One room	38.9	40.9	28.4	34.9	23.7	26.2	**32.5**
	More than one room	37.9	36.2	50.2	40.2	55.3	52.9	**45.1**
Problems related to the dwelling	Leaking roof	5.5		10.1	4.0	6.8	8.9	**6.8**
	Humidity	8.4		18.8	10.2	14.2	13.4	**11.7**
	Crime	29.8		11.7	40.4	11.0	8.1	**21.4**
	Noise	73.1		59.8	72.2	51.3	59.4	**65.5**
	Pollution	62.5		51.5	73.0	36.4	47.4	**55.7**
Condition of the dwelling	Good or very good	61.9	63.3	47.5	35.6	59.6	46.5	**52.9**
	Satisfactory	34.8	34.8	46.5	57.9	37.2	46.0	**42.1**
	Poor	3.3	...	6.0	...	...	7.5	**5.0**
Internet connection at home		65.6	67.9	59.8	44.7	58.0	52.7	**58.1**

Source: Statistics Estonia 2008.

ing in Central, Western and Southern Estonia live in single-family houses (Table 3.2.1.) where the number of rooms per household member is the largest. Living conditions are the most cramped in North-Eastern Estonia. People living in Northern Estonia and primarily Tallinn are the most satisfied with their living conditions. In these regions 63% of respondents evaluate their living conditions as good or very good. Also, compared to the other regions, many more households in Tallinn have internet connections at home. In North-Eastern Estonia 58% of the people characterize their living conditions as satisfactory and studies show that this region has the smallest number of households with a home internet connection. Regions are clearly differentiated by the problems related to living conditions: in Northern Estonia, the greatest problem is noise, while in North-Eastern Estonia pollution and noise as well as people's fear of crime are seen as the most pressing problems.

However, if we look at a longer period of time, it becomes evident that living conditions have improved over time. The transition from a socialist system to a capitalist economic system affected most areas of life, including the households' way of life and the form of ownership of the dwelling. In 1994, at the beginning of the ownership reform, 26% of households owned their dwellings, whereas in 2006, 95% of all households had become owners of their dwellings and the ownership status did not depend on the type of household or the material situation of the household.

The increased percentage of households living in their own house is another factor indicating the improvement of living conditions. In 1994, 24% of all households and in 1999, 28% lived in their own house, but by 2007 this percentage has increased by another two percentage points. To a large degree, this increase reflects the building of new suburban residential districts.

There has also been an increase in the number of rooms available per household member. While in 1994, 54% of households lived in two-room dwellings, by 2006 the average number of rooms per household member had grown and 37% of households lived in two-room dwellings. Although dwellings have become larger, this is not directly reflected in the improvement of living conditions. For example, the percentage of households who can use a shower or a bath in their dwelling has not changed in 12 years (71% in 1994, 73% in 2006).

The generally improved condition of dwellings is expressed in people's level of satisfaction. In 2008, nearly a quarter of the respondents were completely satisfied with their dwellings and half of the respondents reported that they were relatively satisfied.

All in all, it can be said that the living conditions of the population of Estonia have improved over the last decade, mainly in connection with the exchanging of apartments for houses and the increase in the size of the dwellings, regardless of the type of household. Although living conditions have improved for all types of households, the differences between households have not disappeared or subsided. Meanwhile, the improved living conditions of households do not automatically mean that their quality of life has improved. In many cases, living conditions have been improved with the help of housing loans which can generate objective difficulties in other areas of life and also cause subjective pressures. According to the F-monitor survey conducted by AS Emor, 16% of Estonian households have taken loans using real estate as collateral. Taking into account the current economic situation, the problems that have emerged with regard to the repayment of housing loans may lead to the deterioration of living conditions in the near future.

Material situation

Comparisons of the incomes of various types of households reveal that childless couples enjoy a relatively better material situation – in 2006, the average equivalent income of these families was nearly one quarter higher

than the average income. Elderly people living alone and single parents have the lowest incomes (about half of the average income and one and a half times lower than the average income, respectively) (Table 3.2.2.). Incomes have grown approximately 1.6 times within the last four years, and the incomes of all household types have grown more or less equally, although the incomes of older people have increased less than the average income.

Instead of the average income, the quality of life related to the material resources of the households is better characterized by the income/poverty line ratio[12]. According to the data of Statistics Estonia, two-parent families with children have the smallest risk of relative poverty (11% for two-parent families with one or two children, 20% for two-parent families with three and more children), while single-member households and single-parent households have the largest risk (50% and 44%, respectively). There has been practically no change in the poverty risk of families with children in recent years, but the poverty risk of single-member households has increased from 30% in 2000 to 50% in 2006.

An analysis of the difference in the poverty rates of men and women in 2002–2006 shows that men's and women's poverty rates are levelling off in the younger age groups, but among people aged 65 and over, the poverty rate of women is nearly twice as high as that of men. In the case of education, the poverty rate of people with basic education and lower education grew to 43% in 2006, while the poverty risk of individuals with secondary education or higher education remained the same (20% and 10%, respectively) (based on data from Statistics Estonia).

Two indicators are used to assess the changes of the households' economic situation: the relative income position of various types of households in comparison to the general income[13] and the relative importance of housing costs in the income in 1994 and 2006. In over ten years, the percentage of housing costs in incomes has decreased by nearly ten points, which indicates that income growth has exceeded the increase in housing costs (Table 3.2.3.). In the context of the overall reduction of residential expenses, the decrease in housing costs has been quickest among households without children (both single-person households and households comprising several individuals). The relative income position has improved the most in the case of single-member households, while at the same time the relative income position of two-parent families with children has deteriorated by 14 percentage points.

Summarizing the results provided above, we can conclude that the general income growth has affected different types of households in different ways. A deepening age polarization can be seen in the case of single-member households – the incomes of young people living alone have increased significantly compared to earlier years, while pensions have increased at a slower rate than incomes in general, causing the relative poverty risk of elderly people to grow. A trend towards the equalization of incomes is evident in the case of two-parent families with children. Both the number of families at risk of poverty and the general income level compared to the average income have decreased.

Table 3.2.2. Monthly equivalent income[11] of households, 2003–2006 (EEK)

Type of household	2003	2004	2005	2006	Change 2003–2006
Total	4230	4733	5678	6913	1.63
Household without children	4126	4563	5647	6694	1.62
Single-person household	3125	3474	4469	5152	1.65
Single person under 65	3766	4103	5568	6441	1.71
Single person 65 and older	2404	2752	3121	3598	1.50
Couple without children, at least one of whom is under 65	5101	5743	7140	8599	1.69
Couple over 64, without children	3235	3662	4204	5065	1.57
Other household without children	4593	4966	6127	7262	1.58
Household with children	4310	4861	5702	7097	1.65
Adult and child(ren)	2603	3197	3684	4422	1.70

Source: Statistics Estonia, 2008

Table 3.2.3. Changes in the relative household income levels* and the relative importance of housing costs in incomes during 1994–2006

	Income			Housing costs		
	1994	2006	Change	1994	2006	Change
Single-person household	90	100	+10%	40	29	-11%
Two-parent family with children	110	96	- 14%	21	17	-4%
Single-parent family with children	74	71	-3%	38	29	-9%
Family of two adults without children	106	108	+2%	23	17	-6%
Other families with children	92	94	+2%	19	12	-7%
Other families without children	127	126	-1%	22	12	-10%
All households				28	19	-9%

** the median income of the corresponding household as a percentage of the overall median income*

Source: Estonian living conditions survey (1994) and EU SILC (2006)

Satisfaction with the material situation. In studies of quality of life, much attention has been devoted to the connection between one's material situation and satisfaction with life. Satisfaction with one's material situation is strongly dependent on the income level of the household (Table 3.2.4.). Households whose income per household member exceeds 5000 kroons consider themselves able to cope at their current income level (86%). However, in the case of households where the income is lower than 3000 kroons per household member, 38% consider coping to be difficult and 16% consider it very difficult.

The following table (Table 3.2.5.) provides information regarding the satisfaction of respondents with their

[11] Income per household, divided by the sum of weighted consumption units of household members (equivalence scales used: 1:0.5:0.3)

[12] Percentage indicates the relative importance of people whose equivalent net income was below the relative poverty line (Statistics Estonia).

[13] Proportion of the median income of the given household to the overall median income

Table 3.2.4. An assessment of the economic situation of households by income groups (%)

	Up to 3000 kroons	3001–5000 kroons	5001 kroons and over
Well-to-do at the current income level	4.4	6.7	23.4
Able to cope at the current income level	41	54.5	63.2
Difficult to cope at the current income level	38.3	27.6	11.0
Very difficult to cope at the current income level	16.3	11.2	2.3

Source: Integration of Estonian Society: Monitoring 2008.

Table 3.2.5. Subjective assessment of the economic situation (%)

1994		1999			2004	2006	2008
Rich	0.1						
Materially satisfied	11.1	**Not rich, live well**	11,1	**Living comfortably on present income**	5.5	9.1	13.1
Making ends meet	66.7	**Neither rich nor poor**	59	**Coping on present income**	49.9	60.7	56.5
		On the verge of poverty/ poor	30	**Difficult on present income**	31.5	22.5	22
Poor	22.1			**Very difficult on present income**	13	7.7	8.4

Source: Estonian living conditions surveys, 1994 and 1999; European Social Surveys, 2004 and 2006; Integration of Estonian Society: Monitoring 2008.

Figure 3.2.1. Satisfaction with income in 2004 and the increase of satisfaction as of 2008 by age groups, ethnicity, level of education, and actual income level (%)

Source: European Social Survey 2004 and Integration of Estonian Society: Monitoring 2008.

material situation over the past 14 years. Regardless of the different wording of the question asked with the aim of determining the subjective material situation throughout the years, it can still be argued that satisfaction with one's income has generally increased and the percentage of people who feel that their situation is problematic has decreased. However, subjective assessments provided by individuals regarding their own incomes have been relatively stable over the years, since the increase of opportunities related to personal well-being has resulted from a general economic growth and the relative level of the individuals' well-being (e.g. compared to others or the average level of the society) has not changed.

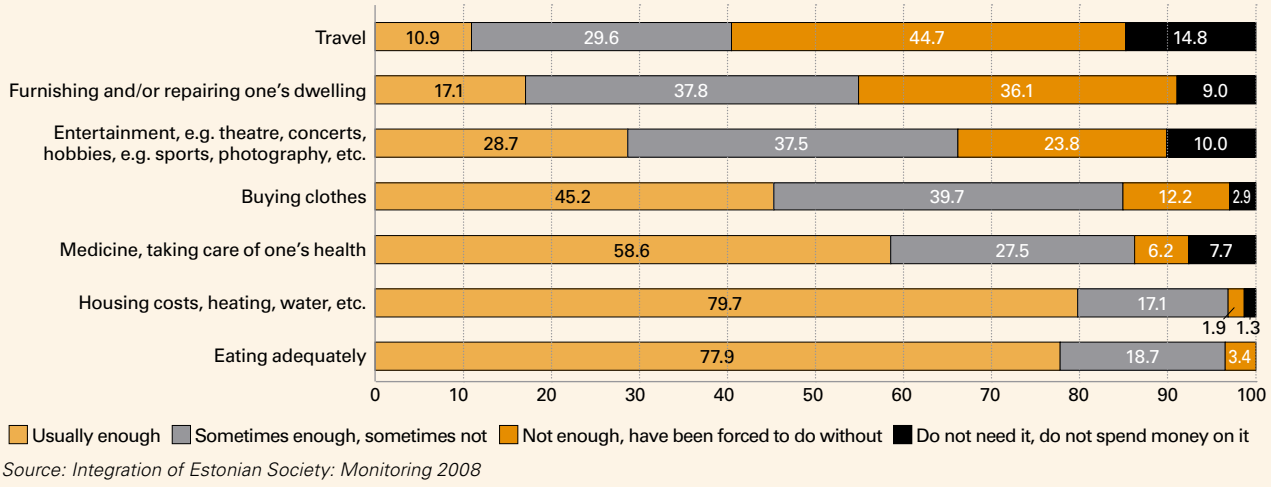
The following section will provide an overview of how assessments regarding the sufficiency of incomes have changed among various groups based on age, education, income and ethnicity (Figure 3.2.1.). Compared to 2004, people's satisfaction with their income level in 2008 has increased on average and nearly 70% of respondents are of the opinion that they are doing well or are able to cope at their current income level. As can be expected, the people with the highest incomes exhibit the highest level of satisfaction with the economic situation (86.5%). However, the sense of economic security of people with lower incomes has experienced a rapid growth (24 percentage points) in recent years. The improvement of the quality of life of people with lower incomes and the homogenization of levels of coping also increase the society's general quality of life.

People with a higher education feel the most economically secure (nearly 80%), but the faster growth of the sense of economic security among people with a secondary and basic education refers to a tendency of homogenization. This can also be confirmed by comparing the economic security of different ethnic groups. However, the assessments of the Russian-speaking population vary clearly according to whether or not the respondent is a citizen of Estonia, with non-citizens and citizens of Russia expressing the least amount of satisfaction (see Kasearu & Trumm 2008; Trumm & Kasearu 2008).

Differences in the sense of economic security are still evident among different age groups. Three quarters of persons aged 15–24 feel economically safe, compared to less than 60% of the elderly. It is also significant that these differences have increased rather than subsided between 2004 and 2008.

Consumption opportunities. The increase in the population's consumption opportunities in 2008 serves as proof of the improvement of the economic aspect of the quality of life (Figure 3.2.2.). Nearly 80% of the respondents reported that their families had enough money to cover housing costs and feed themselves properly. Less than one fifth of the respondents reported that sometimes they have been short of money to cover housing costs and eat adequately. Primary necessities can also be considered to include expenses related to maintaining one's health. Financial reasons have caused 6% of the respondents to avoid such expenses. While 45% of the respondents have enough money to buy clothes, the percentage of respondents who feel that they have had to avoid entertainment-related expenses for financial reasons has increased significantly (23%). More expensive activities, such as travelling or repairing and furnishing one's dwelling is affordable for 10% and 17% of the respondents, respectively.

Figure 3.2.2. Financial means of households, 2008 (%)

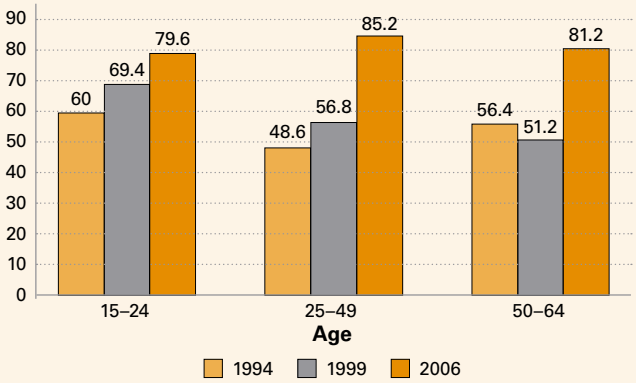


Source: Integration of Estonian Society: Monitoring 2008

Compared to the earlier period, however, the financial means of the Estonian population have improved considerably. For example, in 1994 a quarter of the respondents had to give up eating meat and fish products more than once a week (see Einasto 2002:105), while in 1999 the same was true for 12.9% and in 2006 for 10% of the respondents.

To conclude, there have been no great changes in the structure of consumption opportunities in recent years. During the early 1990s' shortage economy, the quality of life depended, to a great extent, on the availability of primary goods and the ability to satisfy basic needs, while nowadays the opportunity to spend one's vacation away from home can be considered an important indicator of quality of life. In 2006, 33% of the respondents were able to afford a week-long vacation away from home without any problems, in comparison with 19% in 1999.

Figure 3.2.3. Percentage of respondents who are not afraid of losing their jobs



Source: Estonian living conditions studies, 1994 and 1999; European Social Survey 2006.

Employment

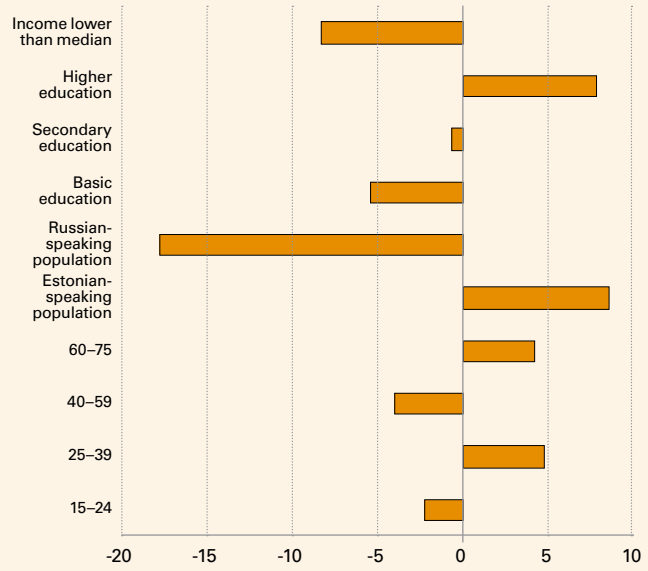
A satisfying job and job security play a significant role in one's quality of life. According to labour market statistics, the employment rate has grown in the 2000s, and unemployment has dropped from 13.6% in 2000 to 4.7% in 2007. Through the years, men aged 15–24, non-citizens, the residents of Ida-Viru county and rural regions in South-Eastern Estonia have been at the highest risk of unemployment (see Kasearu & Trumm 2008). As a result of the economic recession, the unemployment rate has grown again during the past year (according to Statistics Estonia, the number of people who have been unemployed less than 6 months grew from 12,400 to 20,000 during the second quarter of 2008) and it appears likely that the deterioration of the labour market situation may worsen people's work-related quality of life.

Job security. In addition to the unemployment rate, it is important to look at subjective perceptions of the labour market situation. Similar to the drop in unemployment, there has been a decrease in the level of concern regarding job loss. In 1994, half of the respondents were not concerned about losing their jobs; in 2006, more than three quarters of the respondents were certain that they would not lose their jobs (Figure 3.2.3.). This means that job security has increased significantly during the monitored period and the differences between social groups have grown smaller. According to the Integration of Estonian Society: Monitoring 2008, 41% of Estonians and 29% of non-Estonians were certain that they could find a suitable job in Estonia if necessary. However, the current economic downturn will probably diminish the general sense of job security.

Job satisfaction. Low pay, working at night (Tausig & Fenwick 2001), overtime (Crompton and Lyonette 2006; Dex and Bond 2005; Grzywacz and Marks 2000; Voyandoff 2004) and the accompanying problems related to reconciling work and family life may decrease job satisfaction and quality of life. In 2008, 72% of the population were satisfied with their jobs, and 23% of the population expressed high satisfaction with their jobs. Job satisfaction is closely connected to the improvement of professional knowledge and skills: 55% of people who participated in self-education programs during the last six months are completely satisfied with their jobs. Meanwhile, half of the people who have not taken part in any training/schooling programs during the last ten years are very dissatisfied with their jobs.

However, the relatively high level of job satisfaction is eclipsed, by the large difference in opinions among different social groups. Job satisfaction is higher in the case of people with higher income (80%, while the job satisfac-

Figure 3.2.4. Difference in the job satisfaction of socio-demographic groups compared to the average level of job satisfaction



Source: European Social Survey 2006

tion level for people with lower incomes is 60%) and job satisfaction is also much higher in the case of Estonians compared to the Russian-speaking population (80% and 54%, respectively). Also, compared to younger and older age groups, people aged 25–39 report above average job satisfaction (Figure 3.2.4.). The higher levels of education increase job satisfaction: more than three quarters of people with a higher education are satisfied with their jobs, compared to 65% among people with a basic education. Job satisfaction among people with a higher education may derive from their employment in management positions. For example, it is apparent that people who feel that the success of the organization depends on them and their work are more satisfied with their jobs. Comparisons of people with different employment relationships reveal that 97% of employers and 72% of salaried employees and self-employed individuals are satisfied with their jobs.

Reconciling work and family life. As one of the most important areas of life, work is connected to all other spheres of life and its impact on the quality of life is not limited to just job security and satisfaction. The effect of work and working on family life is especially important – finding the balance between work and family life, the transfer of work-related problems into family life, etc. According to the 2006 European Social Survey, people with higher levels of education and people with higher income employed in management positions face the most problems related to reconciling their work and family lives. More than half of the respondents with a higher education believe that their families are disturbed by their strenuous work, while one third tend to worry about work-related problems at home and also find that they do not have enough time to devote to their partner and their family. Large workloads reduce the amount of free time and opportunities to engage in activities that provide enjoyment. Therefore, working in a higher position has both a positive and a negative effect on one's quality of life. Compared to women, men are more prone to working overtime, during weekends or in the evenings and at night. At the same time, studies do not indicate any tendency among men to worry more frequently than women about work-related problems or time devoted to their family and partner. This means that while men are more likely to work irregular hours, they do not feel a higher level of stress with regard to reconciling work and family life.

Social relations

Social relations are the means of satisfying an individual's need of belonging as well as the need for approval and security, and thus significantly affect a person's individual quality of life. Paugam and Russel (2000) distinguish three types of social relations: relations within a family or household, relations with friends, neighbours and co-workers, relations with social organizations and institutions (social participation). These spheres of social relations may reinforce each other, but the domination of one sphere may decrease an individual's involvement in others. The significance of different spheres of social relations varies in different societies. A study by Olagnero et al. (2008) shows that among European countries, Estonia represents the Scandinavian model, where support from the family is less important than extra-familial support networks. Despite this, the importance of family in one's quality of life should not be underestimated.

Family life. Family plays an important role in shaping a person's individual quality of life (Jeffers and Dobos 1995). The primary role of the family is to provide social support, help and a feeling of security. However, the importance of family as an influence on a person's quality of life is constantly changing, depending on the stage they have reached in their life (Kohler et al. 2005). According to the Integration of Estonian Society: Monitoring 2008, 45% of the respondents were relatively satisfied and 35% completely satisfied with their family life. As expected, the level of satisfaction is higher among people who have both a spouse/partner and children (87%) than among people who live alone or are single parents (66% and 70%, respectively).

It can be assumed that family life, including doing housework and raising children, has a different effect on men's and women's quality of life. Although in Estonia women do a larger share of housework and contribute more to raising children than men (Telpt 2008), this difference cannot be equated with a greater dissatisfaction with family life on the part of women, since dissatisfaction usually arises from discrepancies between conditioned attitudes and actual behaviour. If the greater involvement is seen as inequality, dissatisfaction increases (Lyonette et al. 2007) and may be expressed as a lower level of satisfaction with life in general. According to the 2004 European Social Survey, nearly a third of the respondents experienced disagreements related to the sharing of housework at least once a month and the frequency of disagreements was higher in the case of younger couples and families with children. One fourth of the couples reported having disagreements related to financial matters, with money being the cause of dissension even more frequently among younger couples (a third of respondents under 40 had finance-related disagreements with their partners at least once a month).

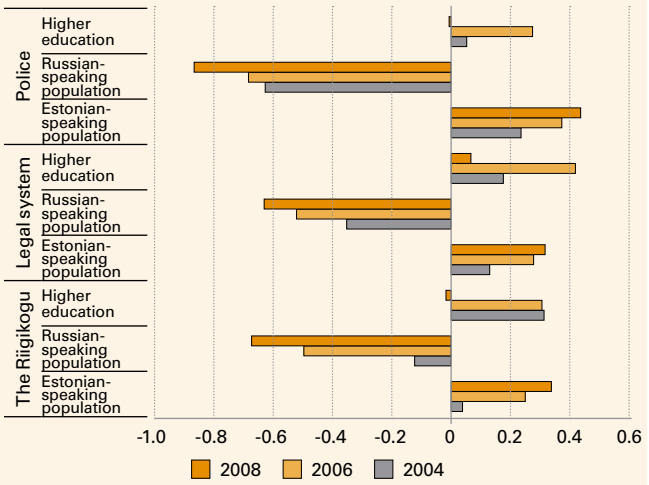
In addition to their state of health, the quality of life of older people is affected significantly by the exist-

ence of social contacts, including relationships with children and grandchildren (Farquhar 1995). The increase in social risks and insecurity caused by the changes in Estonian society at the beginning of the 1990s (Kutsar 1997) increased the importance of the help and support received through family connections and informal networks as a means of maintaining one's quality of life. Yet it is safe to assume that there was a shortage of resources that could be used to aid each other. In 1994, 32% of people received help in housework from their adult children and 28% of parents provided help to their adult children. Ten years later, the share of people receiving help has grown to 53%, while 39% of parents help their adult children with child care or housework. Hence, there has been an increase in the provision of inter-generation support. On the one hand, this tendency may represent a strengthening of ties between generations and/or reflect the insufficiency of social services which has brought about an increase in informal help. For example, the role of grandparents in child care is relatively large: in 2004, a third of the respondents said that their children's babysitters were usually the grandparents, while in the case of a fourth of the respondents, one of the parents themselves stayed at home (ESS 2004). Although the availability of child care services has improved recently, the grandparents remain, in all likelihood, an important resource in the day-to-day organization of family life. However, the expectations of Estonian residents regarding support from the family are lower in comparison to other European countries, resembling the corresponding indicators for Denmark, France and Finland (Olagnero et al. 2008).

Communication networks. In addition to family, an individual's support network comprises their friends, neighbours and co-workers. Compared to the end of the 1990s, the frequency of communication between people had increased somewhat by 2006: the share of respondents who saw their friends once a week increased from 60% in 1999 to 77% in 2006. The activeness in communicating with friends is dependent on age – younger people have more contacts with friends than older people. Furthermore, Estonia's Russian-speaking population tends to communicate with friends more frequently than the Estonian population (46% of Russians and 37% of Estonians communicate with friends at least several times a week or more frequently). People are generally satisfied with their relationships (in 2008, only 5% of the respondents reported that they were dissatisfied with their relationships with friends and people close to them). About a half of the Estonians and a third of the Russian-speaking population are completely satisfied with their relationships. Compared to Estonians, a higher percentage of non-Estonians agree with the statement that people are more likely to care about themselves than try to help others. The level of trust in others is also lower in the case of non-Estonians. Interpersonal trust is not dependent on age or gender, but a higher tendency to express trust is exhibited by people with a higher education.

Participation in social life. In 2008, more than 85% of the population belonged to citizens' associations, societies and clubs – a significant increase from the mid-1990s when just 31% of the population belonged to an association. This growth has mainly been the result of the increase in the memberships of housing and consumers' cooperatives. In 2008, 46% of the respondents were engaged in other

Figure 3.2.5. Difference between average trust and the average opinion of a given group by year



Source: European Social Surveys, 2004 and 2006; Integration of Estonian Society: Monitoring 2008.

forms of co-operation. Despite the increase in participation in social life, the level of participation in Estonia still lags behind the corresponding indicators for Western European countries, but is higher than those of Latvia and Lithuania (Olagnero et al. 2008). Active participation in local events or the organization thereof is much more common outside Tallinn and North-Eastern Estonia. Younger people with a higher education and a larger salary tend to participate in organizations and citizens' associations more actively. Charity organizations have the lowest rate of participation (approximately 20% of Estonia's population in 2006).

Relationship between the individual and society

Feeling of security. Since the beginning of the 1990s, the sense of security has grown in Estonian society. In 1994, 43% of people were not afraid of being attacked in the street; by 1999 the figure had grown by eight percentage points and reached 60% by 2006. However, there are certain differences: in 2008, 86% of Estonians were completely or relatively satisfied with their personal security, but only 63% of the Russian-speaking population reported similar confidence in their security. There are also considerable differences in this regard between residents of rural areas and cities. While 15% of city-dwellers are completely satisfied with their security, the satisfaction rate is twice as high among people living in rural areas.

Interest in politics. People's connectedness with the state can be viewed through how much they are interested in the politics and care about the well-being of the state. Compared to 1994, the number of people who are very interested in politics has tripled as of 2008 (growing from 5% to 17%) and there has also been an increase in the percentage of people "rather interested" in politics (from 35% to 52%). Interest in politics is highest among people with a higher education and nearly a quarter of the population aged between 60 and 75 state that they are very interested in politics. A comparison of the Russian-speaking and Estonian-speaking populations reveals that non-Estonians are generally somewhat more interested in politics,

Table 3.2.6. Agreement with statements expressing alienation from society (responses "completely agree" or "sooner agree than disagree" by ethnicity, place of residence, and age group (%))

		Ethnicity		Place of residence		Age group			
	Total	Estonian	Russian	City	Rural area	15–24	25–39	40–59	60–75
I do not look at the future hopefully	21.1	18.6	26.1	23.8	15.5	9.5	12.6	24	40.3
My contribution is not recognized	23.5	19.3	32	25.9	18.6	20	19.8	23.9	32.4
I feel that I am a second-rate member of the society	26.3	22	35.1	28.8	21.3	15.8	19.8	28.2	42.4
People look down on me due to my low income or occupation	13.8	10.8	19.7	16.2	8.8	9.2	8.4	15.2	23.5
I feel that I have "missed the boat"	22.5	18.9	29.4	23.8	19.6	6.4	14.5	28.6	39.4
I do not have the opportunity to influence society	63.3	57.8	72.3	65	59.8	44.6	55	70.8	79.2
I am unable to protect my interests	25.7	16.4	44.5	30.2	16.3	13.2	18.1	27.3	53.3

Source: Integration of Estonian Society: Monitoring 2008.

although the percentage of those who are very interested in politics is higher among Estonians.

General trust in national institutions has been steadily low in 2004–2008. On a scale of 1–10 (1 meaning having no trust at all and 10 meaning having full confidence), confidence in the Riigikogu has fluctuated between 4.2 and 4.6 points during this period, while confidence in the judicial system has increased over the years (4.9 in 2004 and 5.3 in 2008) and confidence in the police has remained the same (5.6 points). Although the trust of Estonians in the national institutions has grown in comparison with the overall average, the opinions of the Russian-speaking population have become increasingly negative when measured on the same scale (Figure 3.2.5.), pointing to a polarization process that is affecting the society (see also Trumm & Kasearu 2008). In 2004 and 2006, people with a higher education expressed greater confidence in institutions, but the differences have grown smaller by 2008. Trust also wanes as people grow older (younger people have more trust in institutions than older respondents). Younger respondents also attribute more value to social cohesion and are ten per cent less likely to think that society would function better if everyone were to take care of themselves.

Subjectively perceived alienation (withdrawal) from society. Previous surveys have shown that subjective assessments of one's economic situation and success are more important as indicators of well-being than the actual situation (see Kasearu & Trumm 2008). This allows us to consider that subjective assessments of one's situation may have a more significant effect on the general quality of life than the real situation itself. Dissatisfaction with one's life, way of life, living conditions and quality of life in general may more likely be an outcome of perceived withdrawal from society than an assessment of actual living conditions.

In 2006, 14% of Estonia's population claimed that they belong to a group that is discriminated against in the society. Ethnicity and language were reported as the primary bases for discrimination, meaning that discrimination was experienced most frequently by Russian-speakers and people with a higher education.

Perceived withdrawal from society was measured through seven statements (Table 3.2.6.). The table provides the percentages of respondents agreeing with the statements by ethnicity, place of residence and age group. The absence of opportunities and the resulting lower quality of life can be viewed from the standpoint of future expectations. The percentage of people pessimistic about their future has decreased from 32% in 2006 to 24% in 2008. Estonians, residents of rural areas, people with a higher education and younger people tend to be more optimistic. The most significant source of dissatisfaction for the residents of Estonia is the absence of opportunities to influence social processes and a quarter of the respondents feel that they are underpriviledged members of the society and are unable to protect their interests. Studies reveal that living in rural areas decreases the likelihood of withdrawal: the number of people who feel that they are unable to protect their interests and that they are looked down upon due to their low income is two times lower among people living outside of urban centres.

The feeling of being alienated is closely related to age (Table 3.2.6.). Older people were considerably more likely to agree with statements that measured alienation and nearly 80% of people aged 60–75 stated that they do not have the opportunity to influence society. One fifth of younger respondents were of the opinion that the society and fellow citizens do not recognize their contributions but were also quite optimistic, with less than 10% of young people claiming to have "missed the boat". Among middle-aged people, however, there is a common fear of being a second-rate person who has not been able to keep up with the changes occurring in society. Comparisons between countries (Böhnke 2008) have shown that among EU states, Baltic countries exhibit the highest rate of perceived alienation from society and the least connection between a people's withdrawal and their socio-economic position.

Compared to the Estonian-speaking population, a much higher percentage of the Russian-speaking population feel alienated, but the most important difference becomes clear when we look at the perceived ability to protect one's interests. The fact remains that there are 28% more Russian-speakers than Estonian-speakers who feel that they are unable to protect their interests (Table 3.2.6.). At the same time, the data of the 2006 European Social Survey indicate that, surprisingly, the percentage of those who feel that they are unable to manage their own life is higher among Estonians compared to Russian-speakers. Thus, Estonians are more likely to consider their lack of success a result of their personal problems, while the Russian-speaking population sees structural reasons related to the organization of the society as one of the sources of their failures. For example, 22% of Estonians and 46% of Russian-speakers believe that compared to the Russian-speaking population, Estonians have better opportunities for self-expression and engaging in creative processes, and 39% of the Russian-speaking population agreed with the statement that they have very few opportunities to show how capable they are, while among Estonian respondents, the rate of agreement with this statement was twice as low.

For further analysis related to perceived alienation a composite alienation index was created by combin-

ing the statements expressing alienation, with the composite index being separated into three categories on the basis of the division of the index (not alienated, at risk of alienation, and alienated). Subjectively perceived alienation was characteristic of a fifth of the respondents and there were more alienated individuals among people aged 60–75 (34%) and the Russian-speaking population (30%), and considerably fewer alienated individuals among people living in rural areas (14%). In the further analysis of quality of life, the absence of perceived alienation has been viewed as social involvement that guarantees a higher quality of life.

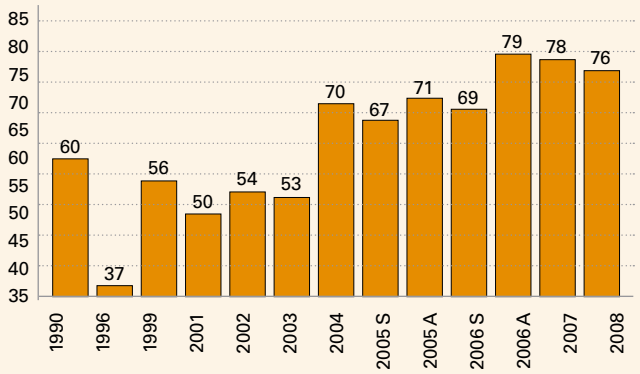
References

1. Allardt, E. (1993). Having, loving, being: An alternative to the Swedish model of welfare research. M. C. Nussbaum, A. Sen, The quality of life. Oxford, Clarendon Press, pp. 88–94.
2. Böhnke, P. (2008). Feeling left out. Patterns of social integration and exclusion. Jens Alber, Tony Fahey, Chiara Saraceno, Handbook of Quality of Life in the Enlarged European Union. New York: Routledge. 304–327.
3. Crompton, R. & Lyonnette, C. (2006). Work-life balance in Europe. Acta Sociologica, 49, 379–393.
4. Cummins, R. A: (2000). Objective and subjective quality of life an interactive model. Social Indicators Research 52, 55–72.
5. Dehley, J. (2004). Life satisfaction in an enlarged Europe. European Foundation for the Improvement of Living and Working Conditions. Luxembourg: Office for Official Publications of the European Communities.
6. Dex, S. & Bond, S. (2005). Measuring work-life balance and its covariates. Work, Employment and Society, 19, 627–637
7. Erikson, R. (1993). Descriptions of inequality: the Swedish approach to welfare research. M. C. Nussbaum, A. Sen, The quality of life. Oxford, Clarendon Press, pp. 67–83.
8. Farquhar, M. (1995). Elderly people's definitions of quality of life. Social Science and Medicine, 41, (10), 1439–1446.
9. Grzywacz, J.G. & Marks, N. F. (2000). Reconceptualizing the work-family interface: An ecological perspective on the correlates of positive and negative spillover between work and family. Journal of Occupational Health Psychology, 5, 111–126.
10. Jeffers, L.W. & Dobos, J. (1995). Separating people's satisfaction with life and public perceptions of quality of life in the environment. Social Indicators Research 34 (2), 181–211.
11. Kasearu, K. & Trumm, A. (2008). Mitte-eestlaste sotsiaalmajanduslik olukord. Eesti Inimarengu Aruanne 2007 [Socio-Economic Situation of Non-Estonians. Estonian Human Development Report 2007], Eesti Koostöö Kogu, pp. 47–54.
12. Kohler, H.-P., Behrman, J.R., Skytthe, A. (2005). Partner+Childr en=Happiness? The Effects of Partnerships and Fertility on Well-Being. Population and Development Review, 31(3), 407–445.
13. Kutsar, D. (1997). Multiple Welfare Losses and Risk of Social Exclusion in the Baltic States during Societal Transition. In. A. Aasland, K. Knudsen, D. Kutsar, I. Trapenciere. The Baltic Countries Revisited: Living Conditions and Comparative Challenges. Fafo: Forskningsstiftelsen Fafo.
14. Land, K. (2001). Models and indicators. Social Forces, 80, 2, 381–410.
15. Lyonette C., Crompton, R. & Wall, K. (2007). Gender, occupational class and work-life conflict. Community, Work and Family, 10, 283–308.
16. Noll, H-H. (2002). Towards a European system of social indicators: theoretical framework and system architecture. Social Indicators Research, 58, 47–87.
17. Olagnero, M., Torrioni, P., Saraceno, C. (2008). Patterns of sociability in the enlarged EU. J. Alber, T. Fahey, C. Saraceno, Handbook of Quality of Life in the Enlarged European Union. New York: Routledge. 279–303.
18. Paugam, S. Russell, H. (2000). The effects of employment precarity and unemployment on social isolation. D. Gallie, S. Paugam (eds) Welfare Regimes and the Experience of Unemployment in Europe, Oxford: Oxford University Press. 243–263.
19. Rootalu, K. (2008). Abielulahutuse tagajärjed ja suhtumine lahutustesse Euroopas. [Effects of Divorce and Attitudes Towards Divorce in Europe] M. Ainsaar, D. Kutsar (eds). Eesti Euroopa võrdlustes. Series of the Ministry of Social Affairs 3/2008, pp. 35–48.
20. Tausig, M. & Fenwick, R. (2001). Unbinding time: Alternate work schedules and work-life balance. Journal of Family and Economic Issues, 22, 101–119.
21. Telpt, E. (2008). Hoiakud ja tegelikkus palgatöö ja majapidamistöö ühitamisel: Euroopa riikide võrdlus. [Attitudes and Reality in Reconciling Work and Home Life] M. Ainsaar, D. Kutsar (eds). Eesti Euroopa võrdlustes. Series of the Ministry of Social Affairs 3/2008, pp. 67–82.
22. Trumm, A., Kasearu, K. (2008). Sotsiaalse ja majandusliku integratsiooni hetkeolukord ja tuleviku väljakutsed. [Current State and Future Challenges of Social and Economic Integration] Riikliku integratsiooniprogrammi 2008–2013 väljatöötamine. http://www.rahvastikuminister.ee/public/V_osa_sotsiaalne_ja_majanduslik_integratsioon.pdf
23. Veenhoven, R. (1996). Happy life-expectance: A comprehensive measure of quality-of-life in nations. Social Indicators Research 39, 1–58.
24. Voydanoff, P. (2004). The effects of work demands and resources on work-to-family conflict and facilitation. Journal of Marriage and Family, 66, 398–412.
25. Wallace, C., Pichler, F. (2008). Working conditions and quality of work. A comparison of Eastern and Western Europe. J. Alber, T. Fahey, C. Saraceno, Handbook of Quality of Life in the Enlarged European Union. New York: Routledge. 162–174.
26. Zapf, W. (1984). Individuelle Wohlfahrt: Lebensbedingungen und wahrgenommene Lebensqualität. W. Glatzer, W. Zapf, Lebensqualität in der Bundesrepublik: objective Lebensbedingungen und subjektives Wohlbefinden, Frankfurt a. M. New York, Campus, 12–26.
27. Zapf, W. (2000). Social reporting in the 1970s and in the 1990s. Social Indicators Research, 51, 1, 1–15.

3.3. Happiness and satisfaction with life

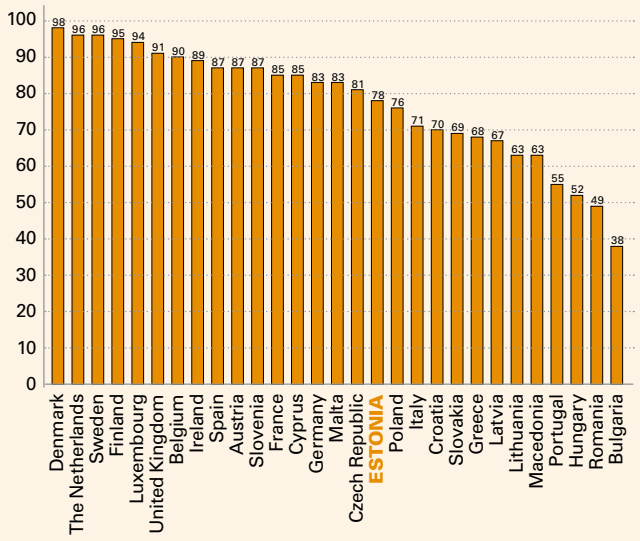
As mentioned earlier, the quality of life of individuals and societies can be measured not only by economic and social indicators, but also through subjective well-being, which is characterized by the emotional and cognitive assessments people make of their lives, or in other words, everything that is commonly known as happiness or satisfaction with life (Diener et al. 2003). Subjective well-being has two important components: the cognitive component comprises people's assessment of their level of general satisfaction with their lives or specific areas

Figure 3.3.1. Satisfaction with life in Estonia in 1990–2008 (percentage of respondents who were satisfied/very satisfied with their lives). S = spring; A = autumn.



Source: World and European Values Survey 1990–1999; Eurobarometer 2001–2008.

Figure 3.3.2. Satisfaction with life in EU member states and candidate countries in the autumn of 2007 (percentage of respondents who were satisfied/very satisfied with their lives)



Source: Eurobarometer 2007.

of life, for example, marriage, work, their material situation, or how meaningful and purposeful they believe their lives to be. The emotional or affective component, on the other hand, is characteristic of people's tendency to experience positive emotions more frequently than negative ones. In other words, people rate high on the scale of subjective well-being when they are satisfied with their life and experience more positive than negative emotions.

In recent decades, interest in studies concerned with subjective well-being and satisfaction with life has increased sharply. One of the reasons for this trend is probably the fact that many studies show that people who are happier and more satisfied with life enjoy more successful marriages, have more friends and better relationships with others, receive larger incomes, are better at their jobs, have more ties with the community they live in, participate in volunteer work and, most importantly, have a better state of health and live longer (Lyubomirsky et al. 2005). What is even more significant – happiness and satisfaction with life are the cause and not the result of all these good things: people are not happy because they are healthy and have higher incomes; instead, they are healthy and more successful because they are happy and satisfied with life (Lyubomirsky et al. 2005).

Dynamics of satisfaction with life in Estonia during the last 20 years

Following the assessments of Estonians regarding their satisfaction with life has been possible through international surveys since 1990 (Figure 3.3.1.). The relevant data regarding the 1990s was gathered through the European and World Values Surveys conducted in Estonia in 1990, 1996 and 1999[14]. Since 2001, it has been possible to analyze Estonian residents' satisfaction with life on the basis of Eurobarometer[15] surveys, which are conducted in all EU member states and candidate countries once or twice annually. Both surveys ask respondents to rate their satisfaction with life as a response to a similar question ("*On the whole, how satisfied are you with your life in general?*") on a scale of 1–10 (1 – not satisfied … 10 – satisfied; World Values Survey) or 1–4 (1 – not at all satisfied … 4 – very satisfied; Eurobarometer). Figure 3.3.1. shows the percentage of respondents who were satisfied or very satisfied with their lives (Eurobarometer surveys) or who used scale points 6–10 to characterize their satisfaction with life (European and World Values Surveys) in the given year.

The satisfaction with life of residents of Estonia varied considerably during the 1990–1999 period. Approximately 60% of Estonian residents were satisfied with their lives in 1990, immediately before the restoration of Estonia's independence. However, amid the whirlwind of social, economic and political change that occurred during the first five or six years after Estonia had regained its independence, the satisfaction rate dropped nearly twofold – only a little more than a third (37%) of Estonian residents were satisfied or very satisfied with their lives in 1996. By 1999, the rate of satisfaction with life had reached almost the same level (56%) as before the restoration of independence. Even at the beginning of the 2000s, Estonians' rate of satisfaction with life was one of the lowest in Europe, but it began a steady increase after Estonia's accession to the European Union in 2004. In the autumn of 2007, 78% of the residents of Estonia were satisfied or very satisfied with their lives, a rate only slightly below the EU average (80%; Figure 3.3.2.).

Connection between subjective well-being and cultural factors

Subjective well-being has long been considered to be dependent solely on external factors. The studies con-

[14] see http://www.worldvaluessurvey.org/

[15] see http://ec.europa.eu/public_opinion/standard_en.htm

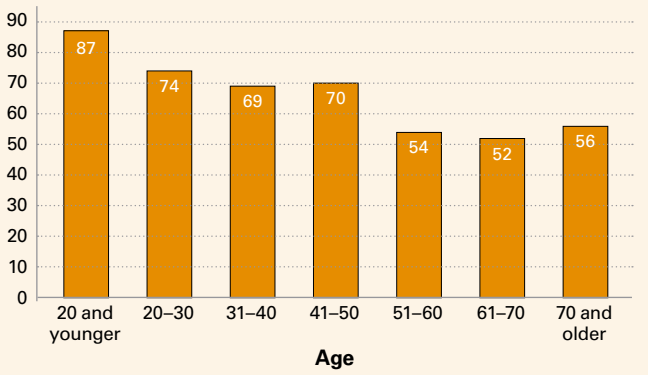
ducted during the last decade have revealed, however, that various demographic factors only have a partial effect on an individual's level of subjective well-being. In addition to external factors, the subjective well-being of people is also dependent on whether their personality is dominated by traits that characterize them as neurotic or extroverted. People with a high neurotic tendency are more prone to experience negative emotions, while the lives of more extroverted people are dominated by positive emotions. Since it has been discovered that most personality traits, especially the tendency to be neurotic or extroverted, are hereditary to a large degree, it can be theorized that approximately 50–60 per cent of individual differences related to subjective well-being have to do with hereditary traits. The data on Estonia presented in the 2006 European Social Survey also confirm this connection: people who experienced more positive ($r = .20$, $p = .05$) and less negative ($r = -.27$, $p = .05$) emotions during the week preceding the survey were more satisfied with life. At the same time, the relative importance of positive emotions in assessments of satisfaction with life is not very significant in Estonia as well as other post-communist countries where emphasis is still being placed on values related to survival (Inglehart & Baker, 2000) – i.e. trust in other people, low tolerance, scarce political activity, awareness of the environment and personal initiative. People in these countries tend to be happy and satisfied even when things are "normal", i.e. not going very badly. However, in countries (including the Nordic countries and many European states) where people emphasize values related to self-expression instead of values related to survival (high level of trust, tolerance, political and social activity, etc.), people need many positive emotions, lots of positive stimulation to be happy with their lives. This is why the definition of a "good life" depends, to a large degree, on the values held by the culture in question (Kuppens et al. 2008).

Socio-demographic factors affecting satisfaction with life

Although a large percentage of Estonian residents are satisfied with their lives, considerable differences still exist if we look at people by age groups, level of education, citizenship and income level. These differences can be analyzed on the basis of data gathered in the course of the 2006 European Social Survey (a total of 1517 respondents in Estonia). This survey measures the respondents' satisfaction with life with the help of the following questions: "*All in all, how satisfied are you with your life in general? Rate your satisfaction using a scale of 0–10 where 0 means that you are not satisfied at all and 10 means that you are very satisfied*". (In order to compare the results of the social survey with earlier surveys, the scale has been reduced to a ten point scale varying from 1 to 10).[16]

One of the most important factors influencing Estonian residents' satisfaction with life is age: approximately

Figure 3.3.3. Percentage of people satisfied or very satisfied with life by age group (%)



Source: European Social Survey 2006.

87% of Estonian residents aged up to 20 are satisfied or very satisfied with their lives, while among respondents aged 61–70 only 52% are satisfied with their lives. It is probable, however, that this is not simply a reflection of age-related peculiarities, but instead a difference in the level of satisfaction of different generations. This interpretation is also supported by the fact that the data gathered in Finland at the same time and in the course of the same surveys reveals no connection at all between age and satisfaction with life. Furthermore, a similar representative survey conducted in Sweden in 1998–2000 demonstrated that respondents belonging to older age groups exhibited a higher level of satisfaction and happiness (Hansson et al. 2000). Consequently, the lower level of satisfaction with life of older Estonian residents is more likely caused by social than biological factors (Realo 2006).

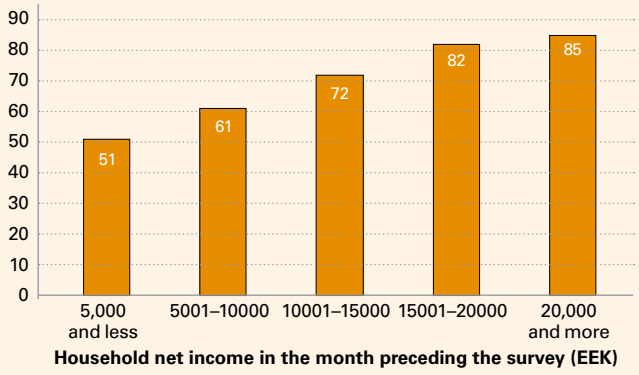
In addition to age, the level of satisfaction of Estonian residents is dependent on their citizenship. Respondents who were Estonian citizens had a nearly 20% higher satisfaction rate than those who were Russian citizens and a 10% higher satisfaction rate than stateless respondents (holders of an alien's passport).

While the levels of satisfaction with life are very similar in the case of women and men, it appears that Estonian residents who are unmarried and do not have children are remarkably more satisfied with their lives than people with children and individuals who are married or divorced. However, these differences become trivial after taking into account the effect of age. In other words, the level of satisfaction with life in Estonia is highest primarily among young people (especially students) who have not yet started a family of their own. Meanwhile, the number of children growing in a family does not influence the respondents' assessments of their satisfaction with life.

Naturally, the respondents' level of education plays a significant role in the assessment of their satisfaction with life. The satisfaction rate is nearly 18% higher

[16] According to the Social Survey, 65% of Estonian residents were satisfied with their lives at the end of 2006/beginning of 2007 (i.e. used scale points 6–10), which is 14% lower than the result of the Eurobarometer survey that was conducted in the same year and indicated that 79% of Estonian residents were satisfied with their lives. This effect was probably caused by the use of the response scale, since a similar difference between the results of the Social Survey and the Eurobarometer survey is apparent in most countries that took part in the social survey. However, the rank correlation between the results of the Social Survey and the Eurobarometer survey among countries that participated in both studies is very high, with Spearman's R = .95, p = .000.

Figure 3.3.4. Percentage of people who are satisfied or very satisfied with their lives by monthly net household income (%)



Source: European Social Survey 2006.

Figure 3.3.5. Percentage of people satisfied or very satisfied with their lives by state-of-health assessment (%)

Source: European Social Survey 2006.

among Estonian residents with higher education than among respondents with basic education. The level of education affects people's assessments of their satisfaction with life even if the effect of age and income has been taken into account. As many earlier studies (Lucas 2007; Realo 2006) have indicated, people's work-related status is another significant factor influencing their satisfaction with life: the rate of satisfaction with life is lower in the case of unemployed people (27%) and those who are not able to work due to a disability (42%), whereas nearly 88% of students are satisfied or very satisfied with their lives.

To what degree do wealth and material well-being increase the happiness of Estonian residents? Many researchers are of the opinion that most people in the world are sufficiently happy regardless of their income and material situation (Biswas-Diener et al. 2005). There is, however, a moderate positive connection between people's level of income and their satisfaction with life, and this connection increases in strength in economically less well-to-do countries (Diener & Biswas-Diener 2002). If Estonian residents are divided into groups based on their income, a clear connection between income and satisfaction with life becomes apparent: only half of the people whose family's monthly net income is lower than 5000 kroons (Figure 3.3.4.) are satisfied with their lives. The rate of satisfaction is more than 30% higher among Estonian residents whose monthly income exceeds 20,000 kroons. This indicates that an increase in income also increases people's sense of happiness and satisfaction.

At the same time, according to a study conducted in the spring of 2008 (Arakas 2008), the richest people in Estonia, i.e. the ones who ranked among the first 150 of the list of top 500 richest people in Estonia compiled by the business newspaper Äripäev in 2007 (Raidla et al. 2007), did not prove to be happier than people whose family's monthly net income exceeded 30,000 kroons. This means that there is a certain point up to which money can buy happiness and when that point is surpassed, any further increase in wealth does not automatically bring about a greater sense of happiness and satisfaction. Or in other words: money does not equal happiness, but neither do economic hardship and poverty.

Is there a connection between Estonian residents' satisfaction with life and their state of health? Generally people who believe they are healthy are more satisfied with life (or inversely, the happier people are, the healthier they believe themselves to be). The percentage of people satisfied with their life is three times smaller (30%) among Estonian residents who believe their state of health to be very bad than among residents who believe their state of health to be very good (90%; Figure 3.3.5.).

Yet the connection between health and subjective well-being exists only if the respondents are asked to assess their own health. As soon as researchers consider more objective indicators of the respondents' state of health or assessments of their state of health provided by doctors, the connection becomes weaker or disappears completely (Diener & Biswas-Diener 2008; Johansson 2008; Okun & George 1984). It can be concluded that an individual's satisfaction with life is affected more by how they perceive their own state of health (i.e. if they consider themselves to be unwell or healthy) than by their actual state of health as characterized by certain objective indicators.

Conclusion

Compared to, for example, Denmark, Sweden or the Netherlands, where 98% and 96% of respondents, respectively, were satisfied with their lives in the autumn of 2007, life in Estonia seems somewhat more dismal. It is naturally conspicuous that satisfaction with life is generally lower in the newer and/or poorer EU member states. The easiest explanation for this is that Estonia, along with the other stragglers, has not yet reached (or has only just entered) the "post-materialist" stage of development where more money does not equal more happiness. This is confirmed by Estonia's position on the World Values Survey map prepared by Ronald Inglehart (1997): the people of Estonia are still fighting for security and survival and do not have enough time or means to devote to self-education and self-expression, which in turn are necessary for achieving satisfaction with life. Meanwhile, Estonian residents' satisfaction with life has increased significantly during the past four or five years, thus reflecting Estonia's economic development and the considerable positive social changes that have occurred.

Although people's sense of happiness and satisfaction is based to a large degree on what is happening in their hearts and souls, a full measure of happiness and satisfaction with life is achievable in our cultural context only through an economically secure, egalitarian and democratic society. While it is true that no country can automatically make its residents happy by enacting a law or a programme, it can create the conditions that allow people to be happy.

References

1. Arakas, A. (2008). Eluga rahulolu mõjutavad tegurid eesti ärieliidi seas: Kas raha teeb õnnelikuks? [Factors Influencing Satisfaction with Life Among the Estonian Business Elite: Does Money Make Us Happy?] Seminar paper, University of Tartu, Institute of Psychology. Manuscript.
2. Biswas-Diener, R., & Diener, E. (2001). Making the best of a bad situation: Satisfaction in the slums of Calcutta. Social Indicators Research, 55, 329–352.
3. Biswas-Diener, R., Vittersø, J., & Diener, E. (2005). Most people are pretty happy, but there is cultural variation: The Inughuit, the Amish, and the Maasai. Journal of Happiness Studies, 6, 205–226.
4. Diener, E., Oishi, S., & Lucas, R. E. (2003). Personality, culture, and subjective well-being: Emotional and cognitive evaluations of life. Annual Review of Psychology, 54, 403–425.
5. Diener, E., & Biswas-Diener, R. (2008). Happiness: Unlocking the mysteries of the psychological wealth. Malden, MA: Blackwell Publishing.
6. Hansson, A., Hillerås, P., & Forsell, Y. (2005). Well-being in an adult Swedish population. Social Indicators Research, 74, 313–325.
7. Inglehart, R. (1997). Modernization and postmodernization: Cultural, economic and political change in 43 Societies. Princeton: Princeton University Press.
8. Inglehart, R., & Baker, W. E. (2000). Modernization, cultural change and the persistence of traditional values. American Sociological Review, 65, 19–55.
9. Johansson, J. (2008). Osteoartroosiga patsientide subjektiivne heaolu enne liigese endoproteesimist. [Subjective Well-Being of Osteoarthrosis Patients Before the Mounting of the Joint Endoprosthesis], Seminar paper, University of Tartu, Institute of Psychology. Manuscript.
10. Kuppens, P., Realo, A., & Diener, E. (2008). The role of positive and negative emotions in life satisfaction judgment across nations. Journal of Personality and Social Psychology, 95, 66–75.
11. Lucas, R. E. (2007). Adaptation and the set-point model of subjective well-being: Does happiness change after major life events? Current Directions in Psychological Science, 16, 75–78.
12. Lyubomirsky, S., King. L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? Psychological Bulletin, 131, 803–855.
13. Okun, M. A., & George, L. K. (1984). Physician- and self-ratings of health, neuroticism and subjective well-being among men and women. Personality and Individual Differences, 5, 533–539.
14. Raidla, P., Hanson, M., Brinkman, K. (2007). Eesti rikaste TOP 500 – Kuraditosin miljardäri rohkem kui mullu. [TOP 500 Rich Estonians – Thirteen More Billionaires Than Last Year] Äripäev, November 23, 2007. online: http://www.ap3.ee/Default2.aspx?ArticleID=7d296789-9550-441c-bc66-36f05b1caf3f.
15. Realo, A. (2006). Mis paneb eestlase elust rõõmu tundma? [What Makes an Estonian Happy?] Horisont, 2, 24–28.

3.4. Typology of quality of life

Previously, we looked at the current level of quality of life as well as its development over time on the basis of separate indicators relevant to shaping quality of life. Material well-being, having a job, social relations as well as general satisfaction and happiness with life proved to be the most important dimensions related to quality of life.

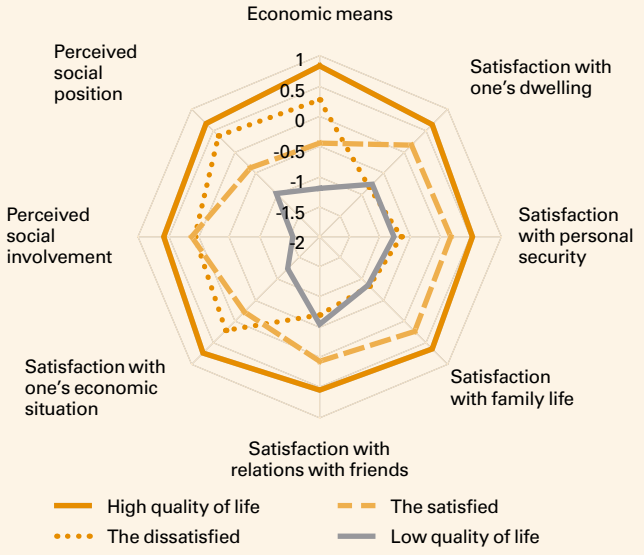
Economic security has improved considerably over the last 15 years along with living conditions. In addition, the progress made with regard to objective indicators related to quality of life is reflected in people's assessments of their satisfaction. Furthermore, the social ties that connect people have become stronger and there has been an increase in social activity. Individual quality of life, which consists of many different components, varies both in terms of the level of quality of life (high, low, medium) and substance. Thus the quality of life of different people may comprise different elements, the importance of which in the overall quality of life varies greatly.

In order to provide a generalized characterization of the quality of life of Estonian residents, a cluster analysis was carried out based on the data of Integration of Estonian Society: Monitoring 2008. The analysis divided the respondents into several types of quality of life on the basis of eight attributes used for measuring quality of life (economic opportunities, satisfaction with one's dwelling, satisfaction with the general material means of one's family, satisfaction with family life and relations with friends, satisfaction with one's own security, perceived social position, and perceived social involvement). An evaluation of different models revealed a four-type model to be the most appropriate for the purpose of interpreting the results of the cluster analysis.

Estonian residents with a high quality of life. The first type of quality of life is characteristic of 37% of the population and indicates an equally high quality of life with regard to every attribute analyzed. The people who belong to this group have very good economic opportunities and are able to live on their incomes without any problems (a third of the people in this group live well at their current level of income and two thirds are able to cope); their satisfaction with all areas of life taken into consideration in the analysis (dwelling, security, family life, friends) is higher than 90%; they do not feel alienated from society and have a higher than average social position (66% place themselves between the 6th and 10th rung of the social ladder) (Figure 3.4.1.). Higher quality of life is also related to higher than average trust in social institutions, positive and optimistic attitudes towards Estonia's current socio-economic situation and prospects for future development, as well as a greater tendency to associate one's life with Estonia (nearly ¾ do not wish to leave Estonia temporarily or permanently) and greater involvement in citizens' associations.

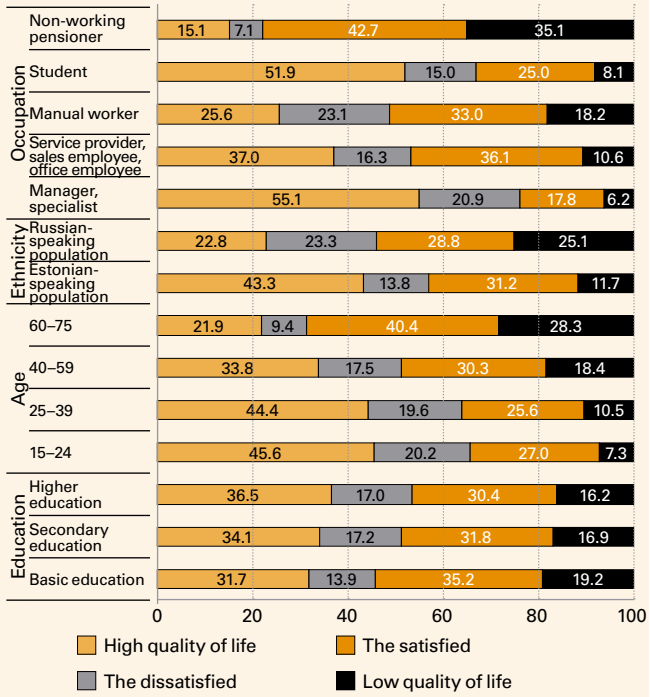
This group primarily includes younger people (more than half of all people aged below 40) and is more likely to include Estonians (more than 40% of all Estonians) than non-Estonians (23%). In terms of social status, high quality of life is characteristic of managers and special-

Figure 3.4.1. Types of quality of life (based on standardized averages of quality of life components)



Source: Integration of Estonian Society: Monitoring 2008.

Figure 3.4.2. Socio-demographic profile of the types of quality of life



Source: Integration of Estonian Society: Monitoring 2008.

ists (55%), and is more widespread among people with a higher level of education than those with a lower level of education (Figure 3.4.2.).

Estonian residents with a contradictory level of quality of life or *"the dissatisfied"* represent an inconsistent type of quality of life (17% of the population). On the one hand, the people whose quality of life corresponds with this type have a social status that is approximately equal to the members of the first group (50% enjoy a higher than average social position). Their economic indicators are also similar (84% are able to cope or are well off). On the other hand, they are very dissatisfied with certain aspects of their lives (60% are not satisfied with their dwelling, 50% are dissatisfied with their family life and 45% with their security), thus resembling the group of people with the lowest quality of life. Almost a fifth of them feel alienated from society. Although the individuals belonging to this group have a slightly higher than average rate of involvement in various citizens' associations, their trust in social institutions is somewhat lower than average, and one tenth are prepared to leave Estonia permanently and 27% temporarily.

"The dissatisfied" group is also heterogeneous in its socio-demographic structure – the people in this group are represented more or less equally in almost all social groups. However, half of the people belonging to this group are younger than 40, and the attitudes associated with this type of quality of life are more characteristic of non-Estonians than Estonians.

"The satisfied" (30%) differ from the first type with high quality of life mainly due to their lower level of material resources and economic situation (more than 60% of the people in this group manage to cope at their current level of income). The perceived social position of people belonging to this group is much lower (only a sixth perceive their social position as higher than average), while the rate of perceived alienation is 13%. At the same time, the members of the group report consistently high satisfaction with their lives, lagging only a couple of percentage points behind the satisfaction rate of people with a high quality of life. Although this group is characterized by lower than average social involvement and a more negative attitude towards Estonia's current and future socio-economic situation, they do not express much interest in leaving Estonia.

More than 60% of the people in this group are older than 40 (over 40% of them are retired) and Estonians and non-Estonians are represented on a relatively equal basis.

Estonian residents with a low quality of life. The fourth type of quality of life is clearly representative of low quality of life and comprises 16% of the population. Nearly 90% of the people in this group are not able to cope at their current level of income, four fifths of the group feel that they are alienated from society and more than half of them place themselves on the three lowest levels of the social hierarchy. Also, their general level of satisfaction is significantly lower than average, but still comparable to the satisfaction rate of the "dissatisfied" group. The predominant attitudes towards developments in Estonia are pessimistic and there is widespread distrust of institutions. Approximately 15% of the people belonging to this group are prepared to leave Estonia permanently if they have the chance.

This type of quality of life is mainly characteristic of the older population: 34% of the people in this group are older than 60 (35% of all retired people, most of whom are women, with the group containing a higher percentage of non-Estonians than Estonians).

The younger age group comprises the largest percentage of people with a high quality of life while among older people, 28% represent the low quality of life type. The difference in the quality of life of young people aged 15–24 and the oldest age group (60–74) is primarily a result of the better material situation, greater social involvement and

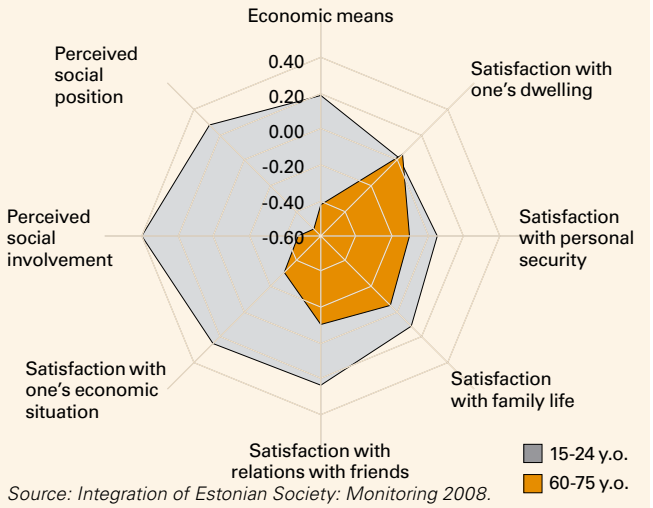
higher social position of the younger population (Figure 3.4.3.).

A comparison of different households indicates that families which consist of two adults and children have the largest number of people belonging to the high quality of life type. The largest number of people with a low quality of life belongs to single-member households and single-parent households.

Contrasting the segments of Estonia's population reveals that the largest difference in quality of life is based on ethnicity. A high quality of life is characteristic of 43% of the Estonian-speaking population, whereas the same is true for only approximately 25% of the Russian-speaking population. One distinctive feature is the significantly higher tendency of members of the Russian-speaking population to belong to the "dissatisfied" group. This raises the question: what are the main aspects of quality of life that bring about the difference in the quality of life of the Estonian-speaking population and the Russian-speaking population? Figure 3.4.4. shows that there are differences in all of the observed dimensions and the largest differences are manifested in the categories of social involvement and personal security.

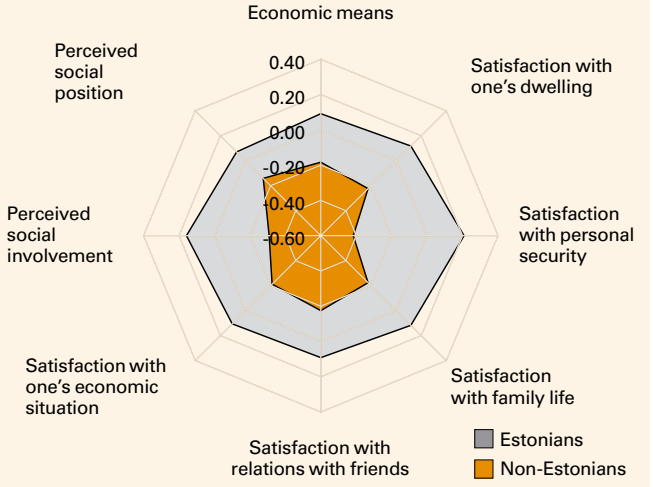
In conclusion, the main differences between Estonian residents in quality of life appear by age and ethnicity. A comparison of the components that make up the quality of life of Estonians and non-Estonians shows, most importantly, the difference in the levels of quality of life. The Estonian-speaking population's quality of life is consistently higher according to all of the attributes analyzed. However, the significantly lower satisfaction of non-Estonians with their personal security and their higher risk of perceived alienation (withdrawal) that are evident among the other quality of life components may indicate a more unfavourable effect of the social environment (the so-called quality of life conditions) on the development of individual quality of life. Differences that are even more substantial appear in the quality of life components of young and elderly people. The lower than average quality of life of elderly people is a result of their extremely low social position and perceived alienation. This is aggravated by their material situation which is devoid of opportunities and produces discontentment, thus functioning as both the cause and effect of the aforementioned problems.

Figure 3.4.3. Average assessments of the dimensions of quality of life in the case of age groups 15–24 and 60–75 (compared to the overall average)



Source: Integration of Estonian Society: Monitoring 2008.

Figure 3.4.4. Average indicators for dimensions of quality of life by ethnicity (compared to the overall averages)



Source: Integration of Estonian Society: Monitoring 2008.

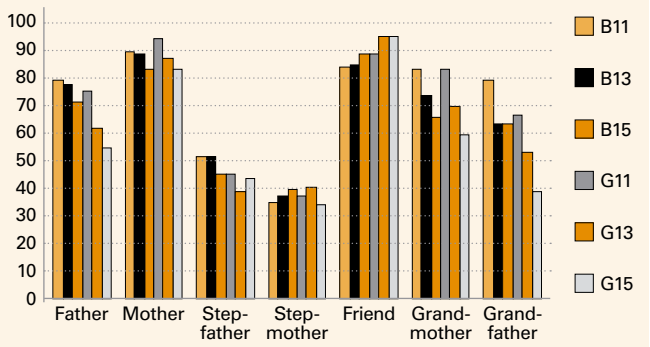
3.5. Quality of life of children

Introduction

According to the new approach to childhood, children are a part of the social structure and exist *here and now* as subjects and as active social agents. Based on this approach we can look at their quality of life from two aspects. First, the quality of life that children can enjoy themselves here and now (e.g. their health, the existence of significant adults and peers and relationships with them, access to social benefits). Second, the children's quality of life as the source of potential for a successful adulthood (development of knowledge and skills as well as physical and mental resources). Consequently, children's quality of life includes both the personal goals of children as well as activities that ensure the sustainability of the society, i.e. social goals.

A child's quality of life is created in a family context and is directly affected by the family's coping skills (the ability of the adults to cope with family-related matters, socio-economic issues and issues related to upbringing, etc.). Important influences include the family's living conditions and its general level of integration in the society, as well as whether or not the child is valued in a wider social context. In addition to communicating with adults, children need to relate to their peers. According to William Corsaro (1997) who established the new paradigm of childhood, involvement in a group of their peers has a therapeutic effect on children. Children who have been mistreated at home or in school

Figure 3.5.1. Percentage of teenagers who find it easy to discuss their problems with parents, grandparents and friends (boys and girls aged 11, 13 and 15)



Source: Aasvee et al. 2007.

may be able to cope with their insecurities and anxieties if they are accepted and recognized by a group of children. Trust and support provided by people their own age help increase children's well-being – their own social capital which will support and protect them if they have to experience something bad or difficult in the future.

Andrews et al. (2002) stress the importance of human and civil rights, social justice and participation in civil society in the lives of children. Children's participation in civil society indicates that they are continuously communicating with both adults and their peers and that social justice determines the distribution of social benefits between various target groups. Children's human and civil rights help them to be seen and heard in addition to giving them the right to actively participate in social affairs, including shaping their own quality of life to a certain degree. The level of realization of a child's quality of life depends on how the society in question views children as a social category and to what extent children's needs are generally taken into account, to whom the political measure is addressed and whether the society attempts to regulate the well-being of children through the well-being of adults.

Solidarity between generations as a prerequisite for providing children with a high quality of life

Children do not generate material wealth for the society. Their task involves the explanatory reproduction and transmission of knowledge from one generation of adults to another. Unlike in the case of adults, the work children do and the compensation they receive are separated in time, meaning that effective investment into knowledge and life skills as a child provides the basis for the ability to cope with life successfully as an adult. Children and adults form two separate social groups and represent differing and sometimes contradictory interests in political discourses. Children's quality of life, however, is affected both by political decisions addressed to children and by decisions that regulate the well-being of adults and thereby the living environment of children.

Poverty surveys conducted in Estonia have repeatedly outlined children as the group most vulnerable to the risk of poverty. The current social practice indicates that in making political decisions, authorities are quick to misuse the restraint of groups of adults who represent the interests of children as well as their limited ability to protect the well-being of children. As a result, the percentage of pension insurance expenses in the GDP have remained within the limits of six per cent in recent years, while the actual pension payments have grown nearly twofold. There has also been a moderate increase of family benefits in recent years as a result of the parental benefit introduced in 2004, despite the fact that the relative importance of family benefits (including those directed to children) in the GDP has actually decreased. Similar to other European countries, Estonia is an aging society: compared to 2000, the proportion of people aged 18 or younger in Estonia's population has decreased and the proportion of people aged 65 or older has grown. If the size of the interest group that represents children's needs (adults raising children) becomes smaller, the direct representation of children's interests in political discussions will diminish further and the decisive role in the distribution of social wealth will be played by the solidarity of political interest groups.

Children's support network as a reflection of their quality of life

Family members. Nowadays, children in Estonia face changes in social and biological bonds more frequently and at an earlier age than before, with the changing world of their own, half siblings and "obtained" brothers and sisters, parents, grandparents and other relatives. Children's quality of life within the system of family relations is directly dependent on how well adults are able to cope within their larger family network. Who make up a child's family and whom can they rely on? The results of an international health behaviour study of schoolchildren (Aasvee et al. 2007) showed that teenagers felt most comfortable discussing their problems with their mothers, while their least frequently preferred confidants included stepmothers and stepfathers (Figure 3.5.1.). Although the tendency to confide in adults decreases as children become older and they find new confidants among friends, it can be concluded that the increasing frequency of situations where children live with step-parents presents a risk in terms of children's quality of life. The study indicated, however, that more children from economically well-to-do families confided in their parents compared to children from less wealthy homes.

It is in the interest of children to have both parents and to be able to communicate with them. Communication with parents living separately is often rendered difficult by unresolved problems that persist between the parents, which in turn overshadow their readiness to understand the real needs of their children. Leeni Hansson (2004) demonstrated in her study that the likelihood of communicating with a parent who lives separately from the family and receiving support from grandparents on that parent's side is greater if the parents have been married. If the parents have been living together outside wedlock, however, the support networks tend to be less developed and remain tenuous and ineffective in the case of a break-up. In the latter case, the ties between the parent living elsewhere and the child tend to be weaker. As a result, the wide informal network created around a child through variegated family structures does not necessarily provide them with more support or a higher quality of life.

Belonging to a family provides children with a sense of security, while belonging to a group of their peers gen-

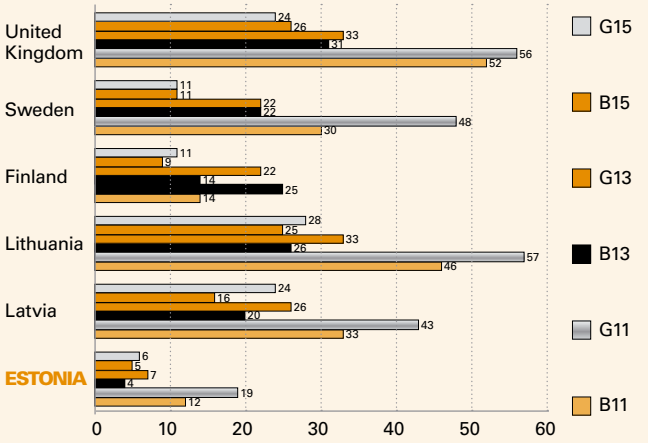
erates trust and self-respect. Children need both types of connections. Children today spend a lot of their time in childhood institutions (nursery schools, schools, hobby schools, etc.). Their daily lives and social experiences are firmly structured and affected by the institutions' distribution of time and space. For example, if a family is incapable of developing good life skills in a child then this can be corrected by these institutions as well as the children's own support networks (friends, peers, teachers, instructors, the children's own access to services and support). Furthermore, media (television, the Internet) has begun to compete for an increasingly large share of attention in children's lives and the amount of the so-called quality time spent by children with their parents is decreasing.

Peers. The importance of peers in a child's life increases with age (Figure 3.5.1.). Most teenagers have at least three friends, although approximately one per cent of teenagers have no friends. Children tend to spend time with friends immediately after school at least once a week, and a fourth of Estonian children spend time with friends after the end of almost every school day. Children's communication with their friends is somewhat less active in the evenings, but this changes as they grow older. Approximately 40% of teenagers communicate with their friends through SMS or the Internet on a daily basis, the latter being an important means of communication for around 70% of teenagers. In addition to participating in active forms of face-to-face communication (e.g. listening to music and dancing – 47%; playing sports – 43%, etc.) approximately half of the respondents reported that they simply "hang around" with their friends (see Alasoo et al. 2007:163–184).

School. Children spend most of their time in school, but school as a communication environment is problematic with regard to children's quality of life. Boys tend to like school less than girls, and the inclination to like school generally decreases with age. Compared to children in other countries, Estonian children are the most critical towards school (Figure 3.5.2.). It is likely that there is some aspect of Estonia's school curriculum that does not suit the preferences of boys and older teenagers. On the other hand, it is certain that children's problems are related to the atmosphere prevalent in schools. A study of school violence by Strömpl et al. (2007) revealed that more often than physical abuse, the school environment is fraught with mental abuse and that girls, not boys, are more likely to take part in it. According to the children suffering from school abuse, teachers are incapable of recognizing mental abuse between students and therefore do not devote enough attention to it. Furthermore, victims themselves sometimes tend to avoid interpreting abuse as such and attempt to somehow cope with the negative emotions they are subjected to.

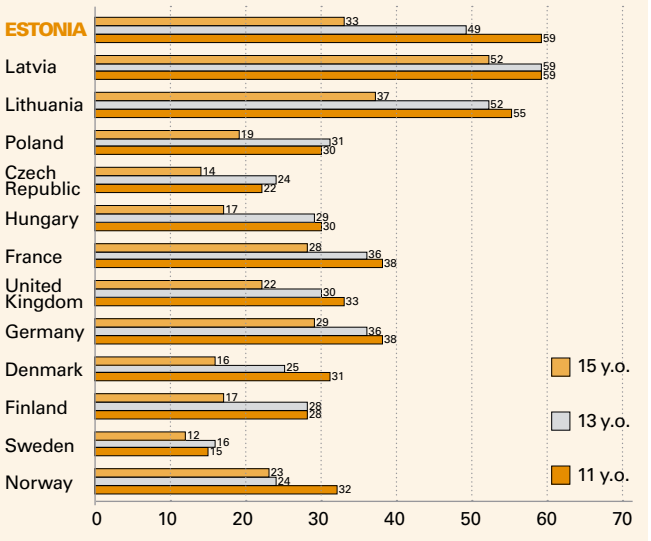
Compared to other countries, Estonia's schools are relatively violent according to the children's assessments, although among the participating countries the situation is similar in the other Baltic States. The percentage of teenagers who reported having been the victims of school abuse was significantly lower, however, in the case of the schools of Nordic and Western European countries (Figure 3.5.3.). Strömpl et al. (2007: 96) claim in the conclusion of their study that the causes of school violence lie deep within the social processes, and the so-called problem children in question (victims and perpetrators of abuse) are a type of symptom that indicates the existence of problems that have not been caused by children themselves. They add on a critical note (p 96): "Estonia's

Figure 3.5.2. Percentage of teenagers who like school very much by the country of residence, age and gender of the respondents (excerpt from countries that participated in the 2005/2006 study)



Source: Currie et al. 2008

Figure 3.5.3. Percentage of teenagers who claim to have been subjected to school abuse during the last couple of months by the country of residence, age and gender of the respondents (excerpt from countries that participated in the 2005/2006 study)



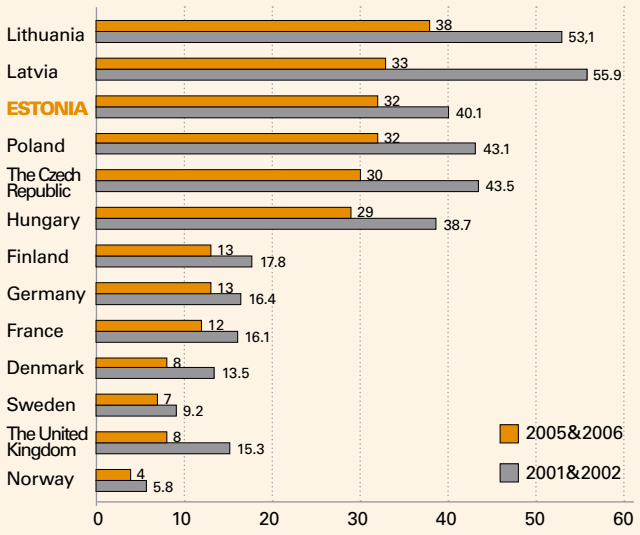
Source: Currie et al. 2008

schools today are too fixated on "providing knowledge" and ignore the people participating in the process, both students and teachers. Individuals are being valued only on a rhetorical level, but it is necessary to learn to interpret these lovely words and to actually start caring about every person." The research sees a solution in creating a sense of belonging in the school community and solidarity between its members, and establishing it as a core of a new school concept.

Economic performance of children as a component of quality of life

The economic existence of children, i.e. the availability of resources for satisfying their needs is directly dependent on

Figure 3.5.4. Percentage of respondents who characterized their family's economic situation[17] as bad by country of residence (excerpt from countries that participated in the study)



Source: Currie et al. 2008; 2004.

their parents' economic situation and the parents' attitudes towards raising children. In the opinion of the children, the economic situation of families in Estonia has improved, i.e. in an international study of the health behaviour of schoolchildren the percentage of respondents who rate the economic situation of their families as bad has decreased during the last five years (Figure 3.5.4.). It is worth noting that the economic situation of families has improved at a significantly faster pace in the new EU member states, such as the Baltic countries and Poland, but remains considerably worse there than in Nordic and Western European countries.

In the European context, Estonian children are relatively poor and only children in Lithuania and Latvia are poorer, while the median income of poor children in neighbouring Finland is just 10% below the poverty line (Polandkese & Reinomägi 2008). In terms of the economic situation, the level of quality of life is lowest for children living with non-active parents, who constituted 8.2% of all people under 18 in 2006. The effect of the unemployment of a parent on children is especially conspicuous in times of general economic growth when differences between people living on social benefits and those living on an income grow quickly. The poverty risk of children with unemployed parents started growing sharply in 2002 concurrently with the economic growth experienced by the Estonian society. Tiit (2006) points out an important cause of this trend: unemployment insurance benefits did not keep pace with the rise of the relative poverty line.

The socio-political decisions of recent years reflect a certain tendency of improvement in the material well-being on which children's quality of life is based. Analyzing the effect of family benefits on the alleviation of poverty in Estonia, Võrk and Paulus (2007) found that national family benefits have reduced the number of children living in poverty by nearly a third. The effect was the greatest in the case of families with many children and the smallest in the case of families with one child and single-parent families. According to Tiit (2006), the poverty risk of households has not been significantly raised in recent years (unlike before) by having a larger number of children under 14 in the household, although the poverty risk of children living with single mothers has increased during the same period.

Effect of poverty on children's quality of life. The results of a household income and expenditure study conducted by Statistics Estonia revealed that families differ greatly in terms of the percentage of the family's total expenses spent on children. Tiit (2004) used data gathered in 2002 to compare households belonging to the five lowest (the poorer half) and five highest (the wealthier half) income deciles and found that the difference between these two income groups in terms of spending on children was nearly twofold. The structure of expenses of the wealthier half of the families showed that they spent, on average, 1.55 times more on food for children, 1.86 times more on children eating out, 2.13 times more on children's transport, 3.12 times more on children's clothing and 3.25 times more on children's recreational activities. The needs of children vary more than the needs of adults and change quickly as children become older. The analysis showed that expenses related to buying clothes and footwear for even preschoolers constituted 80% of the expenses related to satisfying the corresponding needs of adults, while in the case of 18-year-olds the expenses had grown 1.5 times higher than those related to adults.

In addition to having their primary needs related to food, shelter and self-development met, children also have the need to belong to groups of their peers on an equal basis. Owning certain items (the "right" toys, clothes, mobile phone, computer, etc.) is an important external indicator of the fact that children share the standards and values of their peers and can therefore be accepted into a group of their peers. The lack of these indicators may, however, be reason enough to cause children to be rejected from participating in the cultural routines of their peers. Compared to their peers, children from poorer homes are more likely to experience economic deprivation – they have less pocket money, lack more of the items they need as well as opportunities to participate in the activities of their peers. They perceive themselves as having fewer friends than others and are less satisfied with themselves (Kutsar et al. 2004). Lack of wealth in itself does not destine children to social exclusion, but money can facilitate their inclusion, especially in activities that require the availability of financial resources.

In fact, children are less likely to have negative experiences due to them lacking a certain item (economic deprivation) than due to their inability to be included in groups of their peers, i.e. deprivation of choices. Self-initiated activities are more important to children than organized activities. A small-scale survey of sixth graders by Viira (2005) showed that 27% of the respondents felt deprived of opportunities to participate in activities along with their peers. These respondents were most often children who had unemployed parents or parents with low incomes. The study also indicated that children from poorer families actively reduce their own needs, while being less active than children from wealthier families in finding opportunities to escape undesirable sit-

[17] The assessment is based on a conventional score calculated as an index characterizing the extent of the family's belongings as defined by the child (ownership of cars, computers, number of joint vacations, availability of a separate room for the child). The score varies from 0 to 9. Economic situation is bad: score 0–3; average: score 4–5; good: score 6–9 (Aasvee et al., 2007, Kooliõpilaste tervisekäitumise uuring 2005–2006).

uations. Thus, children cope with their subjectively perceived relative deprivation by reducing their own quality of life standards. However, this coping strategy also diminishes interest in organized recreational activities, thereby intensifying the affected children's passiveness and inactivity.

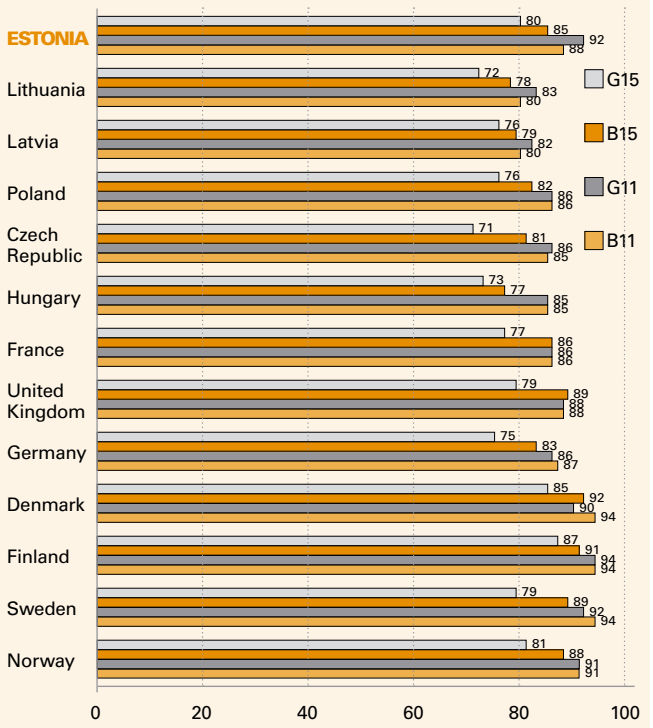
Social networks, whether those created by adults or children themselves, play an important role in children's quality of life. Children's quality of life is increased considerably by a friendly and united school atmosphere, the support of their friends, help provided by highly qualified specialists, and the availability of social services and support. Children begin accumulating human, social and cultural capital already before school as they learn to trust their peers by being included in their games. Later, when children are old enough to go to school, the process of capital accumulation is intensified. It is paradoxical that while children spend most of their time in institutions (nursery school, school, hobby clubs, etc.) among their peers and stay separated from the world of adults, they become increasingly similar to adults. In the context of our aging society researchers have noticed a trend called the aging of childhood which focuses both around the individuation process (the individual representation of a child in society) and children's own propensity to be active and make purposeful choices corresponding to their social competence after discussing them with adults.

Children are increasingly acting in cooperation with agents that do not belong to their families, including the "new nannies" (computers, the Internet, mobile phones, public game arcades, shopping centres, etc.). Parents whose economic situation is better have more opportunities for entrusting their children to the "new nannies", while the children of parents with a low financial status can choose between options that do not require an immediate contribution of additional financial resources (watching television, communicating with their friend in the streets, simply "hanging around" at shopping centres, etc.). At the same time it is important to note that children's quality of life has become more dependent than before not just on the resources around them but also the life skills children use to make those resources available to themselves. In addition to negotiation skills, children are also supported by the society's tendency to value children and the solidarity of its political interest groups.

Satisfaction with life as the universal measure of children's quality of life

According to the international study of the health behaviour of schoolchildren, children are generally satisfied with their lives (Figure 3.5.5.). There is, however, a significant drop in the number of children satisfied with their lives among the older teenager group. Girls are more critical in their assessments of their satisfaction with life than boys and their assessments are related to the level of financial means available to them in all countries (greater satisfaction is connected to the family's better economic situation). Children from Western European and Nordic countries are more satisfied with life compared to children from Eastern and Central European countries. Estonian children's satisfaction with life is one of the highest among transitional countries.

Figure 3.5.5. Percentage of teenagers who are generally satisfied with their lives (have given their satisfaction with life a rating of at least 6 points on a 10-point scale) by gender and country of residence (excerpt from countries and age groups that participated in the survey).



Source: Currie et al. 2008

References

1. Aasvee, K, Polandkese, A., Minossenko, M., Kurbatova, A. (2007) Eesti kooliõpilaste tervisekäitumise uuring. [Health Behaviour Study of Estonian Schoolchildren] 2005/2006 academic year. Tables (Results on the basis of weighed data). Tallinn: National Institute for Health Development.
2. Andrews, A., Ben-Arieh, A., Carlson, M., Damon, W., Dweck, C., Earls, F., Garcia-Coll, C., Gold, R., Halfton, N., Hart, R., Lerner, R.M., McEwen, B., Meaney, M., Offord, D., Patrick, D., Peck, M., Trickett, B., Weisner, T., Zuckerman, B. (2002) Ecology of Child Well-Being. Advancing the science and the science-practice link. Georgia: Centre for Child Well-Being.
3. Corsaro, W.A. (1997). The Sociology of Childhood. Pine Forge Press.
4. Currie C., Roberts, C., Morgan, A., Smith, R., Settertobulte, W., Samdal, O., Barnekow Rasmussen, V. (eds) (2004) Young people's health in context. Health Behaviour in School-aged Children (HBSC) study: international report from the 2001/2002 survey. Health Policy for Children and Adolescents, No. 4. WHO.
5. Currie C., Gabhainn, S.N., Godeau, E., Roberts, C., Smith, R., Currie, D., Picket, W., Richter, M., Morgan, A., Barnekow, V. (eds) (2008) Inequalities in young people's health: international report from the HBSC 2006/06 survey. WHO Policy Series: Health policy for children and adolescents Issue 5, WHO Regional Office for Europe, Copenhagen.
6. Hansson, L. (2004). Valikud ja võimalused: argielu Eestis 1993-2003. [Choices and Opportunities: Daily Life in Estonia 1993–2003], Tallinn: Tallinn University Press.
7. Kutsar, D., Harro M., Tiit, E.-M., Matrov, D. (2004) Children's Welfare in Estonia from Different Perspectives. In: Jensen A-M., Ben

Arieh A., Conti C., Kutsar D., Nicghiolla Phadraig M., Warming Nielsen H. (eds). Children in Ageing Europe, COST A19, Vol 1, pp. 81–141. Trondheim: Norwegian Centre for Child Research.

8. Polandkese, A., Reinomägi, A. (2008) Vaesus ja sotsiaalne kaitse. Lapsed. [Poverty and Social Protection. Children], Tallinn: Statistics Estonia, pp. 20–38.
9. Reinomägi, A. (2008) Riiklikud peretoetused ja hüvitised. Sotsiaalvaldkonna arengud 2000–2006. Trendide kogumik. [National Family Support and Benefits. Developments in the Social Sphere in 2000–2006. A Collection of Trends], Series of the Ministry of Social Affairs 2/2008:33–38.
10. Strömpl, J., Selg, M., Soo, K., Šahverdov-Žarkovski, B. (2007) Eesti teismeliste vägivallatõlgendused. [Estonian Teenagers' Interpretations of Violence], Series of the Ministry of Social Affairs 3/2007.
11. Tammur, A., Randoja, M. (2008) Laste kasvukeskkond. Lapsed. [Children's Growing Environment. Children.], Tallinn: Statistics Estonia, pp. 11–19.
12. Tiit, Ene-Margit (2004). How much do Estonian children cost? An Empirical Study. Paper presented at NFRN workshop in Uppsala, 11-12 September 2004.
13. Tiit, E.-M. (2006). Vaesus ja selle mõõtmine. Vaesuse suundumused Eestis. [Poverty and How to Measure It. Poverty Trends in Estonia], Series of the Ministry of Social Affairs 8/2006.
14. Viira, K. (2005) Deprivatsiooni seos majandusliku seisundiga ning selle mõju lapse vaba aja tegevustele. [The Connection Between Deprivation and Economic Situation and the Effect of Deprivation on Children's Recreational Activities], Bachelor's thesis, supervisor D. Kutsar. Tartu: University of Tartu. Manuscript.
15. Võrk, A., Paulus, A. (2007) Peredele suunatud rahaliste toetuste mõju vaesuse leevendamisele Eestis: analüüs mikrosimulatsioonimeetodi abil. Uurimisraport. [Effect of Financial Support Directed at Families on Reducing Poverty in Estonia: Microsimulation Analysis. Study Report.] Tallinn: PRAXIS.

3.6. Quality of life of the elderly

Introduction

As of January 1, 2008, 230,469 people aged 65 and older lived in Estonia, making up 17.2% of the entire population. There were 17,899 very old people (85 and older) constituting 1.33% of the population. During the next decades, the percentage of very old people will grow, which makes the issues related to the quality of life of the elderly increasingly topical.

Discussions about the quality of life of the elderly emphasize health-based quality of life and sometimes tend to equate it with quality of life in general. This approach is justified in evaluating the treatment of specific illnesses and discussing difficulties in coping with challenges arising from such illnesses, but it does not substitute the treatment of quality of life on a wider scale. As they become older, people usually experience several losses (related to health, partners, jobs, income, position, etc.) and the subjective quality of life of the elderly is dependent, to a large degree, on psychological reserves that allow people to cope with such losses. Thus, one of the keys to aging well is the skill to employ selectiveness, optimization and substitution as the means for coping with the challenges related to aging (Baltes & Baltes 1990). With regard to material well-being, Estonia's elderly are largely dependent on solidarity-based social support as well as the availability of services and benefits, since current pensioners have had few opportunities to accumulate material resources for themselves.

The following section provides a closer inspection of the relationship of the elderly with the labour market, their social activity and assistance, health evaluations and the need for care as factors influencing the quality of life of the elderly. Data have been gathered from five studies conducted in Estonia: the Study of Health and Coping of the Older Population of Estonia in 2000 (pan-Estonian random sample of 1000 respondents aged 65 and older, data on 811 individuals, i.e. 0.5% of the elderly population; study conducted by family physicians); the Study of Tartu Seniors in 2002 (random sample of 1000 people aged 50 and older living in Tartu, data received from 480 individuals, mail-in survey); the CareKeys study (Estonia, Finland, Germany, Sweden, the United Kingdom; a random sample of 150 persons receiving home care service and 150 people on institutional care from each country; data collected in 2005); the 2006–2007 nursing care audit (sample included all nursing care institutions in Estonia, N=41, with a random sample of 10 patients from each institution or all patients if the institution had less than 10 patients in nursing care; a total of 369 cases; a survey of patients and personnel and the researchers' analysis of documentation).

Employment and exit from the labour market

Compared to other EU member states (Table 3.6.1.), Estonia, like the Nordic countries, has a relatively high level of employment among the older population. Employment is higher among women than men and the elderly prefer to work full time. This employment behaviour among the elderly surpasses the corresponding EU goal for 2010. A significant withdrawal from the labour market begins around the ages of 61–63 and as the older population's willingness to stay in the labour market decreases sharply, 80% of the elderly have left the labour market by the age of 65 (Tiit et al. 2004). When people continue working after reaching retirement age, they are paid old-age pensions alongside their salaries. They are thus encouraged to remain active while aging and supported materially with regard to their quality of life. Many members of the older population would, however, prefer to use the "soft" strategy for exiting from the labour market, which would entail working part time or doing easier jobs before completely leaving the labour market (Tiit & Saks 2002; Saks et al. 2000).

Social activity and informal support networks of the elderly

According to the Estonian Study of the Elderly, the social activity of people over 65 is relatively small. Only 15% of the elderly said that they participate in events organized in their neighbourhoods, while about a half of the respondents stated that the reason for their lack of participation is their bad state of health, and one fifth of the respondents said that they lacked interest in the events. For the most part, the communication and hobby activities of the elderly tend to be individual, mainly comprising watching television, listening to the radio, reading books (including visiting libraries), going to the theatre and concerts. Approximately 15% of the members of the elderly population are regular visi-

tors of day centres for the elderly and 14% visit the day centres sparsely, with older people living in rural areas being more active in this regard than those living in cities (Tiit & Saks, 2002; Saks et al., 2002). Nearly a quarter of the elderly population participate in church-related activities. A fifth of the respondents reported that they would like to participate in joint events or church life but are unable to do so. At the same time, over a fifth of the elderly population were not at all interested in taking part in joint activities. It is probable that one cause of the low social activity of the elderly is the shortage of opportunities aimed at their age group. A third of the respondents, however, complained about the lack of relevant information and a quarter reported that they do not care about participating in events outside their home.

According to the European Social Survey (2004), people's activeness in communicating with friends, relatives and colleagues decreases as they become older and friendship-based communication is replaced with communication based on care-related needs. Compared to men, women's communication activeness diminishes at a slower rate because they are also more active in providing non-financial assistance (e.g. helping friends, neighbours, children, etc.) and accepting assistance when they are left alone, while men receive informal assistance primarily from their spouse/partner and report being left without assistance more often than women when living alone. Consequently, elderly men's quality of life is more dependent on resources within the household, while women tend to be more efficient in combining these with resources available outside the household.

Health

People's functional abilities decrease in old age, but it is the increasing frequency of health problems that cause health to be the primary factor affecting elderly people's quality of life. One of the most informative indicators for characterizing the state of health of adults is people's own assessment of their health. The percentage of people who rated their health as good or very good is 3.5–3.9 times higher in Estonia than that of people who rated their health as bad or very bad (Figure 3.6.1.). The average proportion in the EU was as high as 6.1 (National Health Interview Surveys 2004; Health status…, EU-SILC online). In older age groups, the difference between good and bad health ratings decreases both in Estonia and other EU countries. In Estonia, the number of people with self-perceived bad health surpasses the number of people with good health already before the age of 65, while in the EU, this tendency is apparent only after the age of 75. It can be concluded that the state of health of the elderly worsens much more quickly in Estonia than in the EU on average, thus creating a situation where health is a significant negative influence on the quality of life of the elderly.

Satisfaction with various aspects of quality of life

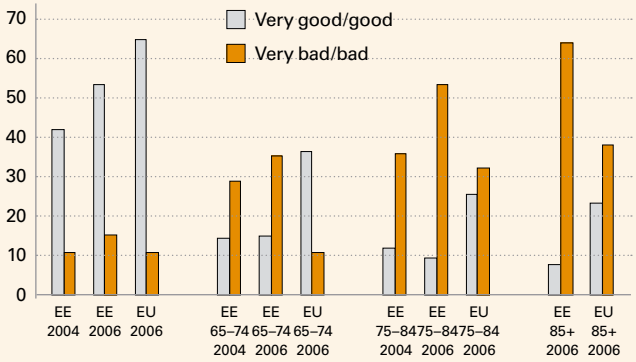
Studies of the satisfaction and subjective well-being of the elderly have shown that these indicators rely largely on the health of the respondents and their coping capacities, as well as the availability of health care and nursing care services (Bowling & Gabriel 2007). Studies of the elderly conducted in Estonia revealed that more than two thirds of people aged 65 and older were generally satisfied with their lives. Approximately half of the elderly respondents rated their ability to cope economically as satisfactory or good. A large segment of the elderly were satisfied or relatively satisfied with their dwelling and the surrounding area, while a tenth of the respondents reported dissatisfaction with these spheres of life. Only a small part of this target group evaluated the work local governments do with the elderly as good (11–13%), a large percentage of respondents had no opinion on it, and the percentage of respondents who were dis-

Table 3.6.1. Employment rates in EU member states and candidate countries, 2002 (%)

	Employment rate (15–64)	Women's (15–64) employment rate	Employment rate of the older workforce (55–64)
Belgium	59.9	51.4	26.6
Denmark	75.9	71.7	57.9
Germany	65.3	58.8	38.6
Greece	56.7	42.5	39.7
Spain	58.4	44.1	39.7
France	63.0	56.7	34.8
Ireland	65.3	55.4	48.1
Italy	55.5	42.0	28.9
Luxembourg	63.7	51.6	28.3
The Netherlands	74.4	66.2	42.3
Austria	69.3	63.1	30.0
Portugal	68.2	60.8	50.9
Finland	68.1	66.2	47.8
Sweden	73.6	72.2	68.0
United Kingdom	71.7	65.3	53.5
EU 15	64.3	55.6	40.1
Cyprus	68.6	59.1	49.4
Czech Republic	65.4	57.0	40.8
Hungary	56.6	50.0	26.6
Lithuania	59.9	57.2	41.6
Latvia	60.4	56.8	41.7
Malta	54.5	33.6	30.3
Poland	51.5	46.2	26.1
Slovenia	63.4	58.6	24.5
Slovakia	56.8	51.4	22.8
ESTONIA 2002	61.7	57.8	51.5
ESTONIA 2003	62.6	58.8	52.1
the EU goal for 2010	**70**	**More than 60**	**50**

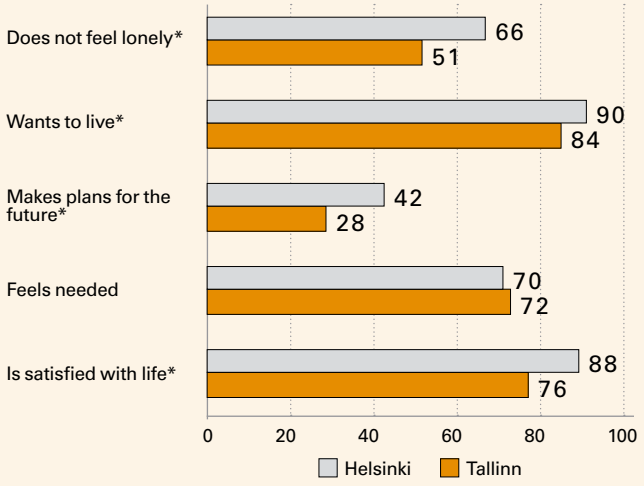
Source: Eurostat, Statistics Estonia (Tiit et al. 2004).

Figure 3.6.1. Health self-assessment by age groups in Estonia and the EU, 2004 and 2006



Source: National Health Interview Surveys 2004; Health status…, EU-SILC online; Saks et al. 2000; Tiit & Saks 2002).

Figure 3.6.2. Subjective quality of life of the elderly in Tallinn and Helsinki (%)



** – statistically reliable difference*

Source: TALSINKI study 2004.

satisfied with the local governments' efforts was somewhat larger (16–20%) than that of satisfied respondents.

According to the study of well-being conducted in the neighbouring cities of Tallinn and Helsinki (Talsinki 2004), the subjective quality of life of the elderly living in Tallinn is significantly lower than that of the elderly living in Helsinki (Figure 3.6.2.). The only area where no difference was identified was the respondents' perceived indispensability to others, but the elderly in Tallinn reported a greater sense of loneliness, a lesser will to live, fewer plans for the future and remarkably lower satisfaction with life. These indicators were apparently not influenced by the fact that a considerably smaller percentage of the elderly live alone in Tallinn than in Helsinki (36% in Tallinn compared to 67% in Helsinki).

The lower quality of life of Estonia's elderly population is a result of worse health (52% of respondents in Tallinn considered themselves ill or very ill compared to 29% in Helsinki), but also significantly worse access to formal services (4% of all respondents used such services in Tallinn, while 35% of respondents were able to do so in Helsinki). The availability of help from family or friends/acquaintances is similar in both cities (nearly 80% of respondents can receive help if they need it).

Quality of life of the elderly with care needs

In the case of elderly people with care needs it is possible to differentiate between the quality of life in general and the quality of life dependent on care. The aim of care is to improve people's quality of life as much as possible in their situation by adjusting their environment, helping and supporting them. It is possible to relieve many coping problems caused by illnesses or age with care, although it is not possible to fully compensate for irreversible losses. Due to this, the key dimensions of quality of life in terms of providing care are those that can be affected through care. The four care-related dimensions of quality of life include the environment and resources, functional abilities, social identity and social relations, and psychological well-being (Pieper & Vaarama 2008). On the subjective level, these four dimensions correspond with safety and convenience, the feeling of control, satisfaction with life, and emotional well-being. The provision of care must help the recipients in their activities of daily living, support the self-sufficiency of people depending on care as well as their social relations, and give emotional support.

The quality of life of elderly people using home care services is affected most by serious illnesses, problems related to daily activities and housekeeping, difficulties related to their dwelling and living environment, their limited access to social life as well as their passive lifestyle and absence of close friends (Vaarama & Tiit, 2008). The quality of life of people receiving home care is better if they are positively disposed to the process of aging and are satisfied with the services provided to them. The feeling of security and control over their situation and the care services are important to people receiving home care. The quality of life of elderly people in care institutions is affected positively not only by their satisfaction with the rendered services and the people who assist them, but also by the opportunity to take part in making decisions related to their care and the planning of their daily life, as well as the opportunity to fill their free time with meaningful and interesting activities. The involvement of family and friends in the treatment process also improves the quality of life of people living in care institutions. In the case of people dependent on care, the significance of different dimensions with regard to general well-being changes somewhat, with food and issues related to meals as well as the ability to leave their room becoming especially important (Saks et al. 2008).

The EU research project CareKeys studies the quality of life of elderly people receiving care services with the aim of clarifying the connections between care and quality of life. The study revealed that the quality of life of the elderly living in Estonian care hospitals and care homes as measured with the short version of the World Health Organization Quality of Life Questionnaire (WHOQOL Group 1998) was just a little lower than, but comparable to, that of the elderly living in similar institutions in other countries (Figure 3.6.3.). The subjective quality of life of people who receive care services at home, however, is considerably lower, even compared to the Estonian elderly living in care institutions (Figure 3.6.4.; Saks & Tiit 2008). Some of the elderly in need of care would prefer to stay in a care institution, but are unable to do so due to financial constraints.

The quality of life of people depending on care is significantly affected by their satisfaction with the services they receive. In Estonian (health) care institutions, the patients' satisfaction with care is generally high according to the Care Keys study () and the Care Audit (Saks & Leibur 2008). However, seven per cent of the respondents were dissatisfied with the care they received and three per cent were very dissatisfied. A higher percentage of respondents (15%) were dissatisfied with the fact that the personnel providing them with care do not have enough time for them and do not give them sufficient information. Respondents were also dissatisfied with being denied the opportunity to plan their own day as well as with having little to do and having difficulty getting outside. They were also critical of their lack of access to health care services. However, the respondents were generally satisfied with the assistance related to their daily activities and with the care institutions as a whole (Saks & Leibur 2008).

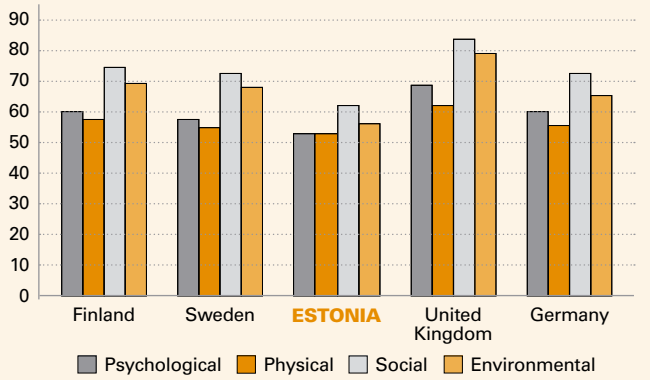
Only a small number of home care service users (5%) were dissatisfied with the care provided as a whole. Respond-

ents were satisfied or very satisfied with the personal qualities, attitudes and work ethic of the care providers. Nearly a tenth of the respondents complained, however, that the care worker had too little time and that they could not plan their own day. Dissatisfaction rates are high with regard to assistance related to several daily activities – a third of the respondents would like to have more help in caring for their teeth and mouth, moving around in their home and outside, putting on their clothes, eating and doing housework. Assistance related to participation in recreation activities is the cause of the most dissatisfaction, with half of the respondents who needed such assistance being dissatisfied with it.

In planning and carrying out the provision of care, it is important to take into account the expectations and subjective needs of persons receiving the care in addition to the need to assist them with daily activities. Implementing the medical care model, currently still widespread in Estonia, leaves many opportunities for improving the patients' quality of life unused. Putting into practice a socio-cultural model of care that takes into account the individual features, life story and preferences of every patient may improve even the quality of life of people whose health and ability to cope are beyond improvement.

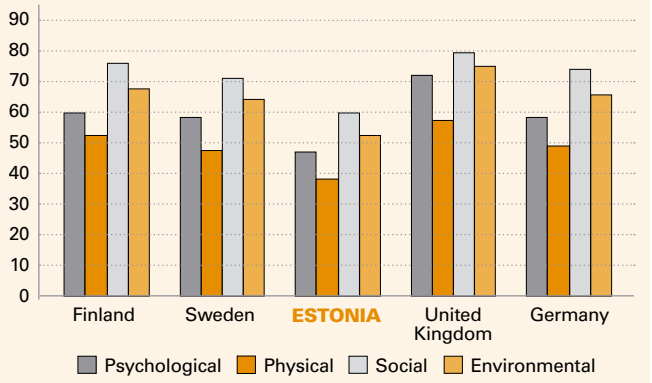
In conclusion, the quality of life of the elderly is lower in Estonia compared to other EU countries. The most significant factors that lower quality of life include the bad health of the elderly and the inadequate accessibility of support services. Meanwhile, the implementation of the model of aging while remaining active and successful has been relatively effective in Estonia. Many people who have reached retirement age but are well and able to cope continue working and can participate in suitable recreational activities if they wish. The lack of material means may limit participation to some extent, but is not the main reason for the low rate of participation in events among the elderly. Nearly half of the older population are cut off from social life due to health problems. Elderly people who require care and live at home are in the worst situation. Reserves that can be used to improve the quality of life of the elderly consist of the enhancement of the availability and quality of both health care and nursing care services. Looking into the future, the most successful strategy for improving the quality of life of the elderly would be the improvement of the general state of health of the population, which would allow people to retain their self sufficiency into an advanced age. This should be combined with a reduction in age-based social alienation in all areas of life. In the near future, however, the key factor will be the improvement of the care provided to the elderly, which will also improve the quality of life of people belonging to the middle-aged and younger generation as they are currently bearing the great burden related to providing care for many ailing elderly people.

Figure 3.6.3. Subjective quality of life of the elderly living in care institutions in five European countries



Source: CareKeys 2003–2006 (Saks & Tiit 2008).

Figure 3.6.4. Subjective quality of life of the elderly receiving care/nursing services at home in five European countries



Source: CareKeys 2003–2006 (Saks & Tiit 2008).

References

1. Ainsaar M., Kutsar, D., Harro M. (eds) (2005) Euroopa Sotsiaaluuringu 2004 Eesti raport. [European Social Survey 2004: the Estonian Report] Tallinn: National Institute for Health Development.
2. Baltes, P. B., Baltes, M. M. (1990). Successful aging: Perspectives from behavioral sciences. New York: Cambridge University Press.
3. Bowling A., Gabriel Z. (2007) Lay theories of quality of life in older age. Aging & Society, 27: 827–848.
4. Health status indicators from the EU-SILC survey. http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1073,60136085&_dad=portal&_schema=PORTAL&p_product_code=HLTH_STATUS_SILC_BASE. 23.10.2008
5. National Health Interview Surveys 2004. http://epp.eurostat.ec.europa.eu/extraction/retrieve/en/theme3/hlth/hlth_1s_spa?Output. 10.09.2008.
6. Pieper, R., Vaarama, M. The concept of care-related quality of life. (2008) (eds) M. Vaarama, R. Pieper, A. Sixsmith., Care related quality of life in old age. Concepts, models, and empirical findings. New York: Springer: 65–101.
7. Saks, K., Allev, R., Soots, A., Kõiv, K., Kolk, H., Paju, I., Jaanson, K., Schneider, G. (2001). Eakate tervishoid ja hoolekanne Eestis. [Health Care and Welfare Services of the Elderly], Tartu: Tartumaa Trükikoda.
8. Saks, K. (ed.) (2006) Hooldusest sõltuv elukvaliteet, hoolduse kvaliteet ja hoolduse juhtimise kvaliteet. [Quality of Life Dependent on Care, the Quality of Care and the Quality of Care Management], Tartu: Tartu University Press.
9. Saks, K., Leibur, J. (2008). Hooldusravi audit 2006-2007. [Care Audit 2006-2007], Lege Artis, 7: 19–21.
10. Saks, K., Tiit, E-M. 2008 Subjective quality of life of care-dependent older people in five European Union countries (eds) M. Vaarama, R.

Pieper, A. Sixsmith, Care related quality of life in old age. Concepts, models, and empirical findings. New York: Springer: 153–167.

11. Saks K., Tiit E.-M., Käärik E. (2000) Eesti eakate elanike toimetuleku- ja terviseuuring 2000 [Study of the Coping and Health of Estonia's Elderly], (http://www.egga.ee/)
12. TALSINKI study 2004. Manuscript.
13. Tiit E.-M., Leppik L., Võrk A., Leetmaa R. (2004) Euroopa Liidu ühiste pensionieesmärkide mõju Eesti pensionisüsteemile. [The Effect of the Common Pension Goals of the European Union on the Estonian Pension System], (http://www.sm.ee/est/HtmlPages/pensioniuurimus_2004/)
14. Tiit, E-M., Saks K. Tartu seenioriuuring 2002. [Study of Tartu Seniors 2002], https://tartu.ee/index.php?page_id=58&lang_id=1&menu_id=6&lotus_url=/uurimused.nsf/Web/teemad/C6372FBF01167434C2256BD800416DC7. 23.10.2008.
15. Vaarama, M., Tiit, E.-M. (2008) Quality of life in older home-care clients. (eds) M Vaarama, R. Pieper, A. Sixsmith, Care. related quality of life in old age. Concepts, models, and empirical findings. New York: Springer: 168–195.
16. WHOQOL group (1998) Development of the World Health Organization WHOQOL-BFER quality of life assessment. Psychological Medicine, 28, 551–558.

3.7. Quality of life in Estonia in the European context

Estonia's fast economic growth during the 2000s has significantly improved Estonia's ranking among European countries in terms of GDP per capita. While in 1997, Estonia's GDP per capita constituted 41.8% of the EU average, placing Estonia 23rd among EU member states and candidate countries (ahead of only Latvia and Lithuania), in 2007 the corresponding figure had risen to 70.6% (20th among EU countries, behind only Slovenia and the Czech Republic among Central and Eastern European member states). Meanwhile, satisfaction and happiness studies indicate that general satisfaction with life is low in Estonia and we lag behind most European countries in international comparisons.

Quality of society and individual quality of life. In terms of studying quality of life, it is important to understand the nature of the individual and social factors that affect individual quality of life. Several authors (Veenhoven 1999; Böhnke 2004; Delhey 2004) have concluded that individual quality of life is related to the general quality of the society, i.e. its livability. The livability of a society is influenced by many different factors. The quality of a society is indicated by its sustainability (conservation of natural and human capital) and social coherence (closeness and strength of bonds between social groups, the avoidance of all types of social exclusion, inequality and alienation; general security, solidarity and trust).

Indexes of individual and social quality of life were developed in order to measure the current level of the Estonian society and the quality of life of its population in the context of European countries. The individual quality of life index was compiled proceeding from Allardt's (1993) approach to well-being. Six indicators based on the 2006 European Social Survey data were included in the individual quality of life index. These indicators were material satisfaction, job satisfaction, assessment of the security of one's living environment, assessment of one's state of health, self-assessment (am optimistic about future + have a positive self-image), and whether or not one has the opportunity to discuss personal and intimate issues with someone.

The quality of society index comprises a total of nine indicators. The economic means of the society are defined through purchasing power parity-adjusted per capita GDP compared to the EU average, while the situation of the country's labour market is characterized by the overall level of unemployment. The relative poverty level is used as an indicator of income inequality (60% of the median equivalent income). The objective state of the health of members of a society is measured by the average expectancy of a healthy life in the given country, while the social security system is defined through the relative importance of social expenditures in the GDP. The educational situation is expressed by the number of people aged 18–24 who are not participating in the educational system (are not studying). The physical security of the country as a living environment is indicated by the number of homicides for every 100,000 inhabitants. Solidarity between members of the society is measured through two indicators (trust in people and the tendency to help others). The quality of a society is also characterized by the satisfaction of the people with their government, the economic situation and the functioning of democracy (these indicators are combined in the institutional satisfaction sub-index).

All indicators have been included in the index at equal weights. The data were weighed according to the comparative technique used in calculating the UN Human Development Index, according to which the index value is determined by comparing a country's indicator with the minimum and maximum values of the given indicator. The index compiled according to this method varies from zero to one, with a value of 0 being attributed to the country where the given indicator is the lowest and the value of 1 to a country where the indicator is the highest (for example, our society's wealth sub-index value of 0.11 indicates that Estonia's per capita GDP is 11% higher than the per capita GDP of the country with the lowest corresponding indicator (Poland) and 89% lower than that of the country with the highest corresponding indicator (Norway)). The composite index of individual and social quality of life consists of the arithmetic mean of the values of the sub-indexes. The sub-index values of the individual quality of life index and the quality of society index have been presented in Tables 3.7.1. and 3.7.2.

Estonia in the context of Europe. Estonia lies among the countries with the lowest quality of life in Europe both in terms of individual quality of life and social quality of life, outpacing only Latvia in the case of quality of society and both Latvia and Slovakia in the case of individual quality of life (Figure 3.7.1.). All other Central and Eastern European countries (excluding Slovenia) and Portugal belong to the same group of countries as Estonia. The

Table 3.7.1. Values of sub-indexes characterizing individual quality of life in European countries, 2006

Country	Material situation	Job satisfaction	Satisfaction with personal security	Assessment of one's state of health	Subjective self-assessment	Social relationships	Quality of life index
Denmark	1.00	1.00	0.88	0.92	0.83	0.78	**0.90**
Norway	0.85	0.67	1.00	0.91	0.60	0.79	**0.80**
Cyprus	0.61	0.87	0.78	0.94	1.00	0.37	**0.76**
Sweden	0.84	0.63	0.73	0.89	0.64	0.81	**0.76**
Finland	0.76	0.82	0.80	0.61	0.66	0.67	**0.72**
Austria	0.69	0.65	0.55	0.88	0.83	0.47	**0.68**
Ireland	0.70	0.51	0.21	1.00	0.76	0.71	**0.65**
The Netherlands	0.73	0.54	0.36	0.61	0.37	0.83	**0.57**
Belgium	0.74	0.72	0.41	0.74	0.26	0.49	**0.56**
Slovenia	0.47	0.52	0.68	0.30	0.65	0.66	**0.55**
Spain	0.63	0.44	0.45	0.42	0.49	0.88	**0.55**
Germany	0.53	0.18	0.40	0.44	0.57	0.99	**0.52**
United Kingdom	0.69	0.23	0.08	0.76	0.38	0.70	**0.47**
France	0.50	0.22	0.45	0.53	0.02	0.36	**0.35**
Poland	0.34	0.18	0.32	0.34	0.25	0.50	**0.32**
Portugal	0.28	0.22	0.33	0.03	0.16	0.52	**0.26**
Hungary	0.17	0.37	0.32	0.00	0.00	0.55	**0.24**
ESTONIA	0.27	0.17	0.00	0.13	0.52	0.29	**0.23**
Slovakia	0.35	0.00	0.04	0.43	0.31	0.21	**0.22**
Latvia	0.00	0.24	0.00	0.30	0.48	0.00	**0.17**

Source: European Social Survey 2006 (authors' calculations).

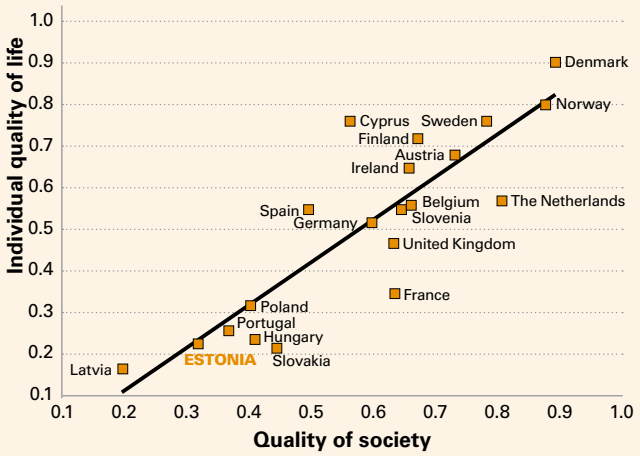
Table 3.7.2. Values of sub-indexes characterizing quality of society in European countries, 2006

	GDP per capita	Unemployment rate	Relative poverty	Expectancy of healthy life	Social expenditure % in GDP	Education	Security	Solidarity	Satisfaction with institutions	Quality of society
Norway	1.00	1.00	0.92	0.79	0.55	0.98	0.98	0.87	0.75	**0.87**
The Netherlands	0.59	0.96	1.00	0.77	0.90	0.77	0.94	0.58	0.70	**0.80**
Denmark	0.55	0.96	0.85	1.00	0.89	0.83	0.96	1.00	0.95	**0.89**
Austria	0.56	0.88	0.77	0.47	0.86	0.87	0.98	0.58	0.58	**0.73**
Sweden	0.54	0.66	0.85	0.74	0.98	0.80	0.93	0.83	0.67	**0.78**
Ireland	0.71	0.90	0.38	0.74	0.32	0.79	0.84	0.52	0.68	**0.65**
Slovenia	0.28	0.76	0.85	0.44	0.56	1.00	1.00	0.49	0.40	**0.64**
Finland	0.48	0.60	0.77	0.11	0.74	0.91	0.75	0.78	0.88	**0.67**
Cyprus	0.30	0.89	0.54	0.47	0.33	0.68	0.80	0.23	0.79	**0.56**
France	0.44	0.45	0.77	0.72	1.00	0.79	0.87	0.39	0.25	**0.63**
Belgium	0.51	0.54	0.62	0.64	0.95	0.78	0.83	0.49	0.56	**0.66**
United Kingdom	0.50	0.82	0.31	0.77	0.75	0.77	0.86	0.51	0.39	**0.63**
Germany	0.46	0.39	0.77	0.27	0.87	0.74	0.95	0.58	0.30	**0.59**
ESTONIA	0.11	0.77	0.38	0.00	0.01	0.76	0.00	0.31	0.49	**0.32**
Hungary	0.09	0.62	0.54	0.16	0.53	0.79	0.82	0.12	0.00	**0.41**
Spain	0.39	0.52	0.23	0.72	0.46	0.27	0.92	0.35	0.57	**0.49**
Portugal	0.17	0.59	0.38	0.41	0.70	0.00	0.87	0.01	0.16	**0.36**
Slovakia	0.08	0.05	0.85	0.30	0.20	0.96	0.83	0.27	0.44	**0.44**
Latvia	0.01	0.68	0.00	0.10	0.00	0.59	0.05	0.19	0.14	**0.20**
Poland	0.00	0.00	0.31	0.75	0.37	0.99	0.89	0.14	0.16	**0.40**

Source: Eurostat and European Social Survey 2006 (authors' calculations).

analysis revealed the country with the highest quality of life to be Denmark where all indicators related to the quality of life were equally high. Denmark was followed by Norway, Sweden, Finland and Austria. The fact that all Nordic countries rank at the top of the quality of life index is probably not incidental and attests to the sustainability and effectiveness of their chosen structure of society. The interesting fact that a large gap exists between countries with a low quality of life and countries with a high quality of life serves as evidence not only of the difference in the

Figure 3.7.1. The placement of European countries based on individual and social quality of life, 2006



Source: Eurostat and European Social Survey 2006 (authors' calculations).

level of quality of life, but also of the qualitative significance of this difference.

What are the potential factors causing Estonia's very low ranking in terms of quality of life? According to Table 3.7.2., the areas most detrimental to the quality of society is the bad state of health of the population (number of years lived in health), the worst in all of Europe, as well as the lower level of physical security (higher rate of murders) and the extremely low percentage of social expenditures in comparison with the GDP. The situation in Estonia is relatively best with regard to the labour market where the average unemployment rate in 2006 was among the lowest in the last 15 years. Estonia's problems with regard to the individual quality of life are similar to those related to the quality of our society, including the fear of becoming a victim of a crime and people's dissatisfaction with their jobs and material situation.

The results of the analysis show that the low individual quality of life of Estonian residents is "in conformity" with the "low livability" of the society. Estonia's lengthy period of economic growth has improved its inhabitants' standard of living, but has not been so effective as to allow us to reach a quality of life comparable to most European countries. The lack of significant improvement in the social quality of life may begin to have a negative effect on individual opportunities for well-being in the near future.

The society has various options for increasing the general quality of life. The general improvement of living conditions can be achieved through the advancement of employment opportunities as well as access to education and healthcare, the enhancement of the level of social security and reduction of crime, the improvement of the overall social infrastructure and the provision of more effective social protection through the development of the network of social benefits and services. Increasing social cohesion in general requires us to lessen the development gap of the less-developed regions, promotes the expansion of equal opportunities and the reduction of social exclusion. In strengthening the social bonds between people, it is important to support and promote social solidarity.

References

1. Allardt, E. (1993). Having, loving, being: An alternative to the Swedish model of welfare research. M. C. Nussbaum, A. Sen, The quality of life. Oxford, Clarendon Press, pp. 88–94.
2. Böhnke, P. (2004) Perceptions of Social Integration and Exclusion in an Enlarged Europe. European Foundation for the Improvement of Living and Work Conditions, Luxembourg: Office for Official Publications of the European Communities.
3. Dehley, J. (2004). Life satisfaction in an enlarged Europe. European Foundation for the Improvement of Living and Working Conditions. Luxembourg: Office for Official Publications of the European Communities.
4. Veenhoven, R. (1996). Happy life-expectance: A comprehensive measure of quality-of-life in nations. Social Indicators Research 39, 1–58.

CHAPTER 4

Quality of Life and Integration

4.1. Introduction

The following chapter analyzes the problems related to integration in Estonian society from the aspect of the quality of life. The analysis is conducted by examining the level of life satisfaction of ethnic minorities compared to other European countries and focusing on specific problems by analyzing two fields of activity – socio-political participation and the labour market. As it appears from the following analysis, the satisfaction among the indigenous population and the ethnic minorities differs, which is a social problem not only in Estonia but in several countries of "old Europe". Therefore, the Council of Europe Framework Convention for the Protection of National Minorities (see Framework Convention for the Protection of National Minorities and Explanatory Report, http://www.coe.int/t/dghl/monitorings/minorities/1_AtGlance/PDF_Text_FCNM_et.pdf, pp. 23–24), which establishes the general requirements for the integration of ethnic minorities, places great importance on the setting of goals to ensure that the members of society belonging to ethnic minorities have opportunities equal to the indigenous people for participating in public life and the labour market. The opportunity for minorities to participate in public life and the labour market in European countries is guaranteed by very diverse legislative and administrative measures. How these opportunities are realized depends on the country's policies, as well as, to a great extent, on the people themselves, their activism and their will to realize themselves in society. An examination of the current situation in Estonia and the recollection of the social shock that occurred during the so-called April Unrest prompt the question that can be considered the central problem: are the young people who have socialized during the two transition decades into the "new Estonian society" more satisfied and integrated than their parents and grandparents? Or are new problems developing for the younger generation that was born and has grown up in the Republic of Estonia upon entering the Estonian labour market and public sphere? Can a "third-generation problem" similar to the Western European countries develop in Estonia, which could culminate in protests by Russian young people?

4.2. Ethnic differentiations in satisfaction evaluations: Estonia's distinctions in the European context

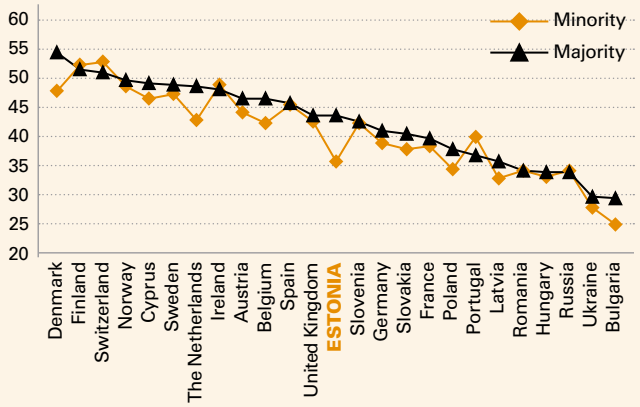
The following analysis continues the topic of the quality of life and life satisfaction covered in Chapter 3 from the aspect of ethnicity. The analysis, which was previously based on percentage distributions, has been developed further in this chapter (see Realo, Chapter 3), and the importance of the factors comprising life satisfaction has been compared with the help of relative statistical coefficients. The analysis in this chapter confirms the previous results indicating that the significant factors affecting the formation of life satisfaction in Estonia involve the individual's age, citizenship, education, and material welfare. This analysis shows that in the European context Estonia is quite distinctive, because people's satisfaction evaluations are strongly related to their ethnic background and citizenship – the 2006 European Social Survey data on 25 countries[18] indicated that both variables – ethnic affiliation and citizenship – have a strong association with life satisfaction (see Annex 4.2.1)[19].

The following subchapter focuses primarily on the analysis of life satisfaction by ethnic background. Although, based on Annex 4.2.1, citizenship and ethnic self-determination are equally important factors in ascertaining life satisfaction, the association with citizenship can be greatly explained by ethnic affiliation – i.e. the citizens of Russia and other countries express their lower life satisfaction primarily when they define themselves as an ethnic minority.

[18] In order to make the survey findings more representative, the data are usually weighted. However, the deficiency of the European Social Survey is that in the case of two countries – Latvia and Romania – the data weights were not given. When analyzing Estonia, it is important to make comparisons with other post-socialist countries. Therefore, in this analysis data from all 25 of the countries covered by 2006 Estonian Social Survey have been used. In the case of weighted and non-weighted data, there are differences of a few percent in the satisfaction assessments. The trustworthiness of the analysis is confirmed by the fact that the statistical importance of the association coefficient and the strength of the coefficient remain the same.

[19] In Western countries, the ethnic factor is also important in Denmark, although the ethnic differences there are smaller than in Estonia (The Cramer's V value, which expresses the association with life satisfaction, is 0.153, in Estonia it is 0.209.)

Figure 4.2.1. Life satisfaction by ethnic majority and minority groups*



** To calculate the satisfaction index, the following questions have been summed up: How satisfied are you with the current economic situation in the country / the government / performance of democracy in the country? How satisfied are you with your life on the whole / your standard of living / your work? How happy are you? (A higher aggregate index value indicated greater satisfaction.)*

Source: European Social Survey 2006

Other research also shows that possessing (or not possessing) citizenship is an important identifier in the evaluation of material opportunities, while at the same time, satisfaction in various life spheres is affected most by ethnicity and income – the satisfaction of the Russian-speaking population that possesses Estonian citizenship is lower than the satisfaction of Estonians with the same income and educational levels (Kasearu & Trumm 2008).

The comparison of Estonia with other countries is also motivated by the fact that in the case of the Latvian sample with a historical and political background to similar Estonia's, neither minority status nor citizenship are significant factors in describing one's life satisfaction. Therefore Estonia's situation is unique and deserves more precise analysis.

General life satisfaction among Europe's majority and minority groups

An overview of the theories of wellbeing and quality of life are provided above (Kasearu & Trumm 2008). Some research that deals specifically with the subjective perception of wellbeing among ethnic majority and minority groups emphasizes the significance of material resources and the physical environment, as well as socio-demographic factors, as the creators of satisfaction (i.e. Mata 2002). Other research considers subjective elements to be more important in the creation of the quality of life – such as the strength of one's family and network of intimates (see Bajekal et al. 2004) and the feeling that one is able to control certain life experiences (Lackland 1989).

Figure 4.2.1. shows a comparison of the aggregate evaluations of majority and minority groups[20] in 25 European countries related to life satisfaction. The figure shows that the evaluations of the ethnic majorities and minorities[21] in many countries are relatively similar. However, a trend is apparent that ethnic majority groups tend to be more satisfied than ethnic minorities (mean value of 42.44 and 40.58 respectively). The evaluations of ethnic majority and minority groups are relatively similar in countries with strong economies and relatively clear and open minority policies (e.g. Norway, Finland, Switzerland, the United Kingdom and France) and countries with more unsettled economic and political regimes (e.g. Ukraine and Russia). There is a trend toward somewhat lower satisfaction among minorities in post-socialist countries, such as Bulgaria, Ukraine, Poland and Slovakia, which may be a reflection of the difficulty of designing integration policies in transition countries. The lower satisfaction assessments in some "old" EU member states may reflect relatively liberal immigration policies, while there are difficulties in finding solutions for specific spheres related to integration (e.g. instances of discrimination in Denmark, education issues in Germany, the Netherlands, etc.). Even in countries with relatively similar socio-economic backgrounds, the "pattern" of the assessments of the majority and minority groups can be quite different – for instance, the evaluation of the majority and minority groups in Norway, Sweden, and Finland are quite similar, while they differ in Denmark. Therefore it is quite difficult to explain the similarities and differences in satisfaction evaluations based on macro conditions, which indirectly points to the smaller impact of objective factors as the creators of satisfaction.

In the comparison of 25 countries it turns out that Estonia has the greatest difference in the evaluation of life satisfaction between the majority and minority groups – Estonians are noticeably more frequently satisfied with life than other ethnic groups. This may be explained, to a certain extent, by the very drastic change in the status of the Russian-speaking population after the collapse of the Soviet Union. However, the same thing occurred with the Latvian Russian-speaking population, but in Latvia the gaps in the satisfaction evaluations based on ethnic group are somewhat smaller.

Age is a very important factor in the evaluation of life satisfaction (see Annex 4.2.1., Chapter 3 Realo), and this may have a greater effect on evaluations in the case of immigrants – younger people may be more satisfied since they have adapted better to the society. Figure 4.2.2. presents an overview of the satisfaction evaluations of ethnic majority and minority groups in different age groups. From the figure we can see that Europe is characterized by a greater percentage of satisfaction among the middle-aged population. Estonia is an exception with the greatest percentage of satisfaction among the youngest age group. In the oldest age group, the satisfaction evaluations of Estonia's population are comparable to the European average (see Figure 4.2.2.).

[20] In the analysis, the ethnic majority and minority have been formed based on whether the respondent defines him or herself as belonging to the majority or minority group. The alternative would have been to differentiate the ethnic groups based on whether people were born in the specific country or not. However, an initial analysis showed that self-determination was the important distinguishing factor for the quality of life. Earlier studies have also shown that the time one has lived in the country is an unimportant factor for subjectively describing the ability to cope (Verkuyten 1986).

[21] In the analysis here and hereafter the shorter singular version of "ethnic minority group" has been used, which actually includes the accumulated data of the ethnic minority groups that live in the various countries.

In Europe as a whole, the differences between ethnic majority and minority groups by generations are noticeably smaller than in Estonia. The differences in the assessments of the ethnic majority and minority groups do not decrease as the generations grow younger. Therefore it cannot be said that the attitudes and evaluations of minorities will "naturally" become more optimistic with a change in generations.

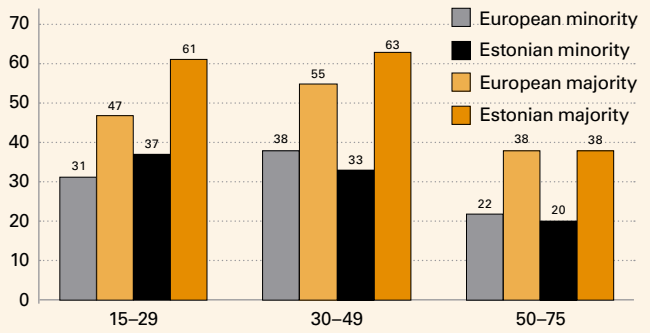
Factors forming general satisfaction by country

As described above, the measurement-evaluation of the quality of the life and life satisfaction is based on many different factors. Data from the European Social Survey primarily enables general satisfaction and feelings of happiness to be analyzed (Questions: *How satisfied are you with your life in general? How happy are you?*); as well as more as one's satisfaction with personal material wellbeing specifically (*How satisfied are you with your work / standard of living?*). In addition, one can analyze people's level of satisfaction with the performance of the state (*How satisfied are you with the country's economic situation / the functioning of democracy in the country / the country's government?*). Table 4.2.1. provides an overview of the analysis of ethnic majority and minority groups according to these dimensions. From the table, it appears that in the majority of countries, the evaluations given by members of ethnic minority groups for feelings of happiness, material wellbeing as well as the performance of the state are all relatively similar. At the same time, for instance, the ethnic minorities in the United Kingdom were relatively satisfied on a personal level, but relatively dissatisfied with the performance of the state. Therefore successfully coping individually does not guarantee the satisfaction of the minority with the country's minority policies. Apparently, certain collective expectations and the minority's ambitions to achieve greater political influence play a role here.

Based on individual evaluation components, Estonia's ethnic minorities are located in the bottom third of the country rankings. The relatively more positive evaluation of the material situation is apparently based on the growth of income and improvement in the material situation of Estonia's Russian-speaking population, especially among Estonian citizens (Kasearu & Trumm 2008). At the same time, the lower satisfaction of the ethnic minorities with the performance of the state is also characteristic of Estonia, which after the events of April 2007 has decreased even further – the most recent studies point to the fact that distrust and pessimism regarding the state have increased among Estonia's Russian-speaking population, especially during the last few years (see, for instance, Integration of Estonian Society: Monitoring 2008). Analysis by various age groups shows that while in a generational comparison differences in personal satisfaction are relatively unchanged, the dissatisfaction regarding the performance of the state is even greater among the younger generation than among the older generation.

The second section of Table 4.2.1. shows the relationships between various individual evaluations and the aggregate satisfaction evaluation. The strength of the association is indicated by the correlation coefficient (maximum value of 1 shows total association between the variables, a value of 0 shows the total lack of association).

Figure 4.2.2. Life satisfaction of majority and minority groups by age group in Estonia and Europe (high general satisfaction percentages)



Source: European Social Survey 2006

From an analysis of these relationships, it appears that the aggregate life satisfaction evaluation for ethnic minorities depends primarily on satisfaction with the performance of the state (the strongest average correlation or association between the two variables of .77). In some of the transition countries (Romania, Poland, Slovakia, Hungary, and Russia), as well as in the so-called European welfare states (Finland, Switzerland, Denmark, Sweden, the United Kingdom, Austria, Netherlands, Germany and France), the country's capability or incapability to regulate the economic situation and to guarantee the performance of the government and democracy are often given as the reasons for life satisfaction/dissatisfaction. Although in Estonia the evaluation of the state also affects the aggregate satisfaction evaluation, the extent of this association is even somewhat weaker than the European average. Thus we can conclude that as the economic situation and democracy improve, the minorities' expectations regarding the performance of the state also increase. Therefore, as a rule, personal material satisfaction is slightly less important in the formation of general life satisfaction than satisfaction with the performance of the state. Only in two countries – Sweden and Spain – does personal material wellbeing play a more significant role in the formation of general satisfaction. Since these countries have relatively high unemployment rates among ethnic minorities, work satisfaction (and its existence) at a personal level is an important indicator for the formation of life satisfaction.

The satisfaction of ethnic minorities regarding the performance of the state, as well as personal feelings of happiness, affect people's own interest in politics and their trust in institutions (in Estonia this association is statistically even stronger then in Europe on average). In other countries with relatively large minorities, such as the United Kingdom and Romania, a significant association appeared between political interest and personal material satisfaction, while in Estonia the background for the political interest of minorities is comprised of ideological-psychological considerations rather than socio-economic ones. In a similar manner to Estonia, minority groups are significantly less interested in politics in Denmark, for example, and therefore a greater role in the political interest of minorities may be played by circumstances related to the specific political landscape, such as the politicization of various socio-economic issues, the structure of political parties (for instance, in Esto-

Table 4.2.1. Factors forming general satisfaction among ethnic minority groups in European countries by country

	Ranking of countries based on satisfaction *			Association of satisfaction to the aggregate index **		
	General satisfaction/feeling of happiness	Satisfaction with material situation	Satisfaction with the performance of the state	General satisfaction/feeling of happiness	Satisfaction with material situation	Satisfaction with the performance of the state
Finland	1	6	2	0.126	0.711	0.831
Switzerland	2	1	3	0.767	0.751	0.795
Norway	5	3	4	0.643	0.627	0.646
Cyprus	3	14	1	0.659	0.523	0.679
Denmark	6	4	5	0.563	0.783	0.827
Sweden	9	2	8	0.716	0.811	0.753
Spain	4	7	7	0.473	0.691	0.649
Ireland	8	8	6	0.641	0.713	0.875
United Kingdom	7	5	12	0.654	0.607	0.785
Austria	10	9	9	0.750	0.649	0.854
The Netherlands	13	10	10	0.670	0.660	0.807
Belgium	12	16	11	0.830	0.712	0.685
Germany	14	13	13	0.758	0.708	0.792
Slovenia	11	11	16	0.816	0.741	0.720
France	15	12	14	0.644	0.662	0.748
Portugal	16	17	17	0.515	0.764	0.801
ESTONIA	17	15	19	0.779	0.709	0.734
Slovakia	19	20	15	0.797	0.763	0.830
Poland	21	19	21	0.748	0.714	0.856
Latvia	18	18	22	0.779	0.652	0.750
Romania	20	24	18	0.830	0.647	0.839
Russia	22	22	20	0.753	0.741	0.795
Hungary	23	21	23	0.782	0.778	0.799
Ukraine	24	23	24	0.807	0.768	0.678
Bulgaria	25	25	25	0.753	0.574	0.713
Average* **	7.5	5.34	5.44	0.690	0.698	0.770
Leg	4.00	3.88	4.67	0.704	0.288	0.229

** The scores of the individual countries are ranked, and each country has been assigned a ranking for each specific satisfaction variable (1 to 25).*

*** Correlations have been calculated between the aggregate satisfaction index (includes all 7 individual variables) and satisfaction in individual fields of activity (3 satisfaction sub-indexes). A Pearson correlation coefficient value that is close to 1 means a strong association between the two variables, while a value close to 0 shows a weak association and lack thereof. All the coefficients shown in the table are statistically significant (at a significance level of p≤01). The strongest coefficient, or the most important factor in the formation of general satisfaction in the specific country is marked in bold.*

**** The first half of the table shows calculations of the average satisfaction values (maximum satisfaction value 11 and minimum 0). The second half of the table shows calculations of the average correlations for the countries in case of specific pairs of variables.*

Source: European Social Survey 2006

nia there are no large ethnic political parties, while there are in Latvia, which has just as large a minority population), etc. The younger generation is characterized by a more ignorant attitude toward politics and great scepticism regarding institutions in both Europe and Estonia (see Annex 4.2.2).

Association of satisfaction with general social integration

Previous chapters have shown that surrounding social relations form one of the important components of the quality of life and life satisfaction. (Kasearu & Trumm 2008). Research dealing specifically with ethnic minorities also shows that the satisfaction evaluations of immigrants are significantly impacted by social capitalization, such as familial contacts (Bajekal et al. 2004), as well as the perceived position of the majority or minority in the society (Verkuyten 1986). In the case of Estonia, it has turned out that these factors are important, for instance, in the creation of cultural openness (Masso 2009). The following analysis focuses on the relationships between satisfaction and social integration.

Table 4.2.2. shows the association between the indicators of life satisfaction and social integration. When evaluating social integration, the following individual and aggregate variables have been used: political interest (*How interested are you in politics?*), trust in institutions (*How much do you trust the country's parliament / legal system / police / political parties / European Parliament / UN?*), perceived discrimination (*Is your group discriminated against because of skin colour / race / nationality / religion / ethnic group / language you speak?*) and social capital (*How often do you socially meet with friends, relatives, colleagues? Is there anyone you discuss intimate and personal matters with? How often do you take part in social activities compared to others of same age?*).

The analysis of satisfaction dimensions and associations is the same as the one in Table 4.2.1. It turns out that the life satisfaction evaluations of Estonia's ethnic minorities are significantly related to the perception of discrimination – the lower the level of perceived discrimination, the greater the satisfaction with the performance of the state and the personal sense of happiness. It is noteworthy that in the majority of European countries there is no significant relationship between the perception of discrimination and satisfaction with the performance of the state. At the same time, Estonia's ethnic minorities perceive discrimination more often than the minorities in European countries on average (see Annex 4.2.1.). Thus, for example, the perception of minority discrimination in the United Kingdom, with a relatively large and diverse ethnic minority, is almost 10% lower than in Estonia and even 20% lower than Estonia in Denmark with a growing number of immigrants.

Estonia's other important distinction compared to the European average is the importance of the social network as a shaper of satisfaction among ethnic minorities – the closer the social network, the more satisfied Estonia's ethnic minorities are with the state. And vice versa – estrangement from the state is related to greater isolation in one's close surroundings. This is especially related to contacts with Estonians and other ethnicities at work and during leisure time (see Korts & Vihalemm 2008). This relationship is probably bidirectional – on the one hand, it is easier for individuals who are socially active and have a wider social circle to become aware of what is happening in the country and to adapt; however, on the other hand, a positive social attitude promotes involvement in work-related and other social networks. At the same time, Annex 4.2.2. shows that compared to European minorities Estonia's ethnic minorities are characterized by significantly lower social capital with respect to the extent of the social network, participation in nongovernmental organizations and trust. However, differences in the social capitalization of majority and minority groups are decreasing in younger age groups, in Europe on average as well as in Estonia (see Annex 4.2.2.).

Table 4.2.2. Association of life satisfaction with social integration among ethnic minorities in Estonia and Europe (correlation coefficient in Estonia, average for European minorities in parentheses)

	Aggregate satisfaction index	Personal mental satisfaction	Personal material satisfaction	Satisfaction with the performance of the state
Interest in politics*	0.172 (0.159)	0.130 (0.084)	0.073 (0.138)	0.215 (0.141)
Social capitalization**	0.207 (0.123)	0.176 (0.094)	0.094 (0.105)	0.238 (0.080)
Trust in institutions***	0.483 (0.403)	0.351 (0.237)	0.377 (0.194)	0.475 (0.449)
Discrimination rate******	-0.322 (-0.098)	-0.286 (-0.086)	-0.147 (-0.011)	-0.361 (-0.119)
Average	0.296 (0.196)	0.236 (0.125)	0.173 (0.112)	0.322 (0.197)

** Political interest either high or very high.*

*** The social capital index is calculated on the basis of single variables: meets frequently with friends, relatives, co-workers; has someone to discuss personal affairs with; compared to contemporaries and participates often in social activities.*

**** The trust index is calculated on the basis of single variables: trust in the parliament, legal system, police, politicians, political parties, European Parliament and UN.*

**** The discrimination index calculated on the basis of single variables: has encountered discrimination based on skin colour or race, ethnicity, religion, ethnicity or spoken language.*

Source: European Social Survey 2006

Summary

In Estonia, life satisfaction depends, to a greater degree, on ethnic affiliation than it does in Europe on average. Estonia is also differentiated in the general European scene by larger gaps in the life satisfaction evaluations of the ethnic majority and minorities – compared to the majority, the members of ethnic minority groups are less frequently satisfied, especially among the middle-aged and younger generations.

While in the "old" EU member states the general satisfaction of ethnic minorities is strongly related to evaluations regarding the performance of the country's economic system and democracy, in Estonia, in a similar manner to the majority of post-Communist transition states, the satisfaction of ethnic minorities tends to be shaped by subjective factors (primarily one's personal sense of happiness). At the same time, the subjective satisfaction is quite strongly related to indicators of social integration – the strength of personal social networks and the perception or non-perception of discrimination. In Estonia, one's relationship with the performance of the state as intermediated by the social network is also characterized by the fact that critical evaluations regarding state policies do not significantly differ between Russian-speakers who are personally more or less successfully integrated (see Lauristin 2008).

Conditionally one could say that unlike other European countries, a "cultural capsule" is created in Estonia upon defining oneself as an ethnic minority group. Ethnic barriers in society do not disappear by themselves since dissatisfaction with life compared to Estonians does not decrease in younger generations. The relatively weak social capital of Estonia's minorities and its significance in the shaping of life satisfaction leads to the conclusion that investing in the growth of social capital for ethnic minorities and their more effective involvement in the life of the country do not jeopardize the performance of the nation-state. Instead, such measures are the basis for shaping reliable relations with the state.

Annexes

Annex 4.2.1. Socio-demographic characterization of life satisfaction in Estonia and Europe

		Life satisfaction among the European population (%)			Life satisfaction among the Estonian population (%)			Strength of the association (Cramer's V)*	
		Low	Average	High	Low	Average	High	Europe	Estonia
Ethnic minority	Yes	9	7	4	42	35	19	0.076	0.209
	No	92	93	96	58	65	81		
Education	Basic	75	71	59	75	68	57	0.110	0.112
	Secondary	22	26	38	23	30	39		
	Higher	3	3	4	1	3	6		
Gender	Man	40	43	51	40	42	47	0.097	0.064
	Woman	61	57	49	60	58	53		
Age	–24	14	17	14	16	17	22	0.130	0.153
	25–34	13	15	19	12	12	18		
	35–44	15	17	23	15	14	20		
	45–54	18	17	21	18	19	19		
	55–65	22	20	17	19	18	14		
	66–	18	14	7	20	20	7		
Citizen of the country	Yes	96	96	96	64	77	88	0.006	0.228
	No	4	4	4	36	23	12		
Existence of salaried employment	Yes	33	45	74	38	50	75	0.352	0.301
	No	67	56	26	62	50	25		
Marital status	Married	48	50	54	41	44	45	0.102	0.124
	Single	21	27	29	25	29	38		
	Other	31	23	17	33	27	16		

** The Cramer's V coefficient in the table shows the strength of the association between life satisfaction and individual socio-demographic variables. The coefficient value varies between 0 and 1, 0 indicates the lack of association and 1 the existence of a strong association between the variables. All the associations shown in the table are statistically significant.*

Source: European Social Survey 2006

Annex 4.2.2. Social integration of Estonia's minority and majority ethnicities (average percentages of 25 countries in parentheses)

	Ethnic minorities, incl.			
	All	15–29-year-olds	30–49-year-olds	50–75-year-olds
High level of interest in politics*	33 (40)	26 (33)	24 (43)	41 (43)
High level of social capital**	22 (40)	41 (55)	16 (33)	13 (26)
Trust in institutions***	10 (15)	63 (58)	56 (56)	46 (49)
Experienced discrimination****	40 (26)	35 (29)	49 (31)	38 (19)
	Ethnic majorities, incl.			
High level of interest in politics	45 (47)	30 (34)	45 (47)	51 (55)
High level of social capital	29 (41)	56 (61)	25 (39)	17 (32)
Trust in institutions	21 (22)	74 (69)	63 (70)	54 (65)

** Very interested and quite interested have been added together.*

*** Very high social capital index value (meets frequently with friends, relatives, co-workers; has someone to discuss personal affairs with; compared to contemporaries and participates often in social activities).*

**** Very high trust index value (trust in the parliament, legal system, police, politicians, political parties, European Parliament and UN).*

***** Very high perceived discrimination index value (has encountered discrimination based on skin colour or race, ethnicity, religion, ethnicity or spoken language).*

Source: European Social Survey 2006

References

1. Bajekal, M.,; Blane, D., Grewal, I., Karlsen, S., Nazroo, J. (2004). "Ethnic Differences in Influences on Quality of Life at Older Ages: a Quantitative Analysis" – Ageing & Society, 24: 1, pp. 709–728.
2. Kasearu, K., Trumm, A.(2008). "Eestlaste ja mitte-eestlaste aineline olukord ja eluga rahulolu", Integration of Estonian Society: Monitoring 2008. http://www.rahvastikuminister.ee/?id=12051
3. Korts, K., Vihalemm, T. (2008). Rahvustevahelised suhted, kontaktid ja meie-tunne. „Integratsiooni monitooring 2008", http://www.rahvastikuminister.ee/?id=12051
4. Lackland, S., D. (1998). "Predicting Life Satisfaction among Adolescents from Immigrant Families in Norway – Ethnicity & Health, 3: 1/2, pp. 5–19.
5. Lauristin, M. (2008). Kodanikud ja mittekodanikud" Integration of Estonian Society: Monitoring 2008. http://www.rahvastikuminister.ee/?id=12051
6. Masso, A.(2009, being published). "Readiness to Accept Immigrants in Europe? Individual and Country Level Characteristics" – Journal of Ethnic and Migration Studies, 35: 2.
7. Mata, F. (2002). "A Look at Life Satisfaction and Ethnicity in Canada" – Canadian Ethnic Studies, 34: 1, pp. 51–63.
8. Verkuyten, M. (1989). "The Impact of Ethnic and Sex Differences on Happiness among Adolescents in the Netherlands" – Journal of Social Psychology, 126: 2, pp. 259–261.

4.3. Evaluation on social changes among Estonian, Latvian and Lithuanian ethnic majorities and Russian-speaking minorities

Directed by Prof Richard Rose, regular public opinion surveys have been conducted in all Europe's post-Communist countries since 1991, which include multi-faceted assessments of the social changes. The respondents have been asked to provide evaluations of the economic system and political regime under the former (Soviet-era) and current systems and the system that will exist in the future, probably in five years. These studies (the New Baltic Barometer) have been organized six times in Estonia, Latvia and Lithuania: September–October 1993, April 1995, November 1996, March 2000, October 2001, November–December 2004 (Rose & Maley 1994; Rose 1995, 1997b, 2000, 2002, 2005b).

The surveys show that Estonians have assessed the changes in society significantly more positively than their southern neighbours. In 1993, the Estonians gave the new economic system a lower rating than the Soviet-era system. In 1995, the assessments of the old and new system were equal, and since 1996, the new economic system has been clearly rated more positively than the former system; the new system received positive evaluations from 70–80% of Estonians.

Among Latvians, and especially Lithuanians, the number of people giving the new economic system positive assessments in 1993–2000 was many times smaller than the number of those who gave positive assessments to the Soviet-era economic system. In 2001, the assessment of Latvians, and in 2004, the assessment of Lithuanians equalized between the former and new economic systems.

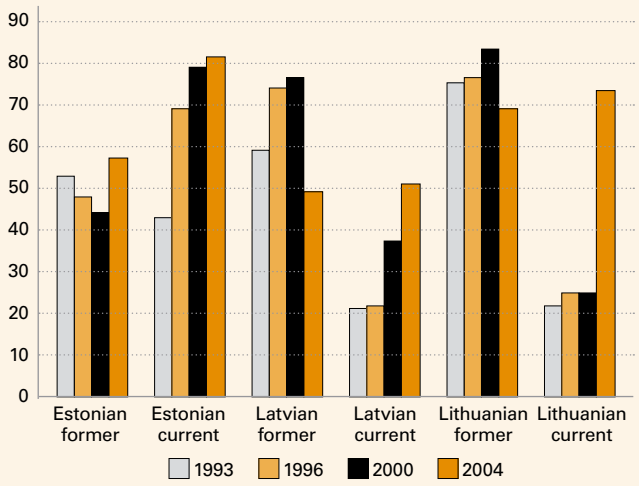
The assessment of the current economic system can at least partially be explained by economic results – in 1991–1994, there were great economic difficulties in the Baltic countries and other transition states; as of 1995 the situation started to improve. Although the growth of gross domestic product (GDP) has not been significantly greater in Estonia than in Latvia or Lithuania, the assessments of the new economic system were much higher in Estonia. As of 2004, the Lithuanians' assessments were comparable to those of the Estonians. At the same time, the Latvians' assessments of the new economic system remained quite modest even in 2004, after several years of successful GDP growth.

The positive attitude prevailing in Estonia is all the more surprising since, compared to its southern neighbours, Estonia has been considered a country that carried out extreme liberalization, and a representative along with Poland of the most radical "shock therapy" in all of Eastern and Central Europe, i.e. rapid and radical market economy reforms (Aslund 2002, 2007).

This highlights the fact that public opinion assessments are based not only on the so-called factual situation, but also on the interpretive schemes that dominate the society, including the media. Comparing the opinions and assessments that are popular in Estonia with those of other post-Communist societies, social scientists point to the widespread acceptance of the liberal success ideology, or the so-called post-Communist transition culture, not only by Estonians but also by local Russian-speaking population. Transition ideology traditionally interprets the appreciation of personal and competitive success as a natural development characteristic of the new age (Kennedy 2002). It is thought that the popularity of understandings promoting neo-liberalism and individual consumption among the population has been one of the important factors in Estonia's rapid economic success (Feldmann 2007). The assessment of the new economic system shown in Figure 4.3.1., as well as the significantly lower assessments for the former system, can be viewed as the widespread acceptance of success ideology.

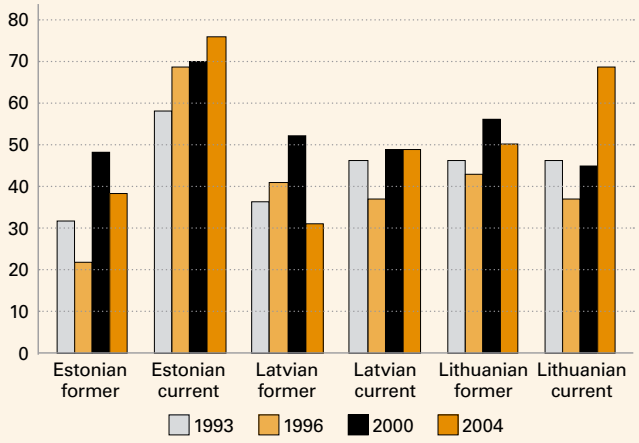
The assessments of Estonia as a successful reform country are also complemented by the Estonians' most positive assessment of the new political system (Figure 4.3.2.).

Figure 4.3.1. Changes in the assessments of the Soviet-era and current economic systems among Estonians, Latvians and Lithuanians 1993–2004 (percentage of positive assessments)



Source: Rose & Maley 1994; Rose 1997b, 2000, 2005b

Figure 4.3.2. Changes in the assessments of the Soviet-era and current political regime among Estonians, Latvians and Lithuanians 1993–2004 (percentage of positive assessments)



Source: Rose & Maley 1994; Rose 1997b, 2000, 2005b

The Soviet-era political system is given a lower rating than the economic system in all three Baltic countries. However, here too differences are apparent between the attitudes of Estonians, Latvians, and Lithuanians. Estonians (like Czechs) have attracted attention in all surveys with significantly more positive assessments of the new governmental organization (see Zapf et al. 2002; Rose 2005a). The Latvians' assessments of the former and current regimes are more equivalent. In 1995–2001, the Lithuanians even assessed the Communist regime more positively, and only in 2004 did the current regime receive a more positive assessment (Figure 4.3.2.).

Comparing the assessments of the Estonians, Latvians and Lithuanians with the Russian-speaking minorities in these countries regarding both economic changes and the political regime, we see the persistence of significant differences throughout the transition period (see Table 4.3.1.).

While Estonians have very clearly shown their preference for the new political order in all surveys since 1993, the local Russians have rated both the Soviet-era economic system and political regime more positively than the current ones in all surveys (Figure 4.3.3.). However, the difference in the assessments has been much smaller in Estonia than in Latvia, where the differences in the assessments of the Latvians and the local Russian-speaking population have been the greatest. In Lithuania, on the other hand, the assessments of the Lithuanians and non-Lithuanians have been the most uniform. At the same time, one can see that with the years the differences in the assessments of the indigenous people and minorities have decreased in all the Baltic countries and percentage of those rating the new political system more positively than the former system has also increased among the Russian-speaking population (see Rose 1997a, 2002, 2005; Ehin 2007).

From the middle of the 1990s until the spring of 2007, Estonian society gradually equalized its attitudes. "Both Estonians and the members of other ethnicities assessed many of the phenomena of Estonian life uniformly. The socio-political and economic background of non-Estonians was predominantly positive." (Saar 2007: 47).

Andrus Saar's conclusion regarding the equalization of assessments among Estonians and non-Estonians generally confirms the results of the *Mina. Maailm. Meedia* survey organized by the University of Tartu Institute of Journalism and Communication at the end of 2002 and 2005. Although significant differences appeared in orientations as well as specific attitudes in both 2002 and 2005 (see Kalmus, Lauristin & Pruulmann-Vengerfeldt 2004; Lauristin 2007; Vihalemm & Kalmus 2008), we noticed some convergence in the assessments of Estonians and non-Estonians regarding changes: in 2005, among both Estonian and Russian-speaking respondents there were many more people who were pleased rather than saddened by the changes in society. We see a totally different trend in the results from the survey conducted in September–October 2008, where the number of Russian speakers who were happy about the social changes was smaller and the number of those saddened was larger than in 2005 and 2002 (Figure 4.3.1. and Table 4.3.2.).

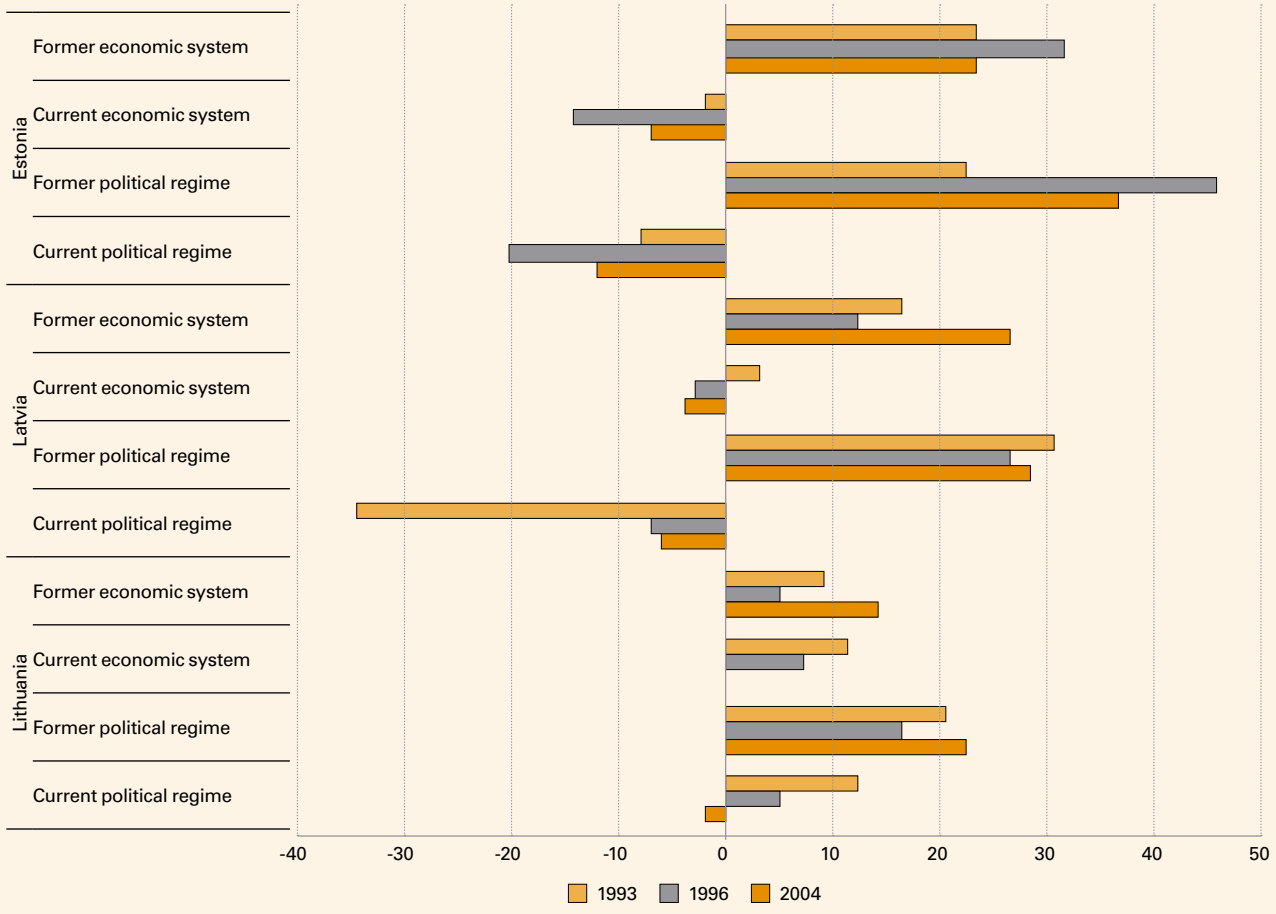
Our survey results confirm the conclusion that has been repeatedly brought forth by research results and actual observation – the events of April 2007 have returned Estonia to the situation where the Estonian-speaking and Russian-speaking collective bodies are very different. This contrast was very apparent in the answers to the questions posed in the course of the Integration monitoring survey conducted in April 2008 regarding assessments of the changes in Estonia during the last three years (Table 4.3.2.). However, the comparison of age groups demonstrates that despite the protest-mindedness that has manifested itself among young people, Russian-speaking young people in the majority are more at home in Estonian society, and in a similar manner to Estonians, are predominantly positive about what is happening in the country.

Table 4.3.1. Comparison of the assessments given to the new and old economic and political systems by ethnic majorities and Russian-speaking minorities in the Baltic countries

	1993			1996			2004		
Estonia	**Ethnic majority**	**Russian-speaking minority**	**Difference (*e-r*)**	**Ethnic majority**	**Russian-speaking minority**	**Difference (*e-r*)**	**Ethnic majority**	**Russian-speaking minority**	**Difference (*e-r*)**
Former economic system	53	76	23	48	79	31	57	80	23
Current economic system	43	41	-2	69	55	-14	81	74	-7
Former political regime	32	65	22	22	67	45	38	74	36
Current political regime	58	50	-8	69	49	-20	76	64	-12
Latvia									
Former economic system	59	75	16	74	86	12	49	75	26
Current economic system	21	24	3	22	19	-3	51	47	-4
Former political regime	36	66	30	41	67	26	31	59	28
Current political regime	43	9	-34	37	30	-7	49	43	-6
Lithuania									
Former economic system	75	84	9	76	81	5	69	83	14
Current economic system	22	33	11	25	32	7	73	73	0
Former political regime	46	66	20	43	59	16	50	72	22
Current political regime	46	58	12	37	42	5	69	67	-2

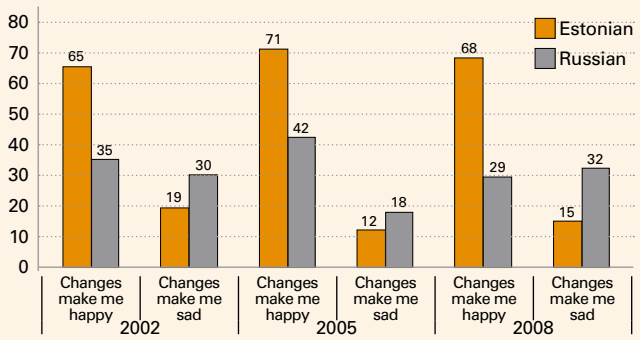
Source: Rose 1997a, 2002, 2005

Figure 4.3.3. Dynamics of the differences (v-p) in the assessments of the former and current social order by ethnic majority and Russian-speaking minority in Estonia, Latvia and Lithuania



Source: R. Rose's data

Figure 4.3.4. Attitudes of the Estonian and Russian-speaking population towards the changes in Estonian society during the last 10–15 years



Source: (University of Tartu survey Mina. Maailm. Meedia 2002, 2005 and 2008)

Table 4.3.2. Attitudes of the Estonian and Russian-speaking population towards the changes in Estonian society during the last 10–15 years

The changes in Estonian society make me …		All respondents	Language of the survey	
			Estonian	Russian
2002	happy	55	66	35
	sad	22	19	30
2005	happy	63	72	43
	sad	14	12	19
2008	happy	58	71	31
	sad	19	13	32

Source: University of Tartu survey Mina. Maailm. Meedia 2002, 2005 and 2008

Table 4.3.3. Assessment of changes in Estonian life during the last 3 years (%)

		All	Age			
			15–24	25–39	40–59	60–75
Estonians	Pleased by the changes during the last 3 years	61	73	70	56	45
	Saddened by the changes during the last 3 years	34	22	28	40	48
Russians	Pleased by the changes during the last 3 years	29	51	34	20	19
	Saddened by the changes during the last 3 years	57	36	55	64	69

Source: Integration of Estonian Society: Monitoring 2008

References

1. Aslund, A. (2002). Building Capitalism: The Transformation of the Former Soviet Bloc. Cambridge: Cambridge University Press.
2. Aslund, A. (2007). How Capitalism Was Built: The Transformation of Central and Eastern Europe, Russia, and Central Asia. Cambridge etc: Cambridge University Press.
3. Ehin, P. (2007). "Political Support in the Baltic Countries, 1993–2004" Journal of Baltic Studies, 38, 1, pp. 1–20.
4. Feldmann, M. (2007). "Emerging Varieties of Capitalism: Lessons from Post-Socialist Transition in Estonia and Slovenia" In Hancke, B., Rhodes, M. & Thatcher, M. (eds), Beyond Varieties of Capitalism: Conflict, Contradictions, and Complementaries in the European Economy. Oxford: Oxford University Press.
5. Kalmus, V., Lauristin, M. & Pruulmann-Vengerfeldt, P. (eds.) (2004). Eesti elavik 21. sajandi algul: ülevaade uurimuse Mina. Maailm.Meedia tulemustest. Tartu: Tartu University Press.
6. Kennedy, M. (2002). Cultural Formations of Post-Communism: Emancipation, Transition, Nation, and War. Minneapolis & London: University of Minnesota Press.
7. Lauristin, M. (2007). "World-view and Support for Political Parties". In Heidmets, M. (editor-in-chief), Estonian Human Development Report 2006. Tallinn: Social Contract Foundation.
8. Rose, R. (1995). "New Baltic Barometer II: A Survey Study" Studies in Public Policy, No. 251. Glasgow: University of Strathclyde.
9. Rose, R. (1997a). "Baltic Trends: Studies in Co-operation, Conflict, Rights and Obligations" Studies in Public Policy, No. 288. Glasgow: University of Strathclyde.
10. Rose, R. (1997b). "New Baltic Barometer III: A Survey Study" Studies in Public Policy, No. 284. Glasgow: University of Strathclyde.
11. Rose, R. (1998). "Getting Things Done with Social Capital: New Russia Barometer VII" Studies in Public Policy, No. 303. Glasgow: University of Strathclyde.
12. Rose, R. (2000). "New Baltic Barometer IV: A Survey Study" Studies in Public Policy No. 338, Glasgow: University of Strathclyde.
13. Rose, R. (2002). "New Baltic Barometer V: A Pre-Enlargement Survey" Studies in Public Policy No.368, Glasgow: University of Strathclyde.
14. Rose, R. (2004). "Russian Responses to Transformation: Trends in Public Opinion since 1992" Studies in Public Policy No. 390, Glasgow: University of Strathclyde.
15. Rose, R. (2005a). "Insiders and Outsiders: New Europe Barometer 2004" Studies in Public Policy No. 404, Glasgow: University of Strathclyde.
16. Rose, R. (2005b). "New Baltic Barometer VI: A Post-Enlargement Study" Studies in Public Policy No. 401, Glasgow: University of Strathclyde.
17. Rose, R. and Maley, W. (1994). "Nationalities in the Baltic States: A Survey Study" Studies in Public Policy, No. 222. Glasgow: University of Strathclyde.
18. Saar, A. (2007). Rahvussuhted ja integratsioonipoliitika väljakutsed pärast pronkssõduri kriisi. Tulemuste kirjeldav ülevaade. Tallinn: Saar Poll. Available electronically www.rahvastikuminister.ee/public/Integratsioonipoliitika_väljakutsed.pdf (viewed 09.11.2008)
19. Zapf, W., Habich, R., Bulmahn, T. & Delhey, J. (2002). "The Case of Germany: Transformation through Unification" In Adamski, W., Machonin, P. & Zapf, W. (eds) (2002). Structural Change and Modernization in Post-Socialist Societies. Hamburg: Krämer.
20. Vihalemm, T. & Kalmus, V. (2008). "Cultural Differencies: Identity and Values". In Heidmets, M. (editor-in-chief), Estonian Human Development Report 2007. Tallinn: Estonian Cooperation Assembly.

4.4. Political support and political participation: comparison of Estonians and non-Estonians

Continuing the topic of social attitudes covered above, the following subchapter provides an overview of political support and participation in Estonia with an emphasis on the comparison of ethnic groups. Answers are sought to the following questions: How high or low is the level of political support and political participation in Estonia (compared to the other Baltic countries, the countries of Eastern Europe and "old" democracies)? Has the degree of support and participation changed over time and how? Are there significant differences in the levels of support and participation between various ethnic groups? How justified is the expectation that the ethnic gap in political attitudes and political behaviour among the Estonian population will decrease with the change in generations?[22]

What is political support and why study it?

Organizations that monitor the development of democracy categorize Estonia as a country where democracy as a form of government has been consolidated. These evaluations focus, to a great extent, on the existence of free elections and the effective performance of democratic institutions. However, the development of well-functioning institutions is only one facet of democratization. Another, equally important aspect has to do with the extent democratic principles become rooted in people's attitudes and behaviour, and concerns popular satisfaction with the activities of democratic institutions. In order to systematically examine people's assessments of the established political order, it is useful to distinguish among the following dimensions of political support (Easton 1965, Norris 1999; Klingemann 1999):

1. support for the current definition of the political community (who should form the citizenry? Where should the borders of the state be drawn?);
2. support for the fundamental principles of the political regime (for instance, support for democracy as a form of government);
3. satisfaction with regime performance;
4. trust in political institutions;
5. evaluations of specific political incumbents.

The study of these various facets allows one to diagnose the problems of democracy more precisely and to predict the consequences of possible lack of trust. The following analysis attempts to summarize the level and trends of political support in Estonia based on the first four dimensions, using recent survey data. The principal source of information is the survey entitled Integration of Estonian Society: Monitoring 2008, commissioned by the State Chancellery, and conducted in March–April 2008.

Consensus regarding the definition of political community

Democracy assumes the existence of a demos: before it is possible to determine the will of the majority, it is necessary to define the citizenry, i.e. the people constituting the "nation" in the political sense of the word. In 2007 Estonia's permanent population fell into the following categories: 83% were citizens of the Republic of Estonia, 9% were stateless and 8% had foreign citizenship. The total number of stateless individuals has decreased from 172,000 people in 2002 to less than 111,000 at the end of 2008 (State Chancellery 2008a). At the same time, existing studies show that the acquisition of citizenship does not guarantee the development of a "we-feeling" that transcends ethnic boundaries. The findings of Integration of Estonian Society: Monitoring 2008 indicate that while the majority of Estonians feel that they are part of the Estonian nation in the constitutional sense, this opinion is shared by only half of the Russian-speaking population as a whole and two-thirds of Russian-speaking Estonian citizens. The percentage of the Russian-speaking population who identify with the Estonian people has significantly decreased during the last year (see Table 4.4.1.).

Comparing the answers by age group offers some support to the hope that the ethnic gap in the attitudes of the Estonian population will decrease with time. According to the findings of Integration of Estonian Society: Monitoring 2008, young Russian-speaking Estonian residents are noticeably more convinced of their affiliation with the Estonian people than their older compatriots. While 49% of the respondents in the 50–74-year-old age group and 51% of the 30–49-year-

Table 4.4.1. Self-assessed membership in the Estonian nation, 2005–2008

		Estonians	Russian-speaking respondents			
			All	Estonian citizens	Russian citizens	Stateless
Yes	2005	99	74	*	*	*
	2007	99	68	80	54	59
	2008	92	52	67	42	34
No	2005	0	22	*	*	*
	2007	0	17	9	26	24
	2008	4	31	20	38	42
Not sure	2005	1	4	*	*	*
	2007	1	12	11	20	17
	2008	4	17	13	9	24

Data: 2002: University of Tartu survey Mina. Maailm. Meedia; 2007: Ethnic relations and challenges for integration policies after the Bronze Solder crisis", Office of the Minister of Population and Ethnic Affairs / Saar Poll; Integration of Estonian Society: Monitoring 2008.

Source: Marju Lauristin, "Kodanikud ja mittekodanikud", Integration of Estonian Society: Monitoring 2008.

[22] The execution of the research work reflected in the article has been supported within the framework of grant project 6212 of the Estonian Science Foundation ("Režiimitoetus uutes demokraatiates: Balti andmestik 1993–2004").

olds considered themselves to be part of the Estonian people, 57% of the 15–29-year-old respondents answered this question in the affirmative. At the same time, having citizenship does not have a greater than average impact on the attitudes of the young people – similarly to all Estonian citizens with Russian-speaking backgrounds, every third young Estonian citizen whose native language is Russian does not consider him- or herself to be part of the Estonian nation[23]. Therefore the society should pay more attention to attitudinal barriers that do not allow people who were born and have grown up in Estonia feel that they really belong here.

Evaluations of Estonia's citizenship policies also vary dramatically by ethnic group. The findings of the 2008 survey show that two-thirds of Estonians feel that Estonia's current citizenship policies are "normal and correspond to international standards", while 15% feel that the citizenship policies are too lenient and damage the interests of the Estonian people. On the other hand, 77% of the Russian-speaking population believe that the current citizenship laws are unjustly strict and restrict human rights. However, there are almost twice as many people in the younger Russian age group (15–29) compared to the 50–74-year-old group who feel that Estonian citizenship policies conform to international standards (20% and 11.5% respectively).

In sum, the data shows that despite progress in naturalization, the political community in Estonia continues to be ethnically split.

Support for democracy as a form of government

Based on survey findings, the citizens of "old" democracies feel almost unanimously that democracy is the best possible form of government (Klingemann 1999). The positions of the populations in post-Communist transition countries regarding this question have been notably more diverse. Painful social changes created nostalgia among certain segments of the population for the old order or the desire for a strong leader who would set the house in order.

The findings of the New Baltic Barometer survey series (Rose 2005) show that during the transition decades a significant part of the Estonian population preferred an authoritarian order to a democratic one. For instance, in 2004 only 46% of Estonians and 39% of the local Russian-speaking population were convinced that democracy is preferable to other forms of government. Of Estonians, 18% and of Russians, 29% think that in certain cases an authoritarian order could be better. A quarter of the respondents were indifferent about this issue. According to the findings of the same survey, a quarter of Estonians and more than a third of the Russian-speaking population agreed with the following statement: "is it best to get rid of parliament and elections and have a strong leader who can quickly decide everything." Among the Russian-speaking population in Latvia and Lithuania, the yearning for "strongman rule" has been even greater, as the statement was approved by almost half of the respondents in some years (Ehin 2007).

Questions about how attached the Estonian population is to the principles of democracy are also important today. The enlargement of the European Union and NATO did not bring about a liberal-democratic "end of history". The deepening conflict of values between the West and Russia is manifested in a political and ideological contestation over the meaning of democracy. The Kremlin's doctrine of "sovereign democracy" assigns content to the concept of democracy that has very little in common with the definition used in the West. The existence of different information fields for the Estonians and the Russian-speaking population (Estonian Human Development Report 2007, Chapter 3.7) creates a fertile ground for the emergence and acceptance of multiple, competing definitions of democracy in Estonia.

Satisfaction with regime performance

Comparative studies have shown that satisfaction with the functioning of the political regime has continually decreased in the democratic societies of the developed Western countries during the last half-century. It seems that improved educational opportunities, greater awareness and political information have led to an erosion of the traditional deferential attitude toward power and rulers, which has been replaced by a notably more critical and cynical attitude (Dalton 2004).

One cannot speak about similar declining trends in the post-Communist countries. During the transition years, the satisfaction of Eastern Europeans with state authority followed a U-shaped curve (Munro 2002). The euphoria of the Velvet Revolution era subsided quickly and gave way to dissatisfaction that was fed by the deterioration in living standards, unemployment, inflation, an increase in crime and other painful consequences caused by the restructuring of the economy and political reforms. Along with improvements in living standards and the growth of political stability, satisfaction with the regime also started to increase again. A similar U-shaped trend is also apparent in the Baltic countries. Overall, the Estonian population has been considerably more satisfied with their political regime during the entire transition period than the populations of Latvia or Lithuania. At the same time, ethnic Estonians and Latvians assess the performance of their political systems much more positively than the Russian-speakers in these countries (also see the previous subchapter of the Human Development Report).

Large gaps between the regime assessments of various ethnic groups are also noticeable now. A survey study conducted in the spring of 2008 (State Chancellery 2008b) show that 62% of ethnic Estonians trust or tend to trust the Estonian state while only 23% of the Russian-speaking population does (Table 4.4.2.). There are no significant age-related differences in the evaluations of the Russian-speaking population regarding the trustworthiness of the Estonian state, although the 15–29-year-old respondents seem to be somewhat more critical toward the state than those who are middle-aged or older. Surprisingly, Russian citizens tend to trust the Estonian state more than those Russian-speakers who are Estonian citizens (see Table 4.4.2.). This can be explained by reference to age differences of the corresponding citizen groups: while younger and middle-aged people dominate among Russian-speakers with Estonian citizenship, the majority of Russian citizens are pensioners who are apparently satisfied with the social security provided to them by the Estonian state (see Lauristin 2008).

Earlier studies have shown that among minorities, satisfaction with regime performance is more strongly

[23] On the other hand, among the middle-aged group, citizenship brings about stronger idetnfification with the Estonian people – 72% of Russian speakers aged 40–49 with Estonian citizenship define themselves as members of the political commmunity.

related to economic factors than among the indigenous population. In light of this, the current economic crisis is likely to add momentum to the spread of distrust among the Russian-speaking population.

Trust in institutions

In young Eastern European democracies, democratically elected institutions, or those that directly represent the people, such as the parliament and the political parties, are generally trusted the least. At the same time, institutions and power structures that are removed from the fray of everyday politics and play a greater representative and symbolic role (such as the president and the military), enjoy a notably higher level of trust. The results of the New Baltic Barometer surveys from 1993–2004 show that in the Baltic countries, trust in political parties was already very low (around 10–15 per cent) in 1993. However, trust in the parliament has decreased with time – about half the population in the Baltic countries trusted the parliament in 1993, while less than 20% did so in 2004 (Ehin 2007).

In 2008, the Riigikogu continued to be the least trusted institution in the eyes of the Estonian public. In the spring of 2008, only a quarter of ethnic Estonians trusted the parliament; at the same time, 67 per cent trusted the president and 37 per cent trusted the government (Figure 4.4.1.). The attitudes of the Russian-speaking population are characterized by extremely low trust in the principal state institutions: in the spring of 2008, the Riigikogu was trusted by only a tenth of the Russian-speakers; and only 13% of the respondents considered the government and the president to be trustworthy. However, among Russian-speaking young people (aged 15–29), the perceived trustworthiness of the parliament, government and president is almost twice as high as among older people (aged 50–74).

Political participation

Democracy cannot survive without the readiness of the citizens to participate in politics. Voter turnout at elections has decreased during the independence period both here and in the neighbouring countries. In the first parliamentary elections after the restoration of independence 68% of voters in Estonia, 90% in Latvia, and 75% in Lithuania participated, while during the most recent elections the participation rate was only 62% in Estonia, 61% in Latvia and 49% in Lithuania. A comparison with other European Union countries shows that voter turnout in parliamentary elections in Estonia is significantly lower than the European Union average (70.4%), but is generally at the same level as in the other Eastern European democracies (International Institute for Democracy and Electoral Assistance 2008).

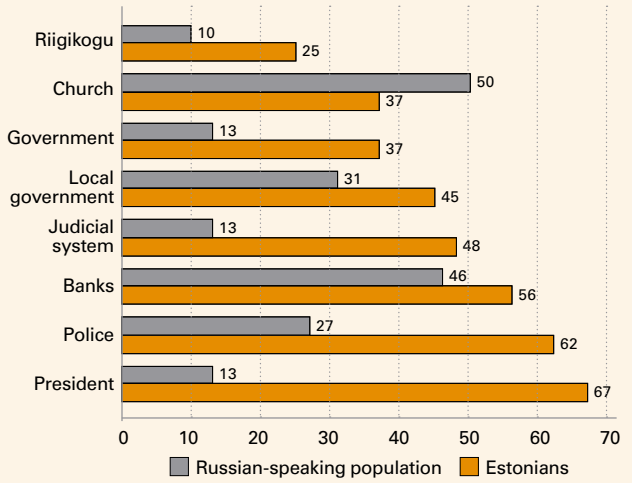
Political parties play in important role in representative democracy, linking the people and the decision-makers. A low level of trust in political parties and the lack of stable partisan preferences are typical of Estonia (and post-Communist democracies in general). According to the findings of the 2008 study (State Chancellery 2008b), 36% of Estonians do not feel close to any political party; among the Russian-speaking population, half of the respondents (49.5%) are of the same opinion. Although Estonia has, relative to the population, a larger number of nongovernmental organizations than other post-Communist countries, participation in the activities of nongovernmental organizations is significantly more widespread among Estonians

Table 4.4.2. Trust in the Estonian state

		All	Citizenship			Age		
			Estonian	Russian	Stateless	15–29	30–49	50–74
Russian-speaking population:	trusts	23	23	27	20	24	22	22
	does not trust	39	40	33	43	45	38	38
Estonians:	trusts	61	*	*	*	71	60	53
	does not trust	11	*	*	*	6	6	11

Source: Integration of Estonian Society: Monitoring 2008

Figure 4.4.1. Trust in institutions in Estonia



Source: Integration of Estonian Society: Monitoring 2008

than among the Russian-speaking population (Estonian Human Development Report 2007 Chapter 2.2.).

People whose native language is Russian believe that they have far more limited opportunities than ethnic Estonians to be engaged in politics, to influence local-level decision-making and to participate in the activities of nongovernmental organizations. Among Russian-speaking respondents, 90% considered Estonians to have considerably greater opportunities for political activity compared to members of ethnic minorities, and half of the respondents found that it is easier for Estonians to participate in the work of nongovernmental organizations.

Ethnic differences are also evident in people's assessment of their political efficacy. As many as 42% of ethnic Estonians, but only 25% of Russian-speakers agree with the statement: "The course of events in the country depends on the choices of the people, including myself and people like me". There are no significant differences in the self-assessed political competence of different ethnic groups. Of Estonians, 28%, and of the Russian-speaking population, 26% agree with the statement: "I think that I am sufficiently competent in political matters that my positions could be of interest to others." Greater political confidence is evident among Russian-speaking Estonian citizens and younger age groups (Table 4.4.3.).

In examining how people assess the various channels of influencing society and politics, it is useful to distinguish respondents by ethnicity, citizenship and age (Table 4.4.4.). Estonians place considerably more importance on voting and participating in the activities of nongovernmen-

Table 4.4.3. Agreement of the Russian-speaking population with the statements regarding political influence and competence

	All	Citizenship			Age		
		Estonian	Russian	Stateless	15–29	30–49	50–74
The course of events in the country depends on the choices of the people, including myself and people like me							
... (tend to) agree	25	33	19	11	35	27	14
I think that I am sufficiently competent in political matters that my positions could be of interest to others							
... (tend to) agree	26	31	21	17	29	27	21

Source: Integration of Estonian Society: Monitoring 2008

Table 4.4.4. Assessment of the importance of various forms of participation by ethnicity, citizenship and age (Percentage of respondents who thought it important: percentage of respondents who thought it unimportant)

	Ethnicity		Citizenship			Age		
	Estonian	Russian-speaking	Estonian	Russian	Stateless	15–29	30–49	50–74
Voting	85:11	72:23	83:13	74:19	60:36	74:22	69:27	70:20
Belonging to a political party	28:64	26:63	28:64	26:61	27:66	29:64	24:63	27:59
Participating in voluntary organizations	68:25	57:33	66:26	55:35	56:36	60:32	52:39	59:29
Participating in strikes	24:63	31:54	25:62	34:50	33:55	30:59	30:54	30:50
Participating in collecting signatures/signing petitions	45:45	43:44	46:44	43:47	36:51	45:46	45:43	39:44
Participating in demonstrations/pickets	27:60	34:53	29:59	38:51	30:57	35:55	31:54	34:49
Participating in Internet forums and writing Internet commentaries	19:66	25:53	21:63	19:47	25:56	29:61	27:56	17:39

Source: Integration of Estonian Society: Monitoring 2008

tal organizations than Russian-speaking respondents. The latter, in turn, place somewhat greater importance on participating in strikes and pickets. Of Estonian citizens, 83%, of Russian citizens 74% and of stateless people, 60% think it is important to vote. There are no significant differences among groups of respondents with respect to the perceived importance of belonging to political parties. Young people, similarly to their parents' and grandparents' generations, favour conventional means of influencing politics – voting, participation in the work of nongovernmental organizations and collecting signatures. Unlike the older generation, young and middle-aged people think the Internet is a relatively important arena of political participation.

The above findings show that Russian-speakers feel that, compared to ethnic Estonians, they have considerably fewer opportunities to be engaged in politics. Russian-speaking respondents who are Estonian citizens assess their political influence and competence more highly than people without Estonian citizenship. However, the lack of Estonian citizenship is not only a cause of political passivity but also a result of it: the fact that stateless people place less importance on voting suggests that they may have been less motivated to make efforts to secure the right to vote.

Summary

Several important aspects regarding the patterns of political support and participation in Estonia differ from those found in the "old" democracies. These include the lack of a shared definition of the political community, indecisive support for democracy as a form of government, weaker trust in the parliament and political parties and lower voter turnout compared to the EU average. We share many of these traits with other Eastern European countries. Throughout the transition period, however, the people of Estonia have given the performance of their political and economic systems considerably higher ratings than the inhabitants of Latvia and Lithuania.

In both Estonia and Latvia, there is a clearly evident ethnic gap in public attitudes towards the state and its institutions. Despite progress achieved in naturalization, almost half of the Russian-speakers in Estonia (many of whom are Estonian citizens) do not consider themselves to be part of the Estonian nation in the constitutional meaning of the term. Only a quarter of Estonia's Russian-speakers trust the Estonian state and slightly more than a tenth trust its principal political institutions – the Riigikogu, the government and the president. The results of a survey study carried out in spring 2008 show that the crisis of trust that accompanied the "bronze events" turned out to be deeper and longer lasting than expected. Neither European values nor security considerations allow us to disregard a crisis of trust of such proportions. The somewhat greater support for political institutions, greater identification with the Estonian people and higher assessment of their political influence and competence among young Russian-speakers offer some hope that ethnic differences in political attitudes may decrease over time. However, the current gap between the political assessments of the ethnic majority and the minorities is so large that we cannot rely on the slow process of a generational change to reduce it.

References

1. Dalton, R. (2004). Democratic Challenges, Democratic Choices: The Erosion of Political Support in Advanced Industrial Democracies. Oxford: Oxford University Press.
2. Easton, D. (1965). A System Analysis of Political Life. New York: Wiley.
3. Estonian Human Development Report (2007), Chapter 3.7. "The infosphere and media use of Estonian Russians" pp. 77–81.
4. Estonian Human Development Report (2007), Chapter 2.2. "Civil initiative and voluntary organizing", pp. 32–39.
5. Ehin, P. (2007). "Political Support in the Baltic States, 1993–2004" Journal of Baltic Studies 38 (1), 1–20.
6. European Commission (2008), Eurobarometer 69: Public Opinion in the European Union, http://ec.europa.eu/public_opinion/index_en.htm (1.10.2008)

7. International Institute for Democracy and Electoral Assistance (2008), Databases and Networks: Voter Turnout, http://www.idea.int/ (1.10.2008)

8. Klingemann, H.-D. (1999). "Mapping Political support in the 1990s: A Global Analysis". Norris, P. (ed) (1999) Critical Citizens: Global Support for Democratic Governance. Oxford: Oxford University Press.

9. Munro, N. (2002). "Post-Communist Regime Support in Space and Time Context." Journal of Communist Studies and Transition Politics, 18 (2) : pp. 103–125.

10. Norris, P. (ed (1999) Critical Citizens: Global Support for Democratic Governance. Oxford: Oxford University Press.

11. Office of the Minister of Population and Ethnic Affairs at the State Chancellery (2008a), data file "Kodakondsuse statistika," http://www.rahvastikuminister.ee (1.11.2008).

12. Office of the Minister of Population and Ethnic Affairs at the State Chancellery (2008b), data from Integration of Estonian Society: Monitoring 2008 conducted in March–April 2008.

13. Rose, R. (2005). "New Baltic Barometer VI: A Post-Enlargement Survey" Studies in Public Policy No. 401. Glasgow: Centre for the Study of Public Policy, University of Strathclyde.

4.5. Non-Estonians in the labour market

The data from Estonian Labour Force Surveys allow for clear and unequivocal conclusions to be drawn: the transition experience in the labour market was considerably more dramatic for non-Estonians than for Estonians. The risk of unemployment for non-Estonians has consistently been greater than for Estonians, and their lag in employment in top positions on the job market has been noticeable (see Table 4.5.1.). The differences are also significant in the case of young people.

The economic boom at the beginning of this century was not accompanied by any significant changes in the distribution of risks and opportunities. With regard to the prevention of risks, the economic boom turned out to be more beneficial for Estonians, with the unemployment rate for Estonians decreasing faster than for non-Estonians – the unemployment rate for non-Estonians was 1.6 times higher in 2001, while by 2006 the difference was 2.4 times. In the case of young people (20–34-year-olds), the Estonians' advantage tended to increase – the unemployment rates of young non-Estonians was less than double that of Estonians in 2001 (17.1% and 11.8% respectively), while by 2006, it was more than double (10.7% and 4.0% respectively).

However, the great lead held by Estonians in employment in top positions in the labour market did decrease somewhat – less than 30% of Estonians and only 15% of non-Estonians worked as managers or professionals in 2001, while by 2006 the corresponding indicators were 31% and 19%, or the difference decreased from 2 times to 1.6 times. Among 20–34-year-olds, the difference decreased as follows: while 26% of young Estonians and only 10% of non-Estonians were employed as managers or professionals in 2001, by 2006, the corresponding ratios were 20% and 17%; in other words, the overrepresentation of young Estonians in top positions in the labour market had decreased from 2.6 times to 1.8 times.

Ethnic inequality in the Estonian labour market and human capital

In Estonia's public discourse, an individual-centred approach to understanding the inequalities of the labour market dominates. Explanations of the different opportunities of ethnic groups in the labour market are based on the theory of human capital. One can define a narrower and broader meaning for human capital. The narrower meaning primarily includes knowledge, skills and experience that enable one to successfully cope with work assignments. In this case, only education and/or area of job activity (indicator for the nature of the work experience) and/or age (measure of the duration of the work experience) are taken into account. There is also a broader meaning of human capital, which, in addition to education and job-related skills, also includes language skills and cultural knowledge. Usually certain human capital is more useful in one or another social context, and therefore the human capital necessary in the labour market differs from country to country. An upheaval in the social order can be accompanied by changes in the value of certain aspects of human capital. As a result of the reforms that took place after the restoration of Estonian independence, the greatest change occurred in the importance of Estonian language proficiency as an essential component of human capital.

Table 4.5.1. The level of unemployment and percentage of professionals and managers by ethnicity, and for non-Estonians, by their citizenship and Estonian language proficiency, average for 2001–2006, %

	Unemployment level		Percentage of professionals and managers	
	Work force (ages 15–74)	Young people (ages 15–29)	Work force (ages 15–74)	Young people (ages 20–35)
Estonians	7.8	14.7	11.3	11.1
Non-Estonians	14.6	23.0	7.1	5.9
… with Estonian citizenship	12.3	17.3	9.8	8.0
…who are stateless	16.8	26.2	4.5	3.4
…with foreign citizenship	15.8	26.7	5.8	5.7
…good Estonian language proficiency [a]	10.0	16.1	11.2	9.0
…poor Estonian language proficiency [b]	16.3	25.9	6.5	4.5

[a] Answers to the questions: (a) What language do you speak at home? If you use several languages, indicate them all, starting with the most frequently used. (b) In addition to the language you speak at home, do you know how to speak some other language or do you understand some other language within the limits of everyday communications? (c) What other languages do you know? In addition to the fact that Estonian is spoken at home, we considered the answer "can speak and write" as an indicator of good Estonian language skills in the case of question (c).

[b] We considered the following answers to indicate poor Estonian language skills: "can understand within the limits of everyday communications" for question (c) and not indicating Estonian in the case of question (b).

Source: Estonian Labour Force Surveys 2001–2006.

Table 4.5.2. The prospects of non-Estonians of working on the top positions and the risk of unemployment in case of equal preconditions with Estonians[24]

In case of each group – non-Estonians compared to Estonians in case of equal preconditions [a]:	Risk of unemployment	Managers and professionals
	How many times greater is the probability for non-Estonians	How many times smaller is the probability for non-Estonians
Entire non-Estonian workforce (15–74-year-olds)	1.67***	2.23**
...incl. those who have good Estonian language proficiency	1.22***	1.55**
... incl. those who have poor Estonian language proficiency	1.93***	2.86***
...incl. those who have Estonian citizenship	1.42***	1.82**
...incl. those who are stateless	1.82***	2.95***
...incl. those who have Russian citizenship	2.08***	2.82***
... incl. those who have good Estonian language proficiency and also have Estonian citizenship	1.23**	1.61***
All non-Estonian young people (20–34-year-olds)	1.38***	2.31***
...incl. those who have good Estonian language proficiency	0.85	2.00***
... incl. those who have poor Estonian language proficiency	1.74***	2.66***
...incl. those who have Estonian citizenship	0.97	2.10***
...incl. those who are stateless	1.66***	2.58***
...incl. those who have Russian citizenship	2.03***	2.71***
... incl. those who have good Estonian language proficiency and also have Estonian citizenship	0.89	2.04***

[a] As equal preconditions, the following factors have been included in the logistic regression model: educational level, age, company's area of activity (branch of the economy); sector (working in the private or state sector); residence (Tallinn, Ida-Viru County or the rest of Estonia); gender, period which the data characterizes (2001–2003) (2004–2006).

**** significant difference (significance level <0.01).*

*** significant difference (significance level <0.05).*

Source: Estonian Labour Force Surveys database for 2001–2006, statistical analysis conducted by the authors.

Table 4.5.2. presents the prospects of non-Estonians for high positions and their risk of unemployment compared to Estonians in 2001–2006. It appears that non-Estonians have a much smaller probability of working on top positions than Estonians even if they have equal human capital, be this defined in the narrower or broader sense. The existence of country-specific human capital (this is indicated by language proficiency and Estonian citizenship in the table) does reduce the advantage of the Estonians over non-Estonians. However, non-Estonians are only able to be competitive if the Estonians have lower levels of education. It appears from Table 4.5.2. that young (20–34-year-old) non-Estonians do not have better than average prospects in the labour market, despite the fact that most of them were born in Estonia and have acquired an education in Estonia, mostly in the Republic of Estonia. Moreover, from the table it appears that the young people gain relatively little from the existence of country-specific human capital. Non-Estonian young people, with good Estonian language proficiency and Estonian citizenship, are 1.61 times less likely than their Estonian contemporaries to work on top positions.

Both Estonian language proficiency and Estonian citizenship reduce the risk of unemployment for non-Estonians, but these cannot bring it to the same level as that of Estonians. However, a positive trend is noticeable among young people – good Estonian language proficiency and Estonian citizenship mean that their prospects of avoiding unemployment are comparable to young Estonians. Young people who do not have Estonian citizenship and no Estonian language skills are the clear outsiders.

Therefore insufficient human capital is not enough to explain the ethnic-based differences in the Estonian labour market. Individual-centred explanations stress the importance of other individual resources as a precondition for labour market success along with human capital. For example, the role of social and/or cultural capital is emphasized, and in the case of young people, their parents' social capital, including financial capital that can provide a buffer while searching for a good job, is important. In Estonia, the lack of such "beneficial" social capital has been considered an important factor that limits the opportunities for non-Estonians in the labour market (Luuk & Pavelson 2002). Based on the fact that the labour market situation of the ethnic minorities is "greatly a social product shaped by the institutional structures of the given country" (Reitz 1998:3), in order to actually equalize opportunities, it would be very important to focus on measures that promote the shaping of productive resources in Estonia's institutional framework.

Assessment of labour market opportunities

The labour market behaviour is related to expectations and perceived opportunities. People's assessments of their opportunities and ambitions are affected by their experiences in the labour market, and expectations and ambitions also direct one's choices and behaviour in the labour market. However, expectations and the actual labour market situation depend on the broader institutional environ-

[24] We used logistic regression for the data analysis to calculate the impact of independent variables (e.g. ethnicity, gender, citizenship) on the variables being examined. One of the goals of the analysis was to find out how ethnicity affects the probability of becoming unemployed or working as manager or professional. In logistic regression analysis, the odds ratio was calculated. In order to obtain the given number, a comparison of the probability of the event occurring (e.g. becoming unemployed) in the two groups is compared. In the case of our analysis this means that first the risk of unemployment in the non-Estonian group was calculated, and thereafter in the Estonian group, and thereafter the ratio of the risk of unemployment in the two groups was calculated. If the probability of unemployment in the two groups is similar, then the odds ratio is close to 1. This means that ethnicity does not impact the risk of unemployment. If the odds of becoming unemployed is greater in non-Estonian group (as the group that was first involved in the analysis), the odds ratio is greater than 1. In our analysis, the odds ratio was 1.67, which indicates that it is 1.67 times more probable that non-Estonians will become unemployed compared to Estonians.

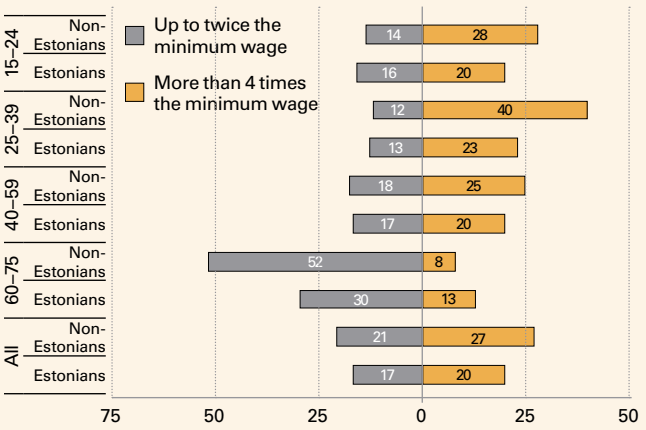
ment and the opportunities based thereon. Nevertheless, a great difference in expectations and actual achievements may cause dissatisfaction with opportunities in the labour market.

From Figure 4.5.1., it appears that the salary expectations of non-Estonians are more differentiated than those of Estonians – when looking for work, they often ask for higher salaries (more than 4 times the minimum wage) and somewhat more often for lower salaries (less than 2 times the minimum wage) compared to Estonians. The number of young people who are satisfied with lower wages does not differ by ethnic group. Generally the salary expectations of older people were the most modest, whereas 60–75-year-old non-Estonians have particularly low salary expectations, with almost half asking a maximum of twice the minimum wage for their work.

The assessments of non-Estonians and Estonians regarding the opportunities for using the educational potential they have acquired differs little, while the differences are significant in younger age groups (Figure 4.5.2.). Compared to their Estonian contemporaries, 15–24-year-old non-Estonians are less likely to accept jobs that require an educational level lower than the one they have. The positive attitude of young non-Estonians is not shared by older non-Estonians, and even 25–39-year-old non-Estonians are more likely than Estonians to accept jobs that are below their educational potential. One of the reasons for the greater positivism on the part of non-Estonians in the younger age group may be the lack of experience in actual labour market competition, which means that their assessment may be based on expectations rather then actual experience. Nevertheless, this group is most likely to have Estonian citizenship and good Estonian language proficiency, which may be the basis for their expectations. From Figure 4.5.2., it also appears that the assessments of the oldest group of Estonians and non-Estonians do not differ substantially as an approximately similar percentage of older people in both ethnic groups would accept jobs that presume lower educational levels than the ones they have.

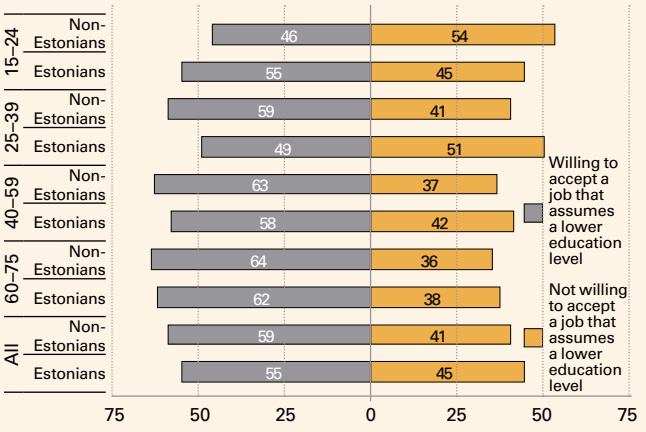
Estonians consider their skills/knowledge to be sufficient for finding suitable jobs somewhat more often than non-Estonians (see Figure 4.5.3.). Although young non-Estonian are characterized by high salary expectations, and greater demands regarding the correspondence between the job and educational level, their assessment of the adequacy of their skills for finding acceptable work is considerably more pessimistic. Figure 4.5.3. shows that about half of 15–24-year-old non-Estonians believe that their skills are inadequate for finding a suitable job (among Estonians this percentage is 38%). Young non-Estonians' negative opinion on the adequacy of their skills may also be related to generally high expectations, although this nevertheless demonstrates greater uncertainty among young non-Estonians regarding their work-related knowledge. Compared to older age groups, young people generally give the adequacy of their skills a more negative assessment, although this may also be caused by lack of work experience, or by the fact that the young people who are still studying do not consider their skills to be adequate for getting an acceptable job. Similar to young non-Estonians, more than half of the oldest age group of non-Estonians assesses their work-related

Figure 4.5.1. Salary expectations of Estonians and non-Estonians by age group, %



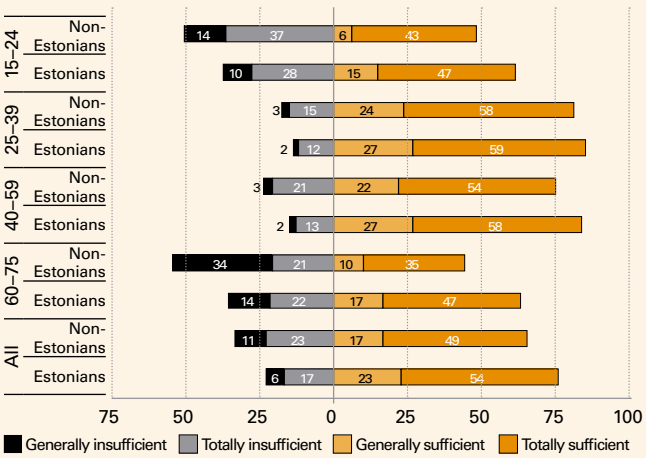
Source: Integration of Estonian Society: Monitoring 2008.

Figure 4.5.2. The assessment of Estonians and non-Estonians to use their educational potential (willing to accept a job that assumes a lower education level than the one they possess) by age group, %



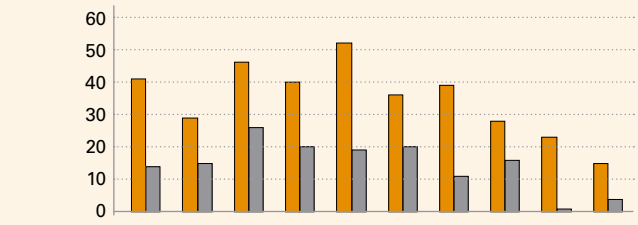
Source: Integration of Estonian Society: Monitoring 2008.

Figure 4.5.3. Assessments of Estonians and non-Estonians regarding their work-related skills/knowledge, by age group, %



Source: Integration of Estonian Society: Monitoring 2008.

Figure 4.5.4. Certainty of Estonians and non-Estonians regarding finding an acceptable job in Estonia or abroad by age group; percentage of those answering definitely yes



	All		15–24		25–39		40–59		60–75	
	Estonians	Non-Estonians	Estonians	Non-Estonians	Estonians	Non-Estonians	Estonians	Non-Estonians	Estonians	Non-Estonians
In Estonia	41	29	46	40	52	36	39	28	23	15
Abroad	14	15	26	20	19	20	11	16	1	4

Source: Integration of Estonian Society: Monitoring 2008.

Table 4.5.3. Assessment of non-Estonians regarding their personal opportunities in the labour market compared to Estonians in the case of similar preconditions

In the case of each group – non-Estonians compared to Estonians in the case of equal preconditions [a]:	Labour force	Young people (15–24)	In Tallinn	In Ida-Viru County	Elsewhere in Estonia
SALARY DEMANDS					
Low salary (up to 2 minimum wages)					
Non-Estonians generally, incl.	+		++		
… with Estonian citizenship			++		
… without Estonian citizenship	+				
… with good Estonian language proficiency			++		
… with poor Estonian language proficiency	+				
High salary (over 4 minimum wages)					
Non-Estonians generally, incl.		++		–	+
… with Estonian citizenship	+	++	+	–	+
… without Estonian citizenship				–	
… with good Estonian language proficiency	++	++	+		++
… with poor Estonian language proficiency					
DEMANDS FOR JOB AND EDUCATION CORRESPONDENCE					
Non-Estonians generally, incl.	–		––		
… with Estonian citizenship					
… without Estonian citizenship	–		––		
… with good Estonian language proficiency					
… with poor Estonian language proficiency	–		––		–
EDUCATION AND SALARY DEMANDS					
High					
Non-Estonians generally, incl.				––	
… with Estonian citizenship					
… without Estonian citizenship	–			––	
… with good Estonian language proficiency				–	
… with poor Estonian language proficiency	–			–	
Low					
Non-Estonians generally, incl.			++		
… with Estonian citizenship					
… without Estonian citizenship			++		
… with good Estonian language proficiency					
… with poor Estonian language proficiency	+		++		
CERTAINTY OF FINDING AN ACCEPTABLE JOB					
Non-Estonians generally, incl.	––	––	––		–
… with Estonian citizenship			––		
… without Estonian citizenship	–––	–––	––		–
… with good Estonian language proficiency			––		
… with poor Estonian language proficiency	–––	––	––		–

[a] *As equal preconditions, the following factors have been included in the logistic regression model: educational level; age; economic status; residence (Tallinn, Ida-Viru County or the rest of Estonia); gender.*

––– significant difference (significance level <0.01).

––, ++ significant difference (significance level <0.05).

–, + significant difference (significance level <0.10).

–, ––, ––– negative association

+, ++ positive association

Source: Integration of Estonian Society: Monitoring 2008, statistical analysis executed by the authors

skills and knowledge to be insufficient. Non-Estonians aged 25–39 and 40–59 also tend to be less certain than Estonians about their skills and knowledge, although compared to younger and older age groups, their assessments are generally more positive.

Table 4.5.3. shows the assessment of non-Estonians regarding personal opportunities in the labour market compared to the assessment of Estonians. When analyzing these assessments, similar preconditions have been considered, which means that the comparison is compiled from the opinions of Estonians and non-Estonians with similar educational levels, ages, genders, financial status and residences (Tallinn, Ida-Viru County, elsewhere in Estonia).

As expected, it turned out that the educational and salary demands of non-Estonians without Estonian citizenship or poor Estonian language proficiency are lower compared to Estonians. In case of similar educational level and other equal preconditions, non-Estonians without country-specific human capital are more likely than Estonians to accept jobs with salaries of up to twice the minimum wage and to be satisfied with jobs that do not correspond to their educational level. The given tendency appears particularly in Tallinn, where non-Estonians without Estonian citizenship or language proficiency have significantly lower expectations to salaries and to correspondence between job and education compared to Estonians. In addition, the given non-Estonian group is significantly less confident of their prospect of finding acceptable work in Estonia. Young non-Estonians without Estonian citizenship or with poor language skills are also less confident than Estonians with regards to finding a suitable job, while their educational and salary demands do not differ significantly from their Estonian contemporaries.

From Table 4.5.3. we can see that the salary expectations of non-Estonians with Estonian citizenship and good Estonian language proficiency are generally higher than those of Estonians. This tendency appears strongly among the youngest age group, where Estonian language skills and citizenship are also related to higher salary expectations compared to Estonians. At the same time, the ambitions of non-Estonians who have invested in country-specific human capital do not differ significantly from those of Estonians regarding correspondence between job and educational level. Education and salary demands are also similar to those of Estonians. Non-Estonians with Estonian citizenship or language skill, including young people, are characterized by similar certainty as Estonians that they can find acceptable work in Estonia. Therefore it seems that those non-Estonians who have invested in country-specific human capital have rather a positive assessment regarding their opportunities in the labour market; their expectations regarding salaries are even slightly higher than those of young Estonians with similar educational levels and other equal preconditions. Their assessments regarding the possibility of using their educational potential and their sense of confidence with regard to finding suitable jobs do not differ from their Estonian contemporaries.

In the assessments of non-Estonians regarding their personal opportunities in the labour market, the peculiarity of Tallinn is evident. Although, similarly to the

rest of Estonia, non-Estonians living in Tallinn who have obtained country-specific human capital are more likely to want salaries equalling at least four times the minimum wage, but there is also an opposite trend – when seeking work, non-Estonians with Estonian citizenship or language skills are also more likely to ask for the lowest pay despite their equal preconditions. These findings show that the expectations of non-Estonians with Estonian citizenship or Estonian language proficiency in Tallinn are firmly differentiated, depending apparently on factors not controlled in the analysis, such as the existence of a useful social networks. However, generally in Tallinn, the certainty of non-Estonians that they can find acceptable jobs is lower than that of Estonians despite their Estonian citizenship and language skills.

The analysis carried out regarding Ida-Viru County shows that in the case of good Estonian language skills, the demands of non-Estonians with respect to salary as well as correspondence between education and job are not as high as those of Estonians. When looking for work, the non-Estonians in Ida-Viru County are unlikely to ask for higher salaries than Estonians, despite their Estonian citizenship. Therefore the job expectations of non-Estonians with Estonian citizenship and good Estonian language skills are somewhat lower than expectations of Estonians.

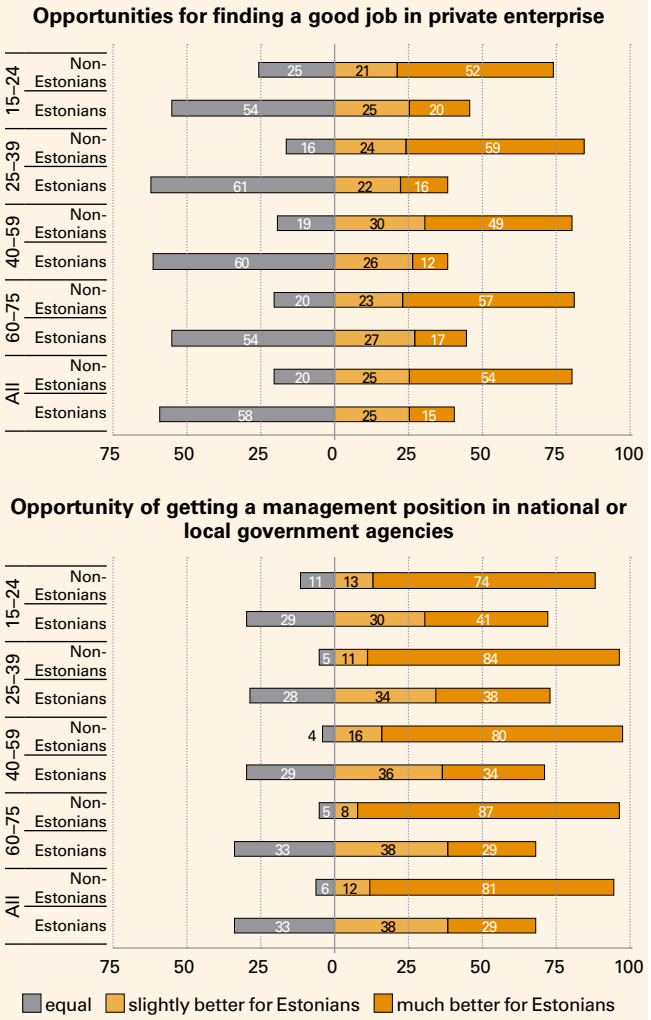
Elsewhere in Estonia, Estonian language skills and Estonian citizenship (along with Russian language skills) are a beneficial resource for non-Estonians, on which their high salary demands may be based. These three regions also denote different models of coexistence between non-Estonians and Estonians: Tallinn, which is based on individual as well as communal competition; Ida-Viru County, which is a model of relatively isolated community existence; and the rest of Estonia, which is a model of individual integration.

Assessment of equal opportunities

In the developed societies of the West, the perception of equal opportunities is considered to be an important basis for the functioning of the market economy and the legitimacy of the society as a whole[25]. In the case of legitimate economic orders, even those that find themselves in unfavourable situations feel they have sufficient opportunities. The data presented in Figure 4.5.5. confirms that the majority of Estonians believe that the opportunities for non-Estonians to find good jobs in private enterprise are equal to those of Estonians, while the non-Estonians are considerably more pessimistic.

Yet the pessimistic assessments of non-Estonians regarding equal opportunities compared to Estonians do not depend directly on their personal position in the labour market. No matter how favourable the personal preconditions of a specific non-Estonian for competing with Estonians in the labour market are, they share the assessment of less successful "compatriots", since their assessments differ greatly from those of Estonians. Therefore one can say that all non-Estonian groups share a critical assessment of the equality of their opportunities,

Figure 4.5.5. Assessment of the equality of labour market opportunities, by ethnicity, %



Source: Integration of Estonian Society: Monitoring 2008.

although those with the most resources are actually capable of competing with Estonians and do so. A comparison of age groups confirms that non-Estonians belonging to the youngest age group give a somewhat more optimistic assessment of the equality of opportunities compared to other age groups. However, a third of them also think that Estonians have better opportunities for getting good jobs in private enterprise.

Estonians do give a considerably more critical assessment of the opportunities for non-Estonians to get management positions in national or local government agencies. Less than a third of Estonians believe that both ethnic groups have equal opportunities. However, among non-Estonians only 6% are optimistic. Again, 15–24-year-old non-Estonians are slightly less critical, although nine-tenths of them do not believe in equal opportunities.

There are several reasons why non-Estonians do not believe that the rules of the Estonian labour market pro-

[25] According to American political scientist R.E. Lane (1986) the distribution mechanism of the market is considered to be fair if two procedural rules apply: (1) opportunities must be perceived as sufficiently open and (2) diligence must be important on the market, i.e. the principle of merit must apply.

mote equal opportunities. At the (ethnic) group level, the most important factor is the decreasing mobility of non-Estonians as a social group since the restoration of Estonian independence. No matter what a non-Estonian's personal "victory" or "loss" turned out to be as a result of the transition, not belonging to the indigenous population was accompanied by a definite stamp of loser in the public discourse. Therefore the experience of general decreased mobility by the (ethnic) group tended to affect one's understanding and interpretation of the labour market experience. As demonstrated by our analysis, the assessment of the equality of opportunities in the labour market may not be based on personal experience in the labour market, but may rather reflect the perception of the general decrease of opportunities resulting from non-affiliation with indigenous population.

Conclusion

The weaker position of non-Estonians in labour market competition is only partially reflected in assessments and expectations for finding work. People without Estonian citizenship and poor Estonian language skills, who have a higher risk of unemployment and who have the least likely prospects of becoming managers or professionals, are also characterized by distinctly lower demands and expectations for acceptable work and greater insecurity in the labour market.

With respect to self-assessment, country-specific human capital is a very important factor in forming labour market attitudes. The expectations of non-Estonians (especially young people) with Estonian citizenship or good Estonian language skills in the labour market are generally higher or similar to the expectations of Estonians. On the other hand, the actual position of the group in the labour market indicates that even if they have similar educational levels and other equivalent preconditions they still come off second-best to Estonians in labour market competition. The contradiction between expectations and reality is clearly visible in the case of young non-Estonians with Estonian citizenship and good language skills. Their prospects of achieving positions as managers or professionals are significantly lower than those of their Estonian contemporaries, while they have higher salary expectations than Estonians and similar wishes to get jobs conforming to their education. Apparently, this fact, as well as the more general experience of the decreased mobility of the ethnic group, has resulted in the extremely critical assessment of the non-Estonians regarding the equality of opportunities in the labour market.

The most important conditions that shape the choices and opportunities available to minorities in the labour market are: the policies related to immigration and ethnic minorities, the structure and regulations of the labour market, and the role of the welfare state in managing the risks of coping, or vice versa, in applying pressure to accept worse jobs. The state's minorities' policy also has symbolic meaning by sending a message to all the parties about how the arrivals are treated, how permanent a relationship is anticipated between this individual and the state, and whether it is sensible for the parties to invest in this relationship. When it becomes evident that country-specific human capital cannot equalize opportunities, the risk develops that the desire to invest in this relationship will disappear.

The consistency of the policy and the clarity of the signal sent to the public are especially important when the second generation of immigrants needs to be integrated. The integration of the second generation is accompanied by more complicated problems (compared to the first generation of immigrants), including a greater ambition for achieving results equal to those of the indigenous population (also demonstrated by our analysis). As we have seen, the situation among young non-Estonians regarding the perception of the situation and their actual prospects is no better than it is among older ones. Therefore it is naïve to think that the situation will improve by itself.

References

1. Lane, R.E. (1986). "Market Justice, Political Justice" American Political Science Review 80: pp. 383–402.
2. Luuk, M., Pavelson, M. (2002). "Non-Estonians on the Labor Market: A Change in the Economic Model and Differences in Social Capital" The Challenge of Russian Minority. Lauristin, M., Heidmets, M. (eds). Tartu University Press, pp. 89–116.
3. Reitz, J.G. (1998). Warmth of the Welcome. Westview Press, Boulder, CO.

4.6. Summary

Regardless the satisfaction level among the Estonian population is the same as the European average, the gap in the satisfaction assessments of the ethnic majority and minorities is one of the largest – the Russian-speaking population in Estonia is less satisfied with life than the Estonians. Comparing the factors determining the life satisfaction of Estonians and non-Estonians, we see that satisfaction with the performance of the state, which is low among Estonia's Russian-speaking population, plays an important role in the formation of the minorities' assessments. However, the positive expectations regarding democracy and the market economy that predominated among the Russian-speaking population when reforms started have receded by the second decade of the transition period – although satisfaction with the present has continually increased, trust in the future performance of the new system, especially the political system, has simultaneously decreased. Compared to the corresponding average assessments of European immigrants, Estonia's Russian-speaking population has experienced wider discrimination, and they have sig-

nificantly less social capital and interest in politics. The situation improves only slightly as the generations become younger – the social capital of young Russian speakers is higher than that of their parents and grandparents and they experience discrimination less often. At the same time, compared to the average minority youth groups in Europe, Russian-speaking young people in Estonia feel rebuffed more often and they have weaker social networks and political interests.

Therefore it can be said that in Estonia there is sufficiently fertile ground for interethnic tensions and conflicts in the form of general dissatisfaction. On the imaginary "map" of European majority-minority relations, Estonia is quite a tense area, and the change in generations will not significantly ease the situation.

Taking jobs into consideration, it is important that guarantees be provided for minorities to have equal opportunities for work-related self-realization and the achievement of a sense of material security. The given analysis shows that young Russians with Estonian citizenship and good Estonian language skills have higher salary expectations than their Estonian contemporaries and are more demanding regarding the correlation between work and education, while they are considerably more pessimistic in their assessment of the sufficiency of their skills for finding acceptable jobs. The supposition that young Russian speakers entertain a hope of emigrating to the West is also not valid – only every fifth Russian-speaking young person believes that he or she would find a suitable job abroad. On the other hand, the actual position of this group in the labour market indicates that, in the case of similar educational levels and other equivalent preconditions, they lag behind Estonians in labour market competition – the risk of unemployment for non-Estonians has consistently been greater than for Estonians, and, compared to Estonians, there is a noticeable lag in their achieving employment in top positions in the job market. Therefore potential dissatisfaction with the opportunities in the labour market is brewing among the younger generation.

In general, it is possible to say that the ethnic split in Estonia will not decrease with the onset of the younger generation. The young people who have been socialized in the Republic of Estonia are somewhat more integrated than their parents and grandparents – their social capital is higher, a large number are politically more confident and trusting, and they are generally more satisfied with life. At the same time, problems can be foreseen in the labour market – the expectations of the young people are higher than their opportunities. Political participation and support among these young people is also relatively low, and they perceive discrimination more often than minority youth in other European countries. Therefore it is probable that a "third-generation problem" may also develop in Estonia where the young people feel disappointed and alienated and a protest identity starts to develop based thereon.

Since these problems are not unique to Estonia, greater attention should be paid to the measures that have been implemented by other European Union member states (especially the United Kingdom, Sweden, Denmark, and the new member states of Hungary and Romania) (see Kallas, Kaldur 2008) in order to involve minorities and immigrant groups in public life and to guarantee them equal opportunities in their working lives. On the one hand, several countries have implemented state supervision and training in order to guarantee career opportunities in public service and equal salary conditions for the representatives of minorities. The United Kingdom particularly stands out for its consistent monitoring of equal opportunities and the implementation of special measures to guarantee equal opportunities in the labour market, and based on the aforementioned data, we see that satisfaction assessments are also considerably higher there. On the other hand, the involvement of the representatives of minorities in the decision-making process at both the national and local government levels is legislatively guaranteed in the majority of European countries through election codes, cultural autonomy or consultative minority committees that operate in the parliaments. Unfortunately, Estonia does not have such an effective system for involving minorities that is guaranteed by law.

The year 2008 brought hope for positive developments in Estonia's minority policies as well – the new National Integration Plan for 2008-2013 was approved, which for the first time has clearly set a course to abolish differences in the labour market and to systematically involve representatives of the Russian-speaking minority in public life (see Integration Plan 2008). At the end of the year, the Riigikogu finally passed the long-awaited Equality of Treatment Act, which enables cases of discrimination in public life and in the labour market to be dealt with on more concrete terms. At the end of the year, the first steps were also taken for the creation of a common information field through television by initiating more Russian-language TV programming on ETV2. Since the above analysis pointed out a strong association between life satisfaction and the assessments of the performance of the state, one can only hope that these steps will help to reduce the alienation between the Russian-language minority and the Estonian state that deepened after the crisis in April 2007 and thereby the assessment of the representatives of minorities regarding their quality of life will also improve.

References

1. Estonian Integration Plan 2008–2013, http://www.rahvastikuminister.ee/public/L_imumiskava_2008_2013_VV_10_04_08_nr_172.pdf

2. Kallas, K., Kaldur, K. (2008). "Integratsioonipoliitika ja meetmed: Heade praktikate uuring Sweden, Denmark ja The United Kingdom näitel. Integration Foundation, Institute of Baltic Studies Tallinn 2008, http://www.meis.ee/est/raamatukogu/?view=view&ID=175

CHAPTER 5

Quality of life in a consumer and information society

5.1. Defining consumer and information society

The concepts of consumer society and culture are usually associated with modern Western countries. The main agent here is the consumer (not, for example, "the worker" or "the citizen"); important values like freedom and progress are evaluated according to consumerist criteria (breadth of choice and growth of well-being) and commercial signs (e.g. advertisements) play an important role in the cultural sphere (Ritzer & Slater 2001: 6). It is more difficult to treat the consumer society as a clearly defined type of society than to analyze consumer culture which combines various values, opinions and activities related to consumption in one way or another. Thus, "consumer society" will remain a rather arbitrary term which is nonetheless used below for the sake of conciseness. One of the aims of this chapter is to look at the current consumption of both material and non-material goods in Estonia from the two following aspects: comparing Estonia to other European countries and describing the development dynamics and changes within Estonia, while attempting to interpret them within the context of people's quality of life.

To a certain extent, consumption in Estonia today must be interpreted through the prism of Soviet consumer culture. The keywords in those times were shortages, the use of networks based on social capital to acquire desirable goods, and the particularly strong symbolic value of Western goods. Transition from socialism to capitalism has thoroughly changed the relationship between people and goods. Among other things, consumer culture has brought about various tensions that were not experienced as acutely in the Soviet society (see Keller 2004). Both the routine consumption of goods and services to satisfy daily needs (see Gronow & Warde 2001) and the purchasing of goods with greater symbolic value (e.g. buying a car) constitute a kind of charged semantic field. Clashes occur along the temporal axis between the Soviet culture of shortages and the current abundance (which is often only seeming, however) that require the use of completely different skills and coping strategies. It is also possible to explain consumers' satisfaction with their lives today through a comparison with the past. In addition, there is a charged spatial field, meaning that Estonia can be compared with other European countries in terms of whether and to what extent Estonia's consumerism has "caught up with" the Western world and what differences exist.

We will proceed from the premise that achieving a certain imaginary "normal" Western level of consumption (which is not based on objective standards but is subjective by its very nature) is part of the quality of life of Estonian residents today, or that at least the perceived absence thereof is more likely to cause dissatisfaction than satisfaction. The low general quality of life and liveability exhibited by the Estonian society as described earlier in Chapter 3 is also often related to our absence of wealth, i.e. our relatively scant consumption opportunities (which have, admittedly, increased rather quickly in recent years). This means that in our current young and undeveloped consumer culture it is impossible to condemn everyone on an equal basis for over-consumption. This chapter does, however, question the capability of today's consumers to assess the existing selection of consumption opportunities as well as to know their rights and have the courage to stand up for them. The subject of sustainable consumption is treated in this chapter in the context of environmental conservation, rather than that of moral attitudes.

The concept of an information society is an indication of the development of a new social structure that modifies the values, ways of life and economic models characteristic of an industrial society. The expected changes are primarily associated with the implementation of information and communication technology (ICT) both by the government and the business sector, as well as the use of ICT facilities by individuals. Although mobile phones, computers and the Internet are being used by an increasing number of Estonian residents daily for the purpose of work, communication and recreation, the use of the term "information society" in this context does not signify the use of ICT as a means of creating a qualitatively new society.

Unlike the concept of consumer society, information society has mainly acquired a positive connotation in public texts. It has been used often by the press, in politics, and in social sciences (an overview of the debate in Estonian is provided by Kanger 2007). Partly due to the overexploitation of the term, it lacks a clear, unambiguous and standardized definition. Many documents, including Estonia's plans for future development, see the implementation of information and communication technology as a driving force behind economic growth and the means of developing a democratic civil society. On the other hand, it is clear that information technology has become a part of many people's daily lives and a factor in their quality of life.

Several previous studies (Pruulmann-Vengerfeldt, Vihalemm, Viia 2007; Runnel, Pruulmann-Vengerfeldt, Reinsalu 2009; Reinsalu 2008) indicate a gap between the

individual and public sphere with regard to ICT. Individuals are unenthusiastic about implementing ICT features for promoting civil society and tend to employ ICT as a tool for using existing entertainment services, finding information and communicating. Thus, their use of the Internet is mainly directed at improving their personal quality of life and the fulfilment of their daily needs.

The question of the roles of the consumer and the citizen arises in the context of both the consumer society and information society. Consumers are traditionally associated with passive, mostly non-critical hedonism and the tendency to attend to personal interests, whereas citizens are associated with active social thought and a sense of responsibility, enabling them to rise above narrow private interests (see Gabriel & Lang 2006). Today's complicated society has also been termed a global risk society (see Beck 2005), where the development of science and technology not only produces benefits, but also results in unforeseen side-effects which may manifest in the form of environmental pollution, health risks caused by additives contained in food products, or cyber-bullying children. This confuses the line between the consumer and the citizen: by consuming material goods as well as the non-material services and products of the information and media field, people constantly make civic decisions that affect both their own quality of life and that of others, who are often living very far away. Whether or not people perceive the substance and effect of these decisions is another question.

Within the context of these contradictions it is especially important to analyze the younger generation. They are the social group that has adopted the patterns of activity and values associated with the information and consumer society in its purest form. Moreover, it is primarily children and young people who will make Estonia's scenarios for the future a reality. Younger age groups are more individualistic and consumption-oriented compared to middle and older age groups, and it is characteristic of them to have high expectations with regard to their quality of life. The socialization of the younger generation into responsible and active citizens, creative thinkers and sensible consumers is possible only when we realize the nature of the activities our children and youth have come to participate in and the opinions they have come to hold as a result of the effects of the information and consumer society on their living environment. The analysis provided at the end of this chapter should help us understand the younger generation more profoundly.

In providing empirical descriptions of phenomena related to the information and consumer society, we have mainly used the results of the representative population survey entitled *Mina. Maailm. Meedia*, conducted by the Institute of Journalism and Communication of the University of Tartu in cooperation with social research companies Faktum and Saar Poll. The data that has been collected for this survey after every three years since 2002 (follow-up survey stages were carried out in November 2005 and September/October 2008, with samples of 1470, 1475 and 1507 respondents aged between 15 and 74, respectively) allows us to analyze the changes that have occurred in the development of the information and consumer society in terms of several characteristics and to detail the trends over time. We also make use of data collected from student surveys conducted by the Institute of Journalism and Communication of the University of Tartu (Estonian school pupils' media use survey 2001–2002, *Noored ja meedia* (Youth and the Media) 2005, *Noored ja Internet* (Youth and the Internet) 2007, *Noorte elustiil* (Youth Lifestyles) 2007) and other surveys conducted in Estonia (for example, *Lapsed ja Internet* (Children and the Internet) 2006). Furthermore, we have used international studies (for instance, *Eurobarometer*, *Flash Eurobarometer* 2008) and statistics (including data from Eurostat, the indexes of the World Economic Forum) to put the developments that have occurred in Estonia into context and compare them to the developments in other countries.

References

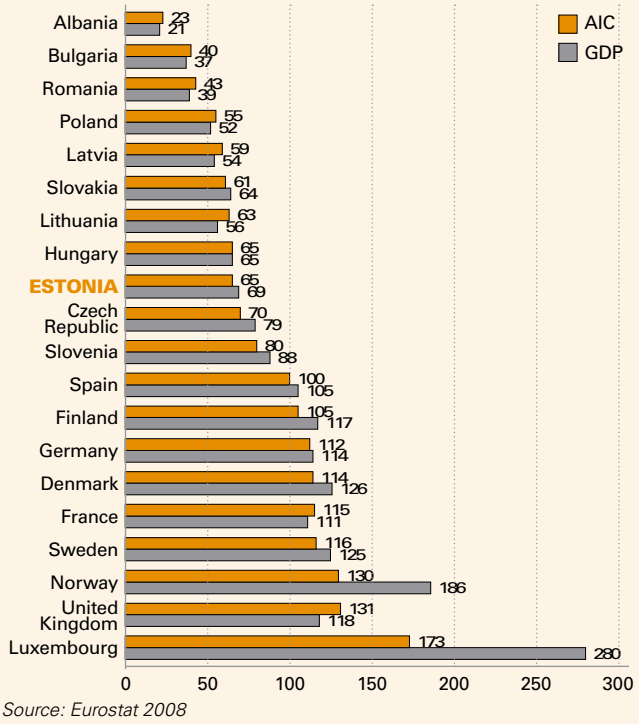
1. Beck, U. (2005 [1986]) Riskiühiskond. Teel uue modernsuse poole. Tartu: Tartu University Press.
2. Gabriel, Y. & Lang, T. (2006) The Unmanageable Consumer. London: Sage.
3. Gronow, J. & Warde, A. (toim.) (2001) Ordinary Consumption. London: Routledge.
4. Kanger, L. (2007) Infoühiskonna määratlemine: kriitiline teooriaülevaade. Master's thesis, University of Tartu, Institute of Journalism and Communication [http://mail.jrnl.ut.ee:8080/282/].
5. Keller, M. (2004) Tarbimiskultuuri pinged tänapäeva Eestis. Akadeemia, 10, 2228–2252.
6. Pruulmann-Vengerfeldt, P., Vihalemm, P., Viia, A. (2007) Digital Opportunities as a Development Factor. Heidmets, M. (ed.). Human Development Report 2006 (95–105). Tallinn: Public Understanding Foundation.
7. Reinsalu, K. (2008) Implementation of Internet Democracy in Estonian Local Governments. Tartu: Tartu Ülikooli Kirjastus [http://dspace.utlib.ee/dspace/handle/10062/8081].
8. Ritzer, G. & Slater, D. (2001) Editorial. Journal of Consumer Culture, 1(1): 5–8.
9. Runnel, P, Pruulmann-Vengerfeldt, P., Reinsalu, K. (2009) Estonian Tiger Leap from Post-Communism to the Information Society: From Policy to Practices. Journal of Baltic Studies, 40(2).

5.2. Development tendencies of a consumer culture

Development of consumer society in Estonia

A consumer society is a multifaceted complex of phenomena wherein global environmental problems related to the amount and way we should consume in order to preserve a sustainable living environment are interlaced with issues linked to the quality of life on an individual level. A case in point would be to determine the level of consumption that would allow an individual to "live well" in Estonia today.

Figure 5.2.1. GDP and AIC per capita volume indexes for 2006, EU27=100



Source: Eurostat 2008

Periods of development of the so-called Western consumer society in Estonia after the restoration of its independence

The following is a short overview of the periods of development of the consumer society in Estonia from the end of the Soviet era until today, presented as a list of keywords. It must be taken into account that the beginning and end dates of the periods are provisional as it is difficult to draw specific lines in this case.

1988–1992 – transition from a Soviet consumer culture to a Western one: the monetary reform of 1992 as a breaking point; the growth in the selection of goods available in stores; consumers' ability to benefit from the new selection is inhibited by very limited financial resources.

1993–1997 – the early period: increasing stratification on the basis of consumption opportunities; satisfying the initial "hunger" and acquiring foreign commodities (e.g. home appliances); abundance of products sold under fake internationally recognized brand names in marketplaces and kiosks.

1998–2004 – period of "maturation" of the Estonian consumer culture; aestheticization and the spread of post-materialism (e.g. in the case of branding and advertising); increasing importance of consumption aimed at lifestyles and identity creation; quick growth in the number and size of shopping venues, including the opening of large shopping centres and supermarket chains in Estonia's larger cities; emergence of shopping as a new way of spending free time; Estonia's accession to the European Union as a symbolic milestone in the "re-Westernization" of Estonia.

2005–2008 – period following Estonia's accession to the EU; growing consumerism (at least until the beginning of the economic crisis in 2008); real estate boom and the rapid increase of volumes of consumption; the public emergence of new topics and problems induced by the consumer society, such as environmentally friendly consumption, consumption practices of children and youths; marketing aimed at children and young people.

Estonia in comparison with other European countries

Useful data for comparing the relative level of consumption in different European countries is available in Eurostat's index of actual individual consumption (AIC), which measures households' relative standard of living per capita based on their consumption-related expenses. The index takes into account purchased goods and services, including education and healthcare. The average index value for the 27 EU member states is stipulated as 100. As seen in Figure 5.2.1., Estonia's volume of consumption is one of the highest among the new EU member states, with only the Czech Republic and Slovenia showing a higher consumption volume. However, the volume of consumption of the wealthier EU "core states", especially the United Kingdom, France, Germany and Sweden, is up to twice as high as that of Estonia.

The increase in the volume of consumption-related expenses in fixed prices during the period 1995–2006 is also indicative of Estonia's development. During this period expenses increased more than twofold in Latvia and Estonia, while in Germany the increase was just over 10% (see Eurostat Yearbook 2008). The growth of Estonia's motorization rate has been equally fast. During the aforementioned period, the number of cars owned in Estonia per 1000 residents increased from 267 to 350. At the same time, the increase in car ownership was even greater in Poland and Lithuania – from 195 to 314 and from 198 to 384, respectively. Understandably, there was no similarly sharp growth in, for example, Denmark where the number of cars per 1000 residents was already high (Denmark experienced a change from 321 to 354) (see Eurostat 2008).

A new phenomenon in Estonia's transition to a consumer society is the satisfaction of consumption needs outside Estonia. According to the Eurobarometer study (see Consumer Protection… 2008), 37% of Estonian residents had made at least one purchase in another EU country within the last year, a percentage significantly higher than the EU27 average (25%). Compared to the 2006 figures, this indicator grew by 12% in Estonia, constituting the highest increase rate among all EU countries according to the study (EU27 experienced an average decrease of 1%). During the past year, Estonian consumers (i.e. those who had made at least one purchase) spent an average of 600 euros on shopping in other EU countries, while the Maltese spent an average of 3700 euros and Luxembourgers spent 2300 euros. Consumers from Lithuania and Latvia also spent more than Estonian consumers: 700 and 640 euros, respectively.

The Estonian consumer 2002–2008

The following section provides an analysis of the results of the *Mina. Maailm. Meedia* studies published at the end of 2002 and in November 2008.

The general opinion of Estonian residents regarding people's material well-being and the improvement of their consumption opportunities during the period following the restoration of independence has not changed significantly since the end of 2002. Among the list of changes that have occurred in Estonia, this aspect was considered very positive by only 2% of the respondents in 2002 and 4% in 2008, generally pos-

itive by 42% and 44%, and generally negative by 41% and 40% of the respondents, respectively. Of the respondents in 2002, 10%, and in 2008, 9% expressed a very negative opinion on this aspect. This probably reflects people's dissatisfaction with the sharp increase in social stratification based on material means that has occurred over the past fifteen years. It is also likely that the memory of the Soviet era, a time of relative equality in contrast to the current situation, plays a role in shaping these opinions. The available figures clearly indicate, however, that consumption has increased and the consumerist orientation has strengthened (see below). Regardless of the critical attitude described above, Estonian people are active consumers and increasingly value the opportunities for self expression gained through consumption.

The latter fact is confirmed by the growing percentage of people who report in their responses to our surveys that they generally have enough money for certain goods or services (see Table 5.2.1.). The table also shows that as recently as in October 2008, people did not feel that they experienced problems related to lack of money more often than before: there has not been a decrease in the amount of money available to be spent on any group of goods or services as compared to 2002, and often the opposite is true. For example, in 2002, 72% of the respondents had enough money to feed themselves properly, while in 2008 that figure had reached 80%. Furthermore, the share of respondents who reported having enough money to buy clothes and a computer had increased by no less than 12% and 11%, respectively (the objective statistical data provided on families in Chapter 1 also verifies this tendency). Meanwhile, the number of people who reported having enough money for providing their children with education and hobby opportunities remained the same in the case of both studies. These results are influenced, to a degree, by the fact that a large segment of the sample (approximately 60%) does not have children under 18 and therefore does not have to spend money on their education. Moreover, parents tend to prioritize expenses related to their children to the extent that they have considered it necessary to spend money on children's education and hobbies even in poorer times. Consumption related to children therefore seems to be less affected by the economic well-being than other personal expenses.

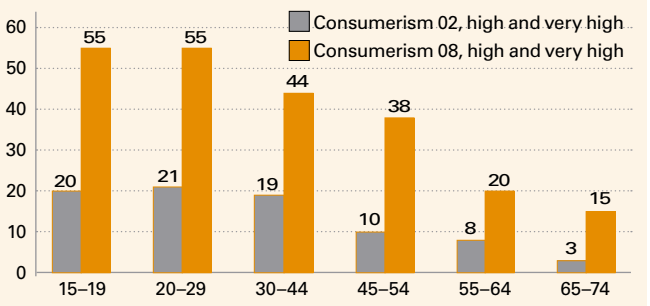
Beginning with the 2002 survey, we have also attempted to measure the more general consumerist orientation of the society through consumption-related questions. In studying consumerist orientation, we proceed from the definition provided by Zygmunt Bauman: "Consumerism stands for production, distribution, desiring, obtaining and using, of symbolic goods. /…/ Consumption is not just a matter of satisfying material greed, of filling your stomach. It is a question of manipulating symbols for all sorts of purposes. On the level of the life-world, it is for the purpose of constructing identity, constructing the self, and constructing relations with others" (Bauman 1992: 223). Thus, consumerism is a phenomenon knowingly oriented at shaping lifestyles and identities. In compiling the index we aggregated the affirmative responses to the following statements: "I sometimes order clothes from a tailor", "I prefer the products of certain clothes manufacturers or certain brands", "I sometimes buy clothes when I'm abroad", "whether or not the clothes fit is more important than their price", "the brand of clothes is more important than their price"; "I have followed one style in furnishing my apartment", "I have my own hairdresser", "I have my own beautician", "I have my own masseuse", "I have done aerobics during the past year", "I have visited the gym during the past year".

Table 5.2.1. Expenses of Estonian consumers (percentage of respondents who chose the answer "I generally have enough money for …") *Do you or your family have enough money for the following expenses?*

Type of expense	2002	2008	Increase (%)
Feeding yourself properly	72	80	8
Residential expenses	69	76	7
Medical products, taking care of your health	55	64	9
Taking care of your appearance	40	45	5
Buying clothes	34	46	12
Providing your children with education	33	33	0
Subscribing to newspapers or magazines	28	32	4
Entertaining guests, making gifts	26	34	8
Children's hobby activities	24	27	3
Learning, self-education	20	21	1
Entertainment, hobbies	19	24	5
Sports	19	23	4
Going to the theatre or concerts	19	25	6
Maintaining and driving a car	18	27	9
Buying books	18	23	5
Buying new home appliances	15	21	6
Visiting cafés, restaurants	14	17	3
Supporting your close relatives	12	14	2
Performing home repairs	11	16	5
Buying, maintaining and upgrading a computer	10	21	11
Furnishing your apartment	9	18	9
Travel	8	14	6
Buying or repairing a car	6	10	4

Sources: Mina. Maailm. Meedia 2002, 2008

Figure 5.2.2. Spread of high and very high levels of consumerism by age groups in 2002 and 2008 (percentage of the age group)

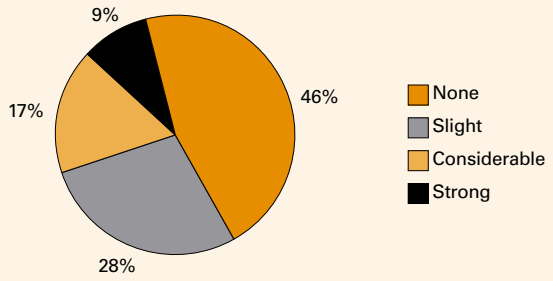


Sources: Mina. Maailm. Meedia 2002, 2008

Through the years, consumerism has been characteristic of younger and more affluent people. This consumption orientation has, however, also spread quickly throughout the society as a whole. While only 13% of the entire sample exhibited high and very high levels of consumerism at the end of 2002, the share had increased to 39% by 2008.

Figure 5.2.2. shows how the rate of consumerism has grown in different age groups. As expected, the level of consumerism is highest among young people, both in the 15–19 and 20–29 age groups. The tendency to value the modern consumerist world has spread rapidly among young consumers, rising from 20% to 55%. At the end of 2002, just 7% of the respondents belonging to the group with the lowest income (less than 1500 kroons a month per family member) exhibited high and very high levels of consumerism, while the corresponding rate was 36% in the case of the group with the largest per capita monthly income (more than 6000 kroons per household member). By November 2008, the indicators had reached the following levels: the percentage of people with high and very high levels of consumerism had already grown to 27% among the poorest group (monthly

Figure 5.2.3. Distribution of consumer dissatisfaction (percentage of the entire sample)



Source: Mina. Maailm. Meedia 2008

Table 5.2.2. Consumer protection and consumer rights indicators for the EU in 2008

Country	% of population that has submitted at least one official complaint to a provider of goods or services within the past year	% of population that has exercised their rights arising from the warranties of goods	% of population that feels sufficiently protected by the regulations as a consumer	% of population that feels that sellers and service providers generally respect their rights
Sweden	34	31	70	77
The Netherlands	25	17	74	77
Germany	24	20	61	72
United Kingdom	24	16	66	77
Finland	23	25	72	88
Denmark	22	25	73	57
Malta	17	17	52	58
EU27	16	16	51	59
Austria	16	20	61	66
Poland	16	14	45	49
Belgium	14	20	61	78
Slovakia	14	25	41	54
Ireland	13	10	56	58
Slovenia	13	18	45	61
Spain	11	14	53	63
France	11	15	40	61
Czech Republic	11	30	48	49
Hungary	11	12	50	57
Cyprus	10	16	52	53
Greece	9	8	30	39
Italy	9	12	39	36
Luxembourg	8	16	60	73
Estonia	8	15	50	68
Lithuania	6	12	25	35
Romania	6	11	-	-
Portugal	5	9	35	39
Latvia	5	8	35	55
Bulgaria	4	7	-	-

Source: Special Eurobarometer 298

income below 2500 kroons per household member) and had reached 50% in the group with the highest income (monthly income above 10,000 kroons per household member). Consumption-related differences between ethnicities are considerably smaller than those exhibited by different age groups, and the spread of consumerism has been even more widespread among the Russian-speaking population. In 2002 only 4% of Estonians and 5% of Russians provided answers indicating a very high level of consumerism, while in 2008 the percentage of respondents characterized by a very high level of consumerism reached 25% among Estonians and 30% among the Russian-speaking population.

The results of the 2008 survey allowed us to compile another important indicator related to consumption attitudes, namely the consumer dissatisfaction index. This index characterizes people's dissatisfaction with the selection of food in our stores and markets, their families' opportunities for healthy eating, the insufficient selection in our clothing market as well as the fact that small shops and marketplaces are increasingly being replaced by large retail chains. An individual's dissatisfaction with consumption opportunities also belongs among the indirect indicators of quality of life. The results are quite telling: 47% of the respondents are satisfied with their consumption opportunities and only 9% of the respondents report a strong sense of dissatisfaction (Figure 5.2.3.). It is noteworthy that Estonian-speaking consumers are somewhat more critical of their consumption opportunities (43% expressed no dissatisfaction) than non-Estonians (56% were not dissatisfied).

Another topic that has become increasingly important in recent years is that of consumer education and competence. Currently, Estonian consumers are still relatively passive with regard to standing up for their rights. This conclusion can be made both on the basis of our survey and on the basis of the aforementioned Eurobarometer study (Consumer Protection… 2008). This pertains to submitting official complaints to the providers of goods and services when problems occur, but also to using consumers' rights arising from warranties. According to the same Eurobarometer study, 50% of the respondents in Estonia feel that they receive enough protection as a consumer from existing regulations – a level almost equal to the EU average (51%). Most Estonian respondents (68%) also feel that sellers and service providers generally respect their rights as consumers, thus displaying a level of confidence twice as high as that of Lithuanian respondents (36%). It is not clear whether Estonia's relatively high consumer satisfaction indicators point to the adequacy of consumer protection and the regulations upholding the interests of the consumer, or are a product of the passive and undemanding nature of Estonian consumers. Though this is a subject best explored by future studies using qualitative analysis, Table 5.2.2. provides an overview of Estonian indicators in comparison with those of other countries.

The matter of consumer education is relatively undeveloped in Estonia today, both in terms of discussion and actual activities. The successful education of Estonian consumers remains an issue requiring the cooperation of several parties. Although we can be satisfied with our results in comparison with Lithuania's indicators, Estonia still has a long way to go if we want to achieve the level of consumer protection available, for example, in Sweden or the Netherlands.

The environment and consumption

People's relationship with nature can be divided into three broad categories: relationship with nature and the realization of interest in nature, environmentally friendly consumption, and civic initiatives that benefit nature (collecting signatures, organizing cooperative initiatives, etc.). The following subsection concentrates on the two latter categories.

Accession to the European Union brought about a significant change in the environmental awareness of Estonian people as the example of the old member states and the effect of several EU regulations challenged us to develop our consumption behaviour along a more environment-conscious path. Estonians who have often defined themselves as a nation with a traditional relationship with nature had to act quickly in order to adopt activities (separate collection of waste, eco-

friendly consumption) hitherto experienced only on occasional trips abroad. Estonians' relationship with nature is also being influenced increasingly by the manner in which the environmental issues are approached globally. While only 34% of respondents considered climate change to be an important environmental problem at the time of Estonia's accession to the EU, by 2007 the percentage of respondents agreeing with this statement had increased to 43% (Eurobarometer 2004 and 2007). There has also been an increase in people's civic engagement with regard to protecting their environment.

The survey *Mina. Maailm. Meedia* (2002, 2005 and 2008) covers both environmentally friendly consumption and civic engagement in the protection of the environment, combining the indicators used for measuring these phenomena into two separate indexes[26]. The following subsection focuses on environmentally friendly consumption practices.

Environmentally friendly consumption

The data from the Eurobarometer surveys allows the environmental behaviour of the Estonian population to be compared to that of other EU nations. Eurobarometer 2007 (hereafter EB) indicates that Estonian respondents, like those in other Baltic countries and new EU member states, considered their personal opportunities for protecting the environment to be significantly lower than the EU27 average. According to EB2004 and EB2007, our personal contribution to the protection of the environment was considerably smaller than the input of the residents of other EU countries. In terms of personal environmental behaviour, Estonian respondents, compared to the EU27 average, had focused less on separate waste collection (46% compared to EU27's 59%), saving energy (41% compared to EU27's 47%) and sustainable transportation. At the same time, Estonian respondents had been considerably more environmentally conscious in terms of buying locally grown products (47% compared to EU27's 21%). Estonian respondents (similar to the residents of the other Baltic States) identified the latter, along with separate waste collection and preferring organic products, as one of the most important environmentally friendly activities, which they will be prepared to engage in to a greater degree in the future. However, the willingness of Estonian residents to decrease energy use (34% compared to EU27's 47%) or waste production (20% compared to EU27's 30%) is significantly lower than the EU27 average. Estonia's comparison with other countries shows that we are mostly prepared to act in an environmentally friendly manner if we do not have to give up our recently adopted consumerist lifestyle in the process. Yet a higher than average percentage of Estonian respondents (18% compared to the EU average of 11%) view contemporary consumption habits as a danger to the environment.

It is noteworthy that during the last three years, Estonian residents have begun to see their consumption practices as less environmentally conscious (in 2008, 50% of the respondents considered themselves mostly or very environmentally conscious, as opposed to 65% of the respondents in 2005)[27]. Although it is difficult to interpret this change, it is probable that the respondents' self-assessments were affected by their new experiences with the practices of sustainable consumption, especially the introduction of recycling, as well as the extensive criticism of "green" activities that are accompanied by an overflow of contradictory information and recommendations. According to EB2007, for example, the percentage of Estonian respondents who thought that the current product labelling system was successful in helping them discern which products are actually environmentally friendly was just a little higher than the percentage of respondents who felt that the current system did not help them. The 2008 survey *Mina. Maailm. Meedia* indicates that more than 40% of all respondents felt that the widespread separate collection of waste was hindered by the poor organization of waste collection.

Table 5.2.3. provides an overview of the respondents' primary environmentally friendly activities and people's self-assessments regarding their environmentally conscious behaviour according to the *Mina. Maailm. Meedia* survey published in 2008. In calculating the importance of the given activities, we have added up the percentages of people who agree with a given statement in part or in full, are sometimes or often engaged in a given activity and consider a given aspect or phenomenon to be rather important or very important.

Table 5.2.3. Ranking of environmentally friendly consumption practices

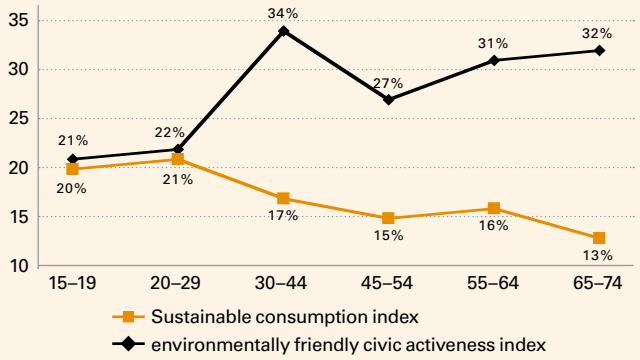
	Activity	%
1	Their family sorts returnable packaging subject to a deposit	77
2	Considers environmentally friendly principles important in buying and using household chemicals	76
3	Uses organic foodstuffs or eco-friendly products	66
4	Considers environmentally friendly principles important in buying and using household appliances	65
5	Their family sorts paper and cardboard	64
6	Follows product labelling (eco-labels, quality marks, etc.) when buying foodstuffs	63
7	Considers environmentally friendly principles important in buying and using cars	60
8	Wears used clothes purchased from a second-hand shop	55
9	Their family sorts hazardous waste	55
10	Their family sorts biodegradeable waste	47
11	Pays attention to the GMO content of products when buying foodstuffs	46
12	Is ready to contribute to the environment by participating in campaigns requiring an input of labour (e.g. the Teeme ära campaign of 2008)	42
13	Is ready to contribute to the environment by reducing consumption and giving up benefits related to consumption	40
14	Their family sorts mixed packaging	39
15	Is ready to contribute to the environment by buying environmentally friendly products even if they cost more than regular products	36
16	Is ready to contribute to the environment by making financial donations to environmental projects	12
17	Is ready to contribute to the environment by paying higher public taxes	5
18	Buys foodstuffs from shops that sell organic products	3

Source: Mina. Maailm. Meedia 2008

[26] The environmentally friendly consumption index combines the following responses: "I use organic foodstuffs, environmentally friendly products", "I wear second-hand clothes", "I consider myself to be an environmentally conscious consumer", "My family separates waste according to types" (returnable packages subject to a deposit, mixed packaging, paper and cardboard, hazardous and biodegradeable waste), "I consider environmentally friendly principles important in buying and using cars/household appliances/household chemicals", "I actively monitor what and how I consume, as my consumption habits influence the state of the environment", "I am ready to contribute to the environment by decreasing consumption" and "I am ready to contribute to the environment by buying environmentally friendly products even if they cost more". The environmental protection-related civic activity index combines the following responses: "I participate in or am a member of environmental protection or heritage conservation associations", "I have participated in waste clean-up activities, cleaning campaigns, etc. during the past year", "I am willing to contribute to the environment by making financial donations to environmental projects, participating in campaigns requiring an input of labour (e.g. *Teeme ära 2008*) or paying higher public taxes".

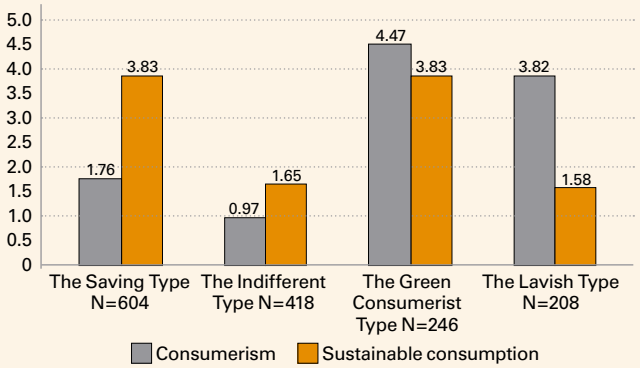
[27] Both surveys used an identical question: "How environmentally conscious do you consider yourself as a consumer?"

Figure 5.2.4. Indexes of environmentally friendly consumption and activeness in protecting the environment by age groups (percentage of the age group with "high" or "very high" index value)



Source: Mina. Maailm. Meedia 2005

Figure 5.2.5. Consumer types according to the average indicators of sustainable consumption (max 19) and consumerism (max 11) indexes, 2005



Source: Mina. Maailm. Meedia 2005

Most characteristics of environmentally friendly consumption are related to ethnicity, gender, education, income, and social class. Traditionally, women's assessments of all environmentally friendly activities have been higher than those of men (both in international and Estonian surveys). In terms of several indicators, there is a positive correlation between income and environmentally friendly practices, excluding the habit of separate waste collection, where the higher income of a respondent does not make them more likely to be engaged in the practice. People with higher incomes are more likely to think that there is enough environmental information available for making consumption-related decisions, and that they are able to affect the environment through their own consumption behaviour. People with higher incomes are also more willing to contribute financially to improving the environmental situation by making donations, or paying higher taxes or purchasing prices.

Although in terms of ethnic groups, the self-assessments of the Estonian-speaking population regarding their environmentally friendly consumption practices were lower than those of the Russian-speaking population, engagement in environmentally friendly activities was more widespread among Estonians. With regard to the separate collection of waste, the responses of the Russian-speaking population show that their engagement in the practice is several tens of percentage points lower than that of the Estonian-speaking population. Many of the answers provided by Russian-speaking respondents also indicate their lack of knowledge or opinion on a given subject (for example, 38% of Russian-speaking respondents said that they did not know whether they used organic products, whereas among Estonian-speaking respondents the percentage of those lacking knowledge on the subject was half that, i.e. 19%).

There was a considerable difference in terms of environmentally friendly orientation apparent with regard to different generations. We differentiated between two aspects of these attitudes: environmentally friendly consumption and activeness in protecting the environment (see Figure 5.2.4.). As a result, we discovered that while activeness regarding the protection of the environment was somewhat higher in younger age groups, the opposite was true for environmentally friendly consumption as the values of the corresponding index were lower in the case of younger age groups than in the case of older age groups. Sustainable consumption was most important for people in the middle age group comprising respondents aged 30–44.

Typology of consumers

Contrary to popular belief, sustainable consumption and consumerism are not mutually exclusive phenomena. An analysis of the corresponding indexes revealed that the relationship between these two characteristics of consumption behaviour is complex, although in no way fully contradictory. By classifying (using the cluster analysis method) the respondents of the 2005 *Mina. Maailm. Meedia* survey in terms of these two aspects of consumption behaviour, we compiled four consumer types (see Kalmus et al. 2009, forthcoming). The group with the most respondents is that of the "Saving Type" (41% of the respondents), whose sustainable consumption level is high and consumerism level is low (see the average indicators of the indexes in Figure 5.2.5.). This type most often comprises middle-aged and older people, as well as more men than women; consumers of this type usually have a secondary education or a basic education and a relatively low or average income. In terms of social hierarchy, consumers belonging to this type categorize themselves equally in the middle, upper middle and upper class. This type comprises the largest segment of Estonia's small town residents. The "Saving Type" can be considered the type most representative of the so-called protestant ethic: they consider it important to be economical and frugal and do not attribute much value to the individual self-expression aspect of consumer culture.

The second largest segment of the respondents belongs to the "Indifferent" type that is characterized neither by sustainable consumption nor a consumerist orientation. The average age of this group is the highest, while their level of education and average income are the lowest. The most frequent representatives of this type are men and dwellers of rural regions. These people are indifferent to the contemporary consumer society, both with regard to aspects related to shaping one's lifestyle through consumption as well as conservation of the environment. This is probably due not only to the relative poverty and lack of consumption opportunities of the members of this group, but also to their natural economy-based lifestyle and established opinions and attitudes.

The "Green consumerist" type comprises 17% of the respondents. The members of this group are characterized both by a high level of consumerism and sustainable consumption. "Green consumerists" generally tend to rank themselves on the higher end of the social ladder. This consumer type includes younger people with higher incomes and levels of education living in the capital as well as smaller towns. This active and informed consumer type comprises more women than men. They value the opportunities of consumer culture but are also relatively critical of the negative side of the consumer society and try to provide their positive input by engaging in environmentally friendly activities.

The smallest group is that of the "Lavish Type" (14% of all respondents), which tellingly includes primarily members of the youngest age groups (aged 15–29), however. They have a high opinion of brands and their values are relatively materialist in nature. The members of this group have relatively high incomes, and many of them have a basic education and live in larger cities (the group includes a relatively large number of secondary school pupils). This consumer type comprises an equal number of women and men, but unlike other types, the percentage of Estonia's Russian-speaking residents is relatively higher in this group.

We can say, in conclusion, that although consumerism and sustainability are intertwined phenomena, the former tendency is primarily characteristic of younger people and the latter, conversely, of the older generation. It will be up to future studies to ascertain whether the lack of economizing and sustainability and the high level of consumerism characteristic of young people today is a temporary phenomenon which they will "grow out of" after setting up families and gathering life experience, or whether it is a selection of attitudes and activities that will remain relatively stable throughout the lives of the new generation

References

1. Attitudes of European Citizens Towards the Environment (2007/2008) European Commission, Eurobarometer. [http://ec.europa.eu/public_opinion/archives/eb_special_en.htm]
2. Attitudes of European Citizens towards the Environment (2004/2005) European Commission, Eurobarometer. [http://ec.europa.eu/public_opinion/archives/eb_special_en.htm]
3. Bauman, Z. (1992) Intimations of Postmodernity. London: Routledge.
4. Consumer Protection in the Internal Market (2008). Special Eurobarometer 298. European Commission. [ec.europa.eu/public_opinion/archives/ebs/ebs_298_en.pdf]
5. Europe in Figures (2008) Eurostat Yearbook. [http://epp.eurostat.ec.europa.eu/portal/page?_pageid=2693,70381876,2693_70592044&_dad=portal&_schema=PORTAL]
6. Eurostat (2008) Motorisation rate. Dataset. [http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1073,46870091&_dad=portal&_schema=PORTAL&p_product_code=TSDPC340]
7. Kalmus, V., Keller, M., Kiisel, M. (2009, to be published) "Emerging Consumer Types in a Transition Culture: Consumption Patterns of Generational and Ethnic Groups in Estonia". Journal of Baltic Studies, 40(1).
8. Svennebye, L. (2008) "GDP per Capita, Consumption per Capita and Comparative Price Levels in Europe", in Statistics in Focus. Economy and Finance. Eurostat 3/2008 [epp.eurostat.ec.europa.eu/portal/page?_pageid=1073,46587259&_dad=portal&_schema=PORTAL&p_product_code=KS-SF-08-003].

5.3. The quality of life in the information society

Instead of searching for an answer to the question of whether Estonia has become an information society and attempting to identify the macroeconomic effect of this, the following subchapter will focus on analyzing the role of information technology in people's daily life and its effect on them as consumers and citizens. We will examine the extent and versatility of Internet use, the types of Internet users emerging in Estonia, and the democratic potential of the information society through increasing civic involvement.

Estonia's development into an information society

The development of information society is a subject that is frequently discussed, primarily from the standpoint of the expected economic development potential of information and communication technologies (ICT). The World Economic Forum compiles the Global Information Technology Report which ranks countries according to their position in the Networked Readiness Index. According to this index, Estonia holds the 20th place among 127 rated countries with 5.12 points, remaining just 0.02 index points behind Japan and outpacing France with 0.01 points. The highest ranked countries are Denmark (5.78 index points), Sweden (5.72) and Switzerland (5.53) (Table 5.3.1.).

The table shows that Estonia's position in terms of networked readiness is the best among all post-socialist countries. Estonia is followed by Slovenia (ranked 30th), Lithuania (ranked 33rd) and the Czech Republic (ranked 36th). Among our closest neighbours, Finland is ranked 6th, Latvia 44th, and Russia 72nd.

The Networked Readiness Index itself consists of three major components (environment, readiness, and usage) which, in turn, consist of sub-indexes (Table 5.3.2.). Based on these components, Estonia's reputation as an information society has been shaped primarily by the ICT usage and readiness of the government sector. The readiness of Estonia's business sector for the effective usage of ICT is relatively low, however.

Another important international organization that compiles rankings reflecting the development of countries with regard to information and communication technology is the International Telecommunication Union (ITU). The World Information Society Report compiled by this organization measures the level of development of information society with the Digital Opportunity Index. The most

Table 5.3.1. Comparison of countries based on the Networked Readiness Index in 2007–2008 and the change in positions compared to 2006–2007

Ranking 2007–2008	Country	Score 2007–2008	Ranking 2006–2007	Score 2006–2007	Change
1	Denmark	5.78	1	5.71	➤
2	Sweden	5.72	2	5.66	➤
3	Switzerland	5.53	5	5.58	▲
4	USA	5.49	7	5.54	▲
5	Singapore	5.49	3	5.60	▼
6	Finland	5.47	4	5.59	▼
7	The Netherlands	5.44	6	5.54	▼
8	Iceland	5.44	8	5.50	➤
9	Republic of Korea	5.43	19	5.14	▲
10	Norway	5.38	10	5.42	➤
19	Japan	5.14	14	5.27	▼
20	ESTONIA	5.12	20	5.02	➤
21	France	5.11	23	4.99	▲
30	Slovenia	4.47	30	4.41	➤
33	Lithuania	4.41	39	4.18	▲
36	Czech Republic	4.33	34	4.28	▼
37	Hungary	4.28	33	4.33	▼
43	Slovakia	4.17	41	4.15	▼
44	Latvia	4.14	42	4.13	▼
61	Romania	3.86	55	3.80	▼
62	Poland	3.81	58	3.69	▼
68	Bulgaria	3.71	72	3.53	▲
70	Ukraine	3.69	75	3.46	▲
71	Kazakhstan	3.68	73	3.52	▲
72	Russia	3.68	70	3.54	▼

Source: World Economic Forum 2008b.

Table 5.3.2. The components of the Networked Readiness Index and Estonia's relative position

Networked readiness components	Estonia's ranking	Sub-index	Estonia's ranking
Environment component	24.	Market environment	23.
		Political and regulatory environment	24.
		Infrastructure	24.
Readiness component	23.	Individual readiness	26.
		Business sector readiness	31.
		Government sector readiness	8.
Use component	8.	Individual use	11.
		Business sector use	23.
		Government sector use	2.

Source: World Economic Forum 2008b

Table 5.3.3. Components of the Digital Opportunity Index and Estonia's results in 2006 and 2007

2006	2006	2007	2007
Opportunities 0.98	Digital Opportunity Index 0.63 (20th place in the world and 11th place in Europe)	Opportunities 0.99	Digital Opportunity Index 0.65 (20th place in the world and 14th place in Europe)
Infrastructure 0.47		Infrastructure 0.50	
Utilization 0.44		Utilization 0.45	

Sources: ITU 2007a and Pruulmann-Vengerfeldt, Vihalemm & Viia 2007

recent source on the Digital Opportunity Index is the report based on data from 2005/2006 and published in 2007. Here, too, the composite index is based on three clusters of indicators: *Opportunities* – accessibility and affordability; *Infrastructure* – networks and means; *Usage* – implementation of ICT. According to the Digital Opportunity Index, the ideal set of opportunities would mean that the whole population of a country had easy access to affordable information and communication technologies, that all homes were equipped with ICT appliances, that all residents owned mobile ICT devices, and that everyone used broadband Internet. The index is presented on a scale of 0–1 and Estonia holds the 24th place with 0.65 points. Although Estonia's ranking has not improved, the value of some of the component indexes has increased somewhat (Table 5.3.3.).

In addition to the Digital Opportunity Index, ITU also compiles an ICT Opportunity Index which is more versatile than the previous index and analyzes a total of 183 countries. The countries are categorized into four larger groups: countries with high, upper, medium, and low ICT Opportunity Index values. Estonia is the only post-socialist country with a high ICT Opportunity Index value, holding the 24th position (with 269.81 index points) among the 29 countries that scored high on the index. Estonia has developed the most among the members of this group (after Barbados) during the period 2001–2005, gaining 78.08 index points. Sweden is the leader in the ICT Opportunities Index rankings with 377.69 points, followed by Luxembourg (371.1 points), and Hong Kong (365.54). Estonia lags behind the leaders primarily in terms of the sub-indexes measuring networks and intensity (Table 5.3.4.). In the case of some of these sub-indexes, Estonia's index values are half those of other countries with high ICT use.

An analysis of the international indexes shows that although we have been comparatively successful with regard to developing e-technologies, especially as a result of the efforts of the government sector, we have not been able to achieve the competitive edge hoped for when implementing these technologies. The main problems are related to the small size of markets, the lack of innovativeness in the business sector, and the complications inherent in the cooperation between the domain of education and research and the business sector. These findings are not particularly novel, however, and there has been much discussion in this context on the necessity of promoting technology and engineering education. These developments are related, in part, to the expectations of the Estonian business elite and their potential for using information and communication technologies for increasing their efficiency, since the Digital Opportunity Index demonstrates that our position is relatively weaker in relation to the readiness and opportunities of the business sector.

Estonia's Internet users and spread of e-services

The prevalence of Internet use and the accessibility of various technologies are seen as the primary factors influencing the development of digital opportunities and technology. The value of this approach is limited, however, in terms of helping us understand the extent to which different social groups benefit from using the Internet for the purpose of improving their quality of life. Figure 5.3.1. introduces the segment of this report devoted to providing a more detailed description of the typology of Estonia's Internet users by giving an overview of the increase in the percentage of Internet users among Estonian residents aged 15–74.

Internet users among different ethnic groups

The 2008 *Mina. Maailm. Meedia* survey indicates that for the first time in Estonia, women surpass men in terms of Internet use to a statistically relevant degree. Accordingly, 55% of women and 46% of men report having last used the Internet no longer than six months before the survey. A significant age-based stratification is also still apparent, with 96% of the respondents belonging to the youngest age groups (i.e. 15–19 and 20–29) being Internet users. Only 30% of the oldest age group comprising people aged 60–74 use the Internet. There is also a connection between Internet use and level of education: people whose level of education is higher are more likely to use the Internet, with only 63% of people with a basic education being Internet users compared to 86% of people with a higher education. The connection between income and Internet use is not as straightforward, however. In fact, 72% of the respondents belonging to the lowest income group (i.e. a monthly income of up to 2500 kroons per family member) use the Internet, while the same is true for only 64% of people whose monthly income is 2501–4000 kroons per capita and 62% of people in the next highest income group (monthly income of 4001–6000 kroons per capita). However, in the case of higher income groups, the percentage of Internet users increases once more. This data can be explained, to a degree, by the fact that many families with children belong to the smallest income group, but their level of Internet use is higher than that of single people and pensioners who tend to belong to the next income groups.

Estonian Internet users engage most frequently in the following activities (Figure 5.3.2.): online banking, communicating with friends and acquaintances, and searching for practical information. The Internet use of Estonian population is characterized least by participation in citizens' initiatives, consumption of culture, participation in forums, blogs, surveys, and the writing of comments. This means that digital stratification is not only a process that discriminates Internet users from non-users, but is also a result of differences in opportunities for Internet use and their implementation.

The difference between the activities of Internet users is especially apparent if we compare different age groups (Figure 5.3.2.). Whereas communicating with friends and acquaintances, searching for entertainment, and finding information related to their work and studies is typical of younger people's patterns of Internet use, middle-aged people's Internet use is primarily focused on using online banking solutions and e-services, searching for information related to state agencies, and engaging in work-related communication. Some of the differences are definitely the result of the different life experience of the younger respondents, meaning that since many of the younger respondents are school pupils they have less need to engage in work-related communication. In addition, they have no income that would require filling out an online tax return. It is evident, however, that the tendency to use the Internet for purposes related to personal well-being differs in several aspects in the case of different age groups.

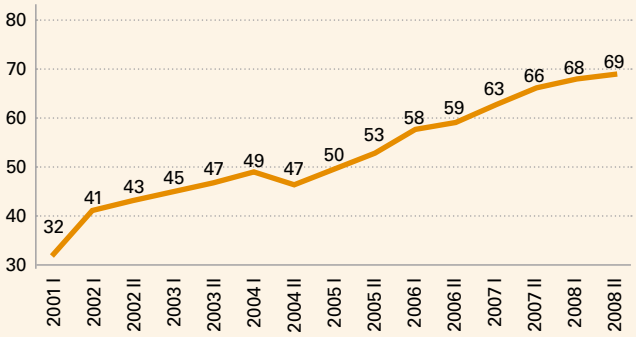
Individual Internet use is continually increasing in Estonia and it is increasingly important to understand the versatility of this phenomenon. An analysis of the behaviour of Internet users shows that although the number of opportunities provided through the Internet has increased significantly during the last six years, the primary interests of the users –

Table 5.3.4. Components of the ICT Opportunity Index and Estonia's results

	Sub-indexes	Index value for Estonia	Index components
Infodensity	Networks index	339.6	Fixed telephone lines per 100 inhabitants International Internet bandwidth per inhabitant Mobile phone users per 100 inhabitants
	Skills index	137.2	Adult literacy rate Gross school enrolment rates
Infouse	Uptake index	346.2	Computers per 100 inhabitants Internet users per 100 inhabitants Proportion of households with a TV
	Intensity index	328.5	Broadband internet subscribers per 100 inhabitants International outgoing telephone traffic (minutes)

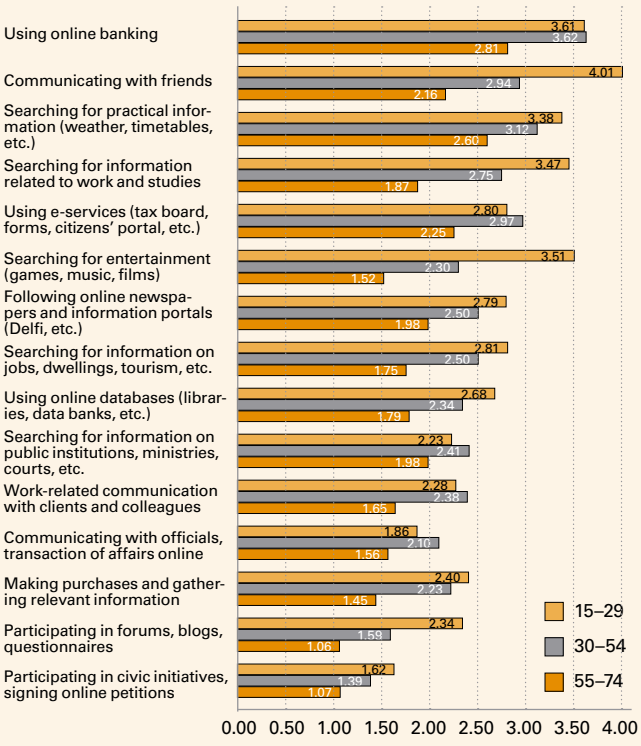
Source: ITU 2007b

Figure 5.3.1. Percentage of Internet users among Estonian residents aged 15–74 (%)



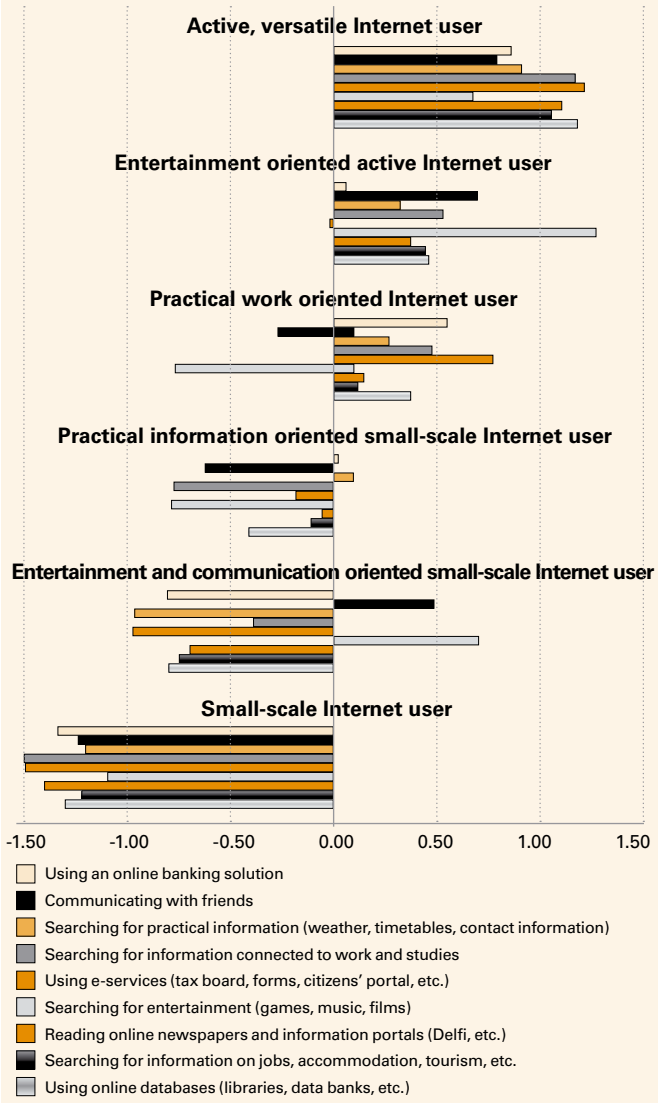
Sources: Emor 2008 and Riso 2008

Figure 5.3.2. To what extent does the given activity characterize your Internet use? Averages by age groups (on a scale of 5 – "very much" to 1 – "not at all")



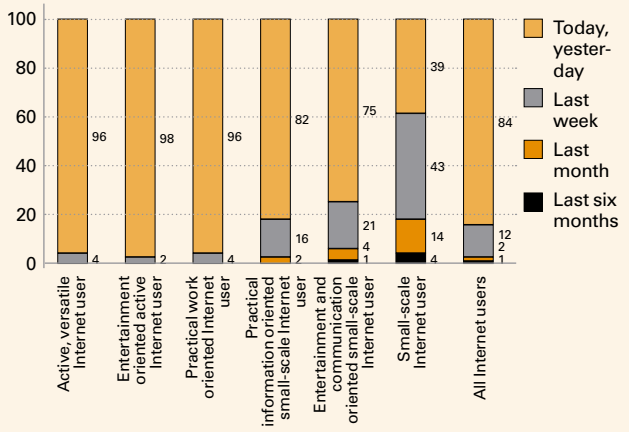
Source: Mina. Maailm. Meedia 2008

Figure 5.3.3. Comparison of types of Internet users in terms of ten of the most popular online activities (differences compared to the average)



Source: Mina. Maailm. Meedia 2008

Figure 5.3.4. When did you last use the Internet? (percentage of user type)



Source: Mina. Maailm. Meedia 2008

information and entertainment – have remained the same. It is important, however, that one or the other type of Internet use dominates in the case of individual respondents and there is evidence of the development of different practices of use.

Types of Internet users

In order to analyze the implementation of digital opportunities and to improve our understanding of the stratification, it is important to take a closer look at what people do on the Internet. We have gathered data on types of Internet users over a period of time dating back to the *Mina. Maailm. Meedia* survey conducted in 2002. The use of cluster analysis has revealed six main types of Internet users, which have remained relatively consistent over the course of various surveys. In general, the types can be divided into two – three types of more active Internet users, on the one hand (varied use, practical and pragmatic information-based use, entertainment and communication-oriented use) and, on the other hand, three types of more passive Internet users. These types include users oriented towards information and entertainment as well as small-scale users who come into contact with the Internet so rarely that it is impossible to distinguish clearly developed practices of use. Figure 5.3.3. provides an overview of the online activities of the types of users, comparing their frequency of engagement in ten of the most popular activities.

Active, versatile Internet users (14% of all Internet users) are more active with regard to all manners of Internet use compared to the other groups. For them, the Internet is an environment where they satisfy their need for information, entertainment, belonging and participating (Figure 5.3.3.). This type includes a greater proportion of women, people aged 20–39, and people with a higher education.

Entertainment-oriented active Internet users (20%) concentrate mainly on searching for entertainment, watching/listening to TV and radio shows on the Internet, and also on the consumption of culture. This type of user is generally active, however, and tends to search for information and use the Internet for gaining access to practical services if necessary. This user type includes people who consider it important to participate in blogs and forums. The largest number of Internet users of this type belongs among the 15–29 age group, with the Russian-speaking population being represented slightly more among the entertainment-oriented active users.

Practical work-related Internet users (22%) focus primarily on information and practical activities, in addition to being significantly more active than average in using e-services. Their online communication is mainly work-related and considerably less personal than that of the average Internet user. They also search for significantly less entertainment than the average Internet user. This group is dominated by women, people aged 30–49, people with a higher education, and members of the Estonian-speaking population. In addition, people belonging to this type are more likely to have an average or high income.

The largest group among the passive Internet users comprises the *practical information-oriented small-scale Internet users* (20%). Their Internet use is characterized by a somewhat higher than average use of information and slightly higher than average use of online banking solutions. At the same time, the variety of their online activities is somewhat larger than that of the next user type. This

type more commonly includes older people, women, and people with a secondary education.

The online activities of *entertainment and communication-oriented small-scale Internet users* (15%) are characterized by searching for entertainment as well as communication with friends and acquaintances, while their Internet use remains passive with regard to other purposes. This group includes more men, members of younger age groups and therefore also people with a basic education and those belonging to the lowest income group.

Small-scale Internet users (10%) are not characterized by any specific practice of Internet use and their online behaviour is generally in the developmental stage. Small-scale users comprise a larger than average share of older people and people with a secondary education, as well as members of the Russian-speaking population.

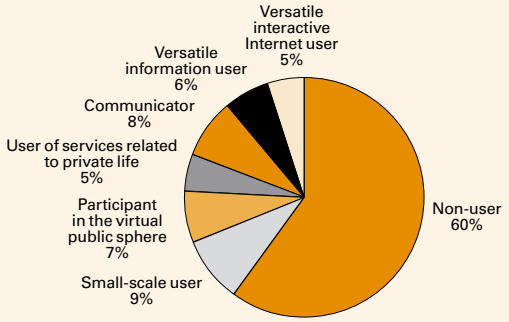
The user types also differ in terms of their frequency of Internet use. In general, 96% of Internet users have used the Internet during the past week. The members of the three more active types of Internet users have all used the Internet during the past week (Figure 5.3.4.).

Figures 5.3.5.–5.3.7. compare the types of Internet users on the basis of data gathered during surveys conducted over the last six years. Types of Internet users, in whose case the nature of activities is the same or very similar but the names used in surveys are different, have been depicted using the same colour. The percentage indicates the relative importance of the user type in the entire population. The visually clearest development is the significant decrease in the share of non-users over the six year period. This is partially a result of Estonia's national policy which has continued to increase Internet use through education, information campaigns, and improved accessibility. Another aspect related to the increase of users is the network-based nature of the Internet, which means that every user adds value to various online services and opportunities. In conjunction with the growth of the percentage of Internet users, there has also been an increase in the relative importance of active user types. *Small-scale users* are increasingly less common among Internet users, although their level has remained steady in the context of the entire population over the examined period.

Use of public e-services and online participation in public life as factors influencing quality of life in information society

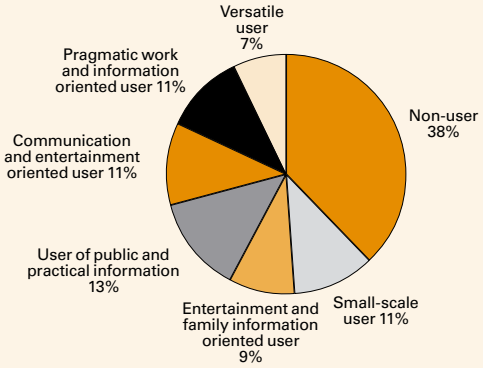
The democratic potential of information and communication technologies can be assessed in several different ways. We can study the availability of various services facilitating civic involvement at the national level or the level of local governments. In this regard, Estonia enjoys a relatively high position according to international indexes. If we examine the frequency of use of these applications, however, we notice that the initiatives of the government sector have not always been popular or widely used among Estonia's population. A considerably larger share of people's daily online activities is related to the consumption of services and entertainment, which does not necessarily lead to improved e-participation and the development of democratic citizenship. Nevertheless, the role of the usability of services provided by the state in terms of developing its citizens' practices of Internet use and shaping their quality of life must not be underestimated. Since most e-services allow citizens to save time and access necessary resources more easily, the provision of such services is another sign of an improvement of quality of life. Information technology has a more direct effect on the quality of life in Estonia, for example, when people have difficulties finding a suitable job near their home, i.e. when they have the option of teleworking through the Internet. In such a case ICT can directly help us solve specific social problems. In this

Figure 5.3.5. Percentage of Internet users and non-users of the entire population in 2002



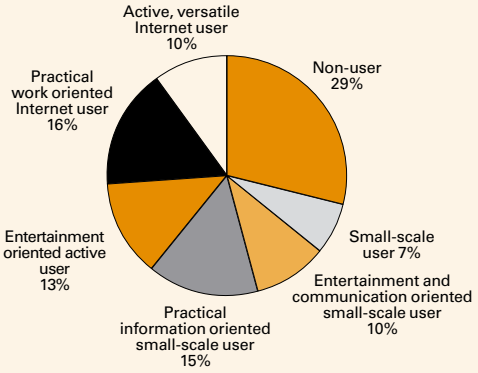
Source: Mina. Maailm. Meedia 2002

Figure 5.3.6. Percentage of Internet users and non-users of the entire population in 2005



Source: Mina. Maailm. Meedia 2005

Figure 5.3.7. Percentage of Internet users and non-users of the entire population in 2008



Source: Mina. Maailm. Meedia 2008

Table 5.3.5. Connections between political activeness and various online activities (percentage of respondents who considered a given activity to be either very important or important with regard to characterizing their Internet use)

General interest in politics and activeness	Searching for information on the websites of local governments	Searching for practical information (weather, timetables, etc.)	Communicating with officials, transaction of affairs online	Using an online banking solution	Using e-services (tax board, forms, etc.)	Participating in forums, blogs, writing comments	Participating in civic initiatives, signing online petitions
Not at all	6	44	7	50	22	15	3
Little	7	48	15	57	22	16	1
Considerable	14	49	15	68	39	11	4
Significant	22	47	23	71	46	7	2
Very significant	27	48	29	73	46	7	1

Source: Mina. Maailm. Meedia 2008

field, the various institutions and local governments certainly have many opportunities for further development.

On a critical note, however, it is clear that a significant and lasting improvement in the quality of life through ICT can only occur in conjunction with the active participation of informed and enlightened citizens who have a good grasp of administrative processes. In order for our citizens to be able to contribute to this development process, Estonia's public institutions should seriously improve their provision of daily information through e-channels. Another important step in increasing the e-participation of citizens involves the refinement of existing participation spaces and the creation of new ones, thus providing both citizens and officials with a real experience of deliberative democracy.

Development of Internet democracy in Estonia

As in the case of traditional democracy, Estonia's Internet democracy is characterized by fast institutional development – Estonia quickly reached the forefront of the race for implementing information technology and received international acclaim with various tables reflecting the speed of development of information society (see also 5.3.1). However, Estonia's initiatives in the field of Internet democracy have not been very productive. The participation portal TOM (*Täna Otsustan Mina* – Today I Decide) which enjoyed both international attention and relatively active participation in its initial stage has ceased to exist in its original form. One reason for this may be the fact that, TOM was characteristic of online representative democracy rather than actual participatory democracy, since the citizens did not have the final say in decision making and the suitability of ideas was decided by the appropriate ministries and officials. Instead of concentrating on introducing transparency and involvement, the primary opportunities and benefits of Internet democracy, Estonia chose an approach focused predominantly on officials and aimed at gathering as much information as possible on everyone in order to provide them with suitable services. Citizens, however, usually lacked the opportunity to participate in discussions concerning the services, not to mention more in-depth political debates. Since citizens are treated in such cases as customers to be provided with services instead of active participants in the decision-making process, the type of e-democracy introduced in Estonia can be considered an *Internet customer democracy* rather than an actual participatory democracy (see, for example, Bellamy & Taylor 1998; Ridell 2002).

Estonia has impressive legislation for regulating the information society in addition to experience of legal regulation. However, most of the applicable political documents are technicist in orientation and do not contain much information on the subject of participation. Although some laws, such as the Public Information Act, do regulate the Internet use of local governments (e.g. the structure of websites), the local authorities do not follow these laws and the decision-making process of many local governments continues to be opaque.

Changes and developments in e-participation

It is important for the development of e-democracy that new technological means be used to involve people who are not interested in the traditional forms of democracy as active participants in social life. In actuality, we have partially accomplished this goal. The data of the 2008 *Mina. Maailm. Meedia* survey indicates (Table 5.3.5.) that in Estonia online forums, for example, are used more by people who completely lack interest in politics. Conversely: only 7% of people with a very high level of general interest in politics say that they frequently express their opinions in public online environments. The same trend generally applies to the practice of blogging. This confirms the tendency revealed in previous surveys of online participation in Estonia being more multifaceted than that of countries with long traditions of civic culture and free development of democracy. Based on this trend we can even conclude that the contribution of the Internet to the development of democracy in general does manifest itself in increasing the activity of people who remain passive in traditional channels. However, the fact that the quality of the content of Internet discussions is often relatively low causes us to regret the tone-setting role in this communication environment of people who have no real interest in politics. Forums originally created for the purpose of political debate and development of democracy often become additional means for exchanging news and practical information, rather than environments for initiating serious discussions and shaping public opinion.

In order to explore the relationship between people's general interest in politics and their use of e-services, we analyzed the connections between Internet use, general interest in politics, and the activeness index (the latter is calculated on the basis of involvement in political parties, campaigns organized by citizens' associations, and elections) (see Table 5.3.5.). In general, most of the people who actively participate in social life today are Internet users. We can thus see a connection even between people's frequency of use of an online banking application and their higher level of general political activeness. At the same time, people with a high level of interest in politics participate rather sparsely in forums, blogs, and commenting environments as well as online civic initiatives. We can thus say that for people who are politically active, technology serves primarily as a means of simplifying their practical daily activities, rather than an engaging opportunity to influence the administration of the country or a local government more efficiently.

One of the most important factors in shaping the connection between general political activeness and e-participation is age. Older people who are more active politically

lack the experience of expressing themselves online, while active bloggers and young people making their opinions public in forums (see also subchapter 5.4) regrettably exhibit a low level of general interest in politics.

Estonia's civic culture and grassroots initiatives have also been exploring options for using the Internet to accomplish their objectives. Several different campaigns have been organized recently both offline and online, indicating an increase in the significance of the third sector and civic involvement. For example, signatures have been collected both in support of and against the construction of a monument in memory of the Estonian War of Independence, the garbage cleaning campaign *Teeme ära* has been organized as a civic initiative, and the unity and feeling of solidarity of the nation were also reinforced by *Märkamisaeg*, an event celebrating the anniversary of the Estonian night song festivals. Some of these initiatives were conceived online, while in the case of others, information and communication technologies were widely used to guarantee their success. This indicates that the spheres of Internet use and civic initiative are increasingly closely connected in Estonia. Yet it is important to distinguish the manifestations of spontaneous democracy from institutional participatory democracy. There have been some developments in the latter category, however. One example is the Internet environment *Osale.ee* launched by the State Chancellery, which is a development based on the model of the TOM participation portal and features a rather lively discussion under the topic "Universal rights in the e-state" (National Audit Office 2008) created by the National Audit Office.

A new step towards Estonia becoming an e-society is the *e-State Charter. Universal Rights in the e-State* – a document prepared on the basis of the comments collected from the thread started and named by the National Audit Office. Proceeding from different laws, this charter explains in simple terms the rights of an individual in relation to the opportunities offered by the Internet both for the provision of public services and the involvement of citizens.

In addition to regulating the electronic transaction of affairs and services, it would be important to increase the amount of attention devoted to the quality of information issued by various public institutions. The all-in-one model of service provision currently represented by the portal eesti.ee is a sensible approach. It is important for this multi-purpose portal to provide citizens with clearly worded information presented in a short format on the activities and roles of various public institutions, allowing them to better understand the state as a whole, shape their opinions, and make choices.

References

1. Bellamy, C. and Taylor, J. A. (1998). Governing in the Information Age. Buckingham: Open University Press.
2. Emor (2008) Eestis on 6–74-aastasi internetikasutajaid 806 000.[http://www.emor.ee/arhiiv.html?id=1951]
3. Eurostat (2008) Information Society statistics. Data tables. [http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1996,45323734&_dad=portal&_schema=PORTAL&screen=welcomeref&open=/&product=EU_MASTER_information_society&depth=2]
4. ITU (2007a) Digital Opportunity Index [http://www.itu.int/ITU-D/ict/doi/index.html]
5. ITU (2007b) World Information Society Report: Beyond WSIS. [http://www.itu.int/osg/spu/publications/worldinformationsociety/2007/WISR07_full-free.pdf]
6. Praust, V. (1998) Infoühiskond ja selle teetähised. [http://www.riso.ee/et/pub/1998it/12.htm]
7. Pruulmann-Vengerfeldt, P., Vihalemm, P., Viia, A. (2007) Digital Opportunities as a Development Factor. Heidmets, M. (ed.). Human Development Report 2006 (95–105). Tallinn: Public Understanding Foundation.
8. Ridell, S. (2002) The Web as a Space for Local Agency. Communications, 27(2), 147–169.
9. National Audit Office (2008) Universal Rights in the e-State. e-State Charter. [http://www.riigikontroll.ee/]
10. Riso (2008) Interneti kasutamise sagedus 2001-2008. [http://www.riso.ee/et/files/eSeire_2008_I_Interneti_kasutamise%20sagedus.pdf]
11. World Economic Forum (2008a) The Global Competitiveness Report 2008-2009. [http://www.weforum.org/en/initiatives/gcp/Global%20Competitiveness%20Report/index.htm]
12. World Economic Forum (2008b) The Global Information Technology Report 2007-2008. [http://www.weforum.org/en/initiatives/gcp/Global%20Information%20Technology%20Report/index.htm]

5.4. Children and young people in the consumer and information society

The opportunities and risks of the consumer and information society for children and young people

A generalized and somewhat simplified set of opinions by researchers on the effects of the consumer society and information society on children can be placed on an axis where critics and child protectionists are located at one end and optimists at the other. The former tend to construct the meaning of childhood through the keywords of innocence and vulnerability, claiming that children need special protection from the onslaught of the consumer and information society. Optimists, on the other hand, believe that children develop a "natural competence" in using the opportunities provided by the surrounding information and consumer society, thus forming a sufficiently capable and active target group both as the audience for and consumers of media (cf. Buckingham 2000). The first opinion dominates the public discourse (including most of the media and academia), while the other is popular in marketing circles and certain media outlets.

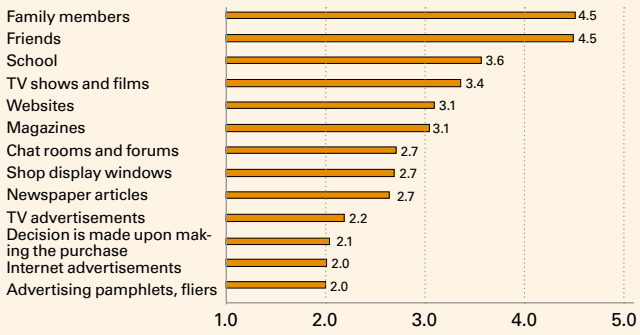
Due to this, the opportunities and risks involved with the media use of children and youth have become one of the central research topics in the new media environment. The line between opportunities and risks is occasionally blurry and depends on one's point of view and values. While children

Table 5.4.1. Who and what are the foremost influences in shaping the lifestyles of children and young people? 1 – "no influence at all"; 2 – "some influence"; 3 – "significant influence")

Influencing factor	Mean value	Percentage of respondents who answered "significant influence"
Peers	2.89	91
Internet environments	2.64	68
Parents	2.64	67
School	2.63	67
Films	2.53	58
Music	2.36	44
Television, magazines, newspapers	2.34	43
Sports and hobbies	2.34	42
Grandparents	2.02	20
Books	1.82	12

Source: Mina. Maailm. Meedia 2008

Figure 5.4.1. Sources of information affecting young people's shopping decisions (mean values on a scale ranging from 1 – "not important at all" to 5 – "very important")



Source: Noorte elustiil 2007

may see exciting opportunities in the anonymity, privacy, and playfulness of the Internet and might also enjoy its potential for a little deception, adults view these phenomena primarily as threats to the safety of children. It is in the interests of producers and banks to provide children with various online services, but proponents of critical social theory often see this as the exploitation of children for commercial purposes or even as the corruption of the innocence of childhood (for an overview of this approach, see Livingstone 2003).

In general, both media researchers and producers, legislators and the public at large consider pornography, content that is violent, racist, or encourages hate or self-harm, improper or potentially harmful contacts with strangers, interference with privacy, abuse of personal data, and the cyber-bullying between children and young people to be the risks that threaten the safety of children in the new media environment. Entertainment, access to information, educational resources, communication, networking, creativity, playing, and participation in civic society are seen as the foremost positive opportunities (Hasebrink et al. 2008: 24–25). The studies conducted so far (Livingstone & Bober 2004) have revealed a connection that highlights a serious dilemma: there is a strong positive correlation between children's use of online opportunities and the risks they encounter, i.e. an increase in opportunities tends to increase the risks, while a lower risk level results in a lack of opportunities. Unfortunately, it is not clear how we could increase the opportunities while reducing the risks.

The world of consumption also provides children and young people with many opportunities for self-fulfilment and finding their identity, although the development of consumer education and competence in Estonia has begun only recently. As a result, the parents of children and youth feel the tensions generated by the consumer society, be they related to the lack of resources or the confusing abundance of options, but do not know how to handle them. Young people themselves admit that being "cool" is defined largely through clothes, accessories, and appearance. This model of interpretation often leads to bullying at school.

This subchapter focuses on three main topics: the lifestyles, consumption preferences and attitudes of young people viewed in connection with aspects of consumer competence; the Internet use of Estonian children and youth, its dynamics and peculiarities in the European context; and the attitudes and beliefs held by the younger generation with regard to the consumer and information society.

Young people's lifestyles, consumption preferences and attitudes

The influence of the commercial environment and marketing communication in shaping the lifestyles of children and young people is constantly increasing, often reaching the youth through the semantic fields they share with their peers. In our definition of the term "lifestyle" we mainly proceed from Mike Featherstone's (2007) position, according to which a lifestyle means the expression of individuality through consuming goods and services that hold some symbolic value as well as through social practices. A lifestyle comprises a wide variety of behaviour and consumption practices aimed at expressing oneself and constructing one's identity and relationships. Due to the fact that lifestyles include both an individual and a social dimension, generally we cannot speak about a certain lifestyle that Estonian residents have in common, but must rather recognize the plurality of lifestyles.

The data of the 2008 *Mina. Maailm. Meedia* population survey indicates that Estonian residents consider peers to have the most influence on shaping the lifestyles of today's young people. Internet environments, parents and school follow peers in the list of most important influences at an almost equal level. A comparison of age groups reveals a statistically significant difference in terms of assessing the importance of sports and hobbies. Namely, 60% of people aged 15–19 consider sports and hobbies to be important aspects in shaping their lifestyles; however, only 37% of people aged 45–54 attribute equal importance to this field. It was also relatively surprising that older generations thought the Internet to be a much bigger influence on young people's lifestyles than the youth themselves: among people aged 15–19, 52% considered the Internet to be a significant influence, while more than 70% of respondents over 45 thought the same.

The student survey *Noorte elustiil 2007* (Youth Lifestyles 2007) provides us with an overview of the opinions of preteens and teenagers on various aspects related to lifestyles and consumption. We have observed school pupils aged 11–14 from Tallinn and Tartu (N=202, including 102 boys and 100 girls). The initial analysis of the data was performed by Laura Järve in the course of her Bach-

elor's thesis conducted at the University of Tartu, Institute of Sociology and Social Policy (see Järve 2008).

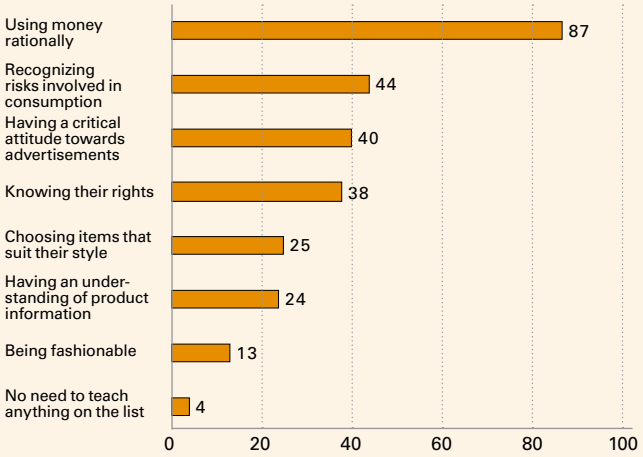
The sources of information on which young people base their consumption decisions also play a significant role in the shaping of lifestyles. According to young people themselves, their consumption decisions are mainly influenced by family members and friends (Figure 5.4.1.). School, TV shows and films are considered to be the next most significant influence. Various forms of advertising, including online advertisements and flyers, are ranked at the bottom of the list. According to young people themselves at least, family and friends have not surrendered their role as leading sources of information.

People in Estonia have increasingly started to recognize the importance of the concept of consumer education (see also 5.4.2.), i.e. the importance of cooperation between various parties – parents, schools and companies – to deliberately train young people to be sensible and smart consumers. The 2008 survey *Mina. Maailm. Meedia* contained the following question: "What is the most important thing that should be taught to young people in order to help them become conscious consumers?" Respondents were instructed to select three answers from a selection of eight. A small minority of respondents (only 4%) do not consider it important to teach them anything at all (Figure 5.4.2.). As expected, the rational use of money is considered most important (87%) in Estonia today, but teaching young people about the risks and dangers involved in consumption is also becoming more important (44% of respondents consider it relevant). In addition, more than 40% of the respondents considered it important for young people to be familiar with their rights as consumers and have a critical attitude towards advertisement and marketing. It is noteworthy that the perception of the importance of the last aspect is least common among the youngest age group (15–19): only 17% have provided it as one of their answers, while 53% of the respondents in the oldest age group did so. Having an understanding of product information, i.e. various markings, and the habit of reading content information is considered relatively unimportant. Presumably this topic will increase in importance as the significance of consumer education becomes ever more widely recognized.

An important "milestone" in growing up to be a consumer is going to school: children start receiving a regular allowance from their parents when they are 6–7 years old and they are expected to have an elementary competence in using it. The study *Noorte elustiil 2007* revealed that 97% of pupils aged 11–14 receive an allowance, with 50% of the respondents receiving a regular allowance and 13% being given pocket money for buying something specific. On average, boys get a 1.7 times higher monthly allowance compared to girls (407 and 247 kroons, respectively). As children become older, their allowance increases. In 2007, the average allowance for 13- and 14-year-olds was 400 kroons per month. School pupils in Tallinn receive significantly larger allowances both on a monthly and weekly basis than young residents of Tartu (Figure 5.4.3.).

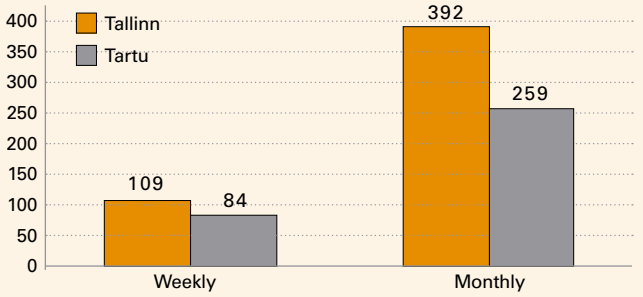
Young people's use of their allowances is illustrated by Table 5.4.2. Compared to boys, girls spend more on cosmetics, clothes and magazines, while boys spend more on food, music and films, games and sports equipment. Boys are also somewhat more active with regard to economizing and saving money. The survey also shows that expenses related to Internet use and mobile phones are usually covered by children's parents.

Figure 5.4.2. What is the most important thing that should be taught to young people in order to help them become conscious consumers? (%)



Source: Mina. Maailm. Meedia 2008

Figure 5.4.3. Size of allowance of young people living in Tallinn and Tartu (average sums in Estonian kroons)



Source: Noorte elustiil 2007

Table 5.4.2. Use of allowance among boys and girls (%, multiple answers possible)

	Total	Girls	Boys
Food, drink	54	43	61
Snacks, sweets	51	51	47
Saving money for buying something	40	37	42
Clothes	36	46	24
Saving money in a bank account	28	20	31
Music, films	23	17	29
Cosmetics	23	44	1
Games	22	8	35
Sports equipment	22	17	27
Magazines	21	32	10
Tickets to events	18	20	17
Other	12	9	14
Mobile telephone bills	8	6	8
Internet	3	1	4

Source: Noorte elustiil 2007

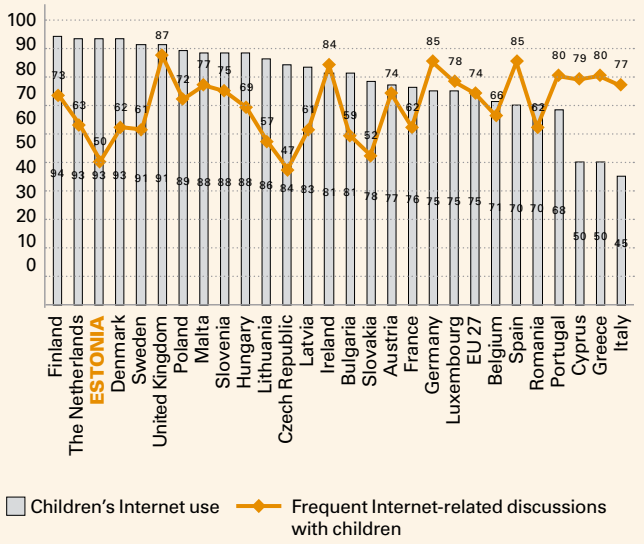
Both boys and girls considered the opportunity to make their own choice a very important criterion with regard to buying technological appliances and sports equipment (more than 90% considered it important or very important). They also considered it important for the product to

Table 5.4.3. Young people's assessment of the importance of brands and their effect on popularity (%)

	Assessed as important or very important	
	Girls	Boys
Importance for the respondent in the case of clothes	38	55
Importance for the respondent in the case of sports clothes and equipment	41	56
Importance in the respondent's school in the case of clothes	55	55
Importance in the respondent's school in the case of sports clothes and equipment	56	55
Importance of clothes among the respondent's friends	50	50
Importance of sports clothes and equipment among the respondent's friends	42	56
Effect of clothes and shoes bearing trendy and well-known brands on the popularity of boys	48	61
Effect of clothes and shoes bearing trendy and well-known brands on the popularity of girls	58	61

Source: Noorte elustiil 2007

Figure 5.4.4. Percentage of children aged 6–17 who use the Internet and the percentage of parents who often discuss online activities with their children (percentage of parents with children who use the Internet) in EU countries



Source: Flash Eurobarometer 248, 2008

be of high quality and durable (93%). Boys (70%) believed it to be important that the purchased product be the latest model and also widespread. Girls attribute more importance to buying school supplies than boys (77% and 50%, respectively). Better prices are not considered very important by either boys (37%) or girls (32%).

Both girls and boys also consider having the opportunity to make their own choice very important in the case of buying clothes, since clothes have to match their style and look good (both criteria are considered important or very important by more than 90% of boys and girls). School pupils also stressed the importance of their clothes being comfortable, fashionable and trendy (all of these characteristics are considered important or very important by over 70% of the respondents). Brands are allegedly less important (only 21% of the girls as opposed to 51% of the boys consider brands to be important or very important). At the same time, being affected by brands is usually something that people do not want to admit openly. Furthermore, young people are often unable to reflexively analyze the impact of commercial symbols on their behaviour. "My buying decisions are not affected by advertising and brands" is simply the socially desirable response and should therefore be treated with reservation.

More general assessments of the importance of brands in different situations are provided in Table 5.4.3. Boys consider brands to be personally more important than girls (respectively, 55% and 38% in the case of clothes). It is interesting that girls do not attribute as much importance to brands with regard to the popularity of boys (48% in the case of boys and 58% in the case of girls), while for boys brands affect the popularity of both genders equally (both 61%). So, contrary to the stereotype that might characterize brands primarily as the girls' domain, they actually play an important role in the values of Estonian boys.

The role of the brands is also connected to school violence arising from clothes and appearance. According to the 2005 student survey *Noored ja meedia* (Youth and the Media) (N=948), 49% of the respondents reported that someone in their class had been bullied due to their clothes or appearance. Of the entire sample, 28% (but a total of 38% of the pupils of Russian language schools) stated that nobody had been bullied due to their clothes or appearance, while 23% said that someone was constantly being bullied. A shift occurs when young people reach the age of 16: nearly 50% of secondary school pupils said that nobody in their class had ever been bullied as a result of their appearance (see Kalmus & Keller 2008).

Internet use of children and youth

According to the international comparison data for recent years, Estonian children are among the leaders in Europe in terms of the percentage of Internet users. The Flash Eurobarometer 248 survey (N=12750) conducted among parents living in EU member states in October 2008 indicates that 93% of all Estonian children aged 6–17 use the Internet. In terms of this indicator, Estonia shares the 2nd – 4th place among 27 EU countries with the Netherlands and Denmark, being outpaced by Finland by only one percentage point (Figure 5.4.4.).

With regard to parent awareness and supervision, Estonia remains at the bottom of the pan-European rankings, however. For example, only 50% of Estonian parents engage in discussions with their children regarding the latter's online activities (the EU average is 74%). Figure 5.4.4. demonstrates that in terms of the relative indifference and liberal approach to their children's online activities, Estonian parents differ not only from their counterparts in Southern European countries (where the level of children's Internet use is relatively low and most parents with children who use the Internet talk to them often about online activities), but also from those in the Nordic countries and the United Kingdom where the level of Internet use among children is high, just like in Estonia. The attitudes and practices of Estonian parents are comparable primarily to those of parents in the other countries of "new" Europe. For example, Estonia, along with the Czech Republic and Slovakia, has the lowest percent-

age of parents (61%, 62%, and 63%, respectively) who have forbidden their children to communicate in online environments with people they do not know in real life (the EU average is 83%, while in Ireland the percentage is 96%).

The parents' extremely liberal approach would be justified, on certain conditions, only if the children's awareness of the dangers related to Internet use were high and their level of risk behaviour low. Very few studies have been conducted in Estonia on this subject, with only *Lapsed ja internet* (Children and the Internet), a survey conducted by Turu-uuringute AS in 2006, and *Eurobarometer* 2005 providing data that can be compared with other countries. The following information is noteworthy among the gathered data:

- Among Estonian children aged 6–14, 31% have experienced teasing, verbal abuse and bullying while using the Internet (the European average is 15–20%; Hasebrink et al. 2008: 29);
- in communicating with strangers in online chat rooms or through communication programs, 19% of Estonian children have felt disturbed by something (for example, the stranger's wish to meet them in real life or know their name, the stranger's request for their home address or photo);
- among children aged 11–14, 13% have actually met strangers they became acquainted with in a chat room or through a communication program (the average for European teenagers is 9%, Hasebrink et al. 2008: 30);
- according to their parents, 58% of children under 18 who use the Internet have come into contact with potentially harmful web content (the European average is 31%);
- according to their parents, only 44% of Estonian children know how to behave when encountering an unpleasant situation online (the European average is 66%).

Taking into account the percentage of Internet users among children under 18 and the results of studies of online risk behaviour, the international research network EU Kids Online has presented a classification of European countries that belong to the network (see Table 5.4.4.). Estonia, along with the Netherlands, Norway and the United Kingdom, belongs among the countries that have a high level of both children's Internet use and online risks. Unlike Estonian children, Dutch and British children are able to handle online risks relatively well according to their parents, with parental supervision being characterized as high in the Netherlands and medium in the United Kingdom (Hasebrink et al. 2008). Considering the information provided above, we can say that Estonian children are in a unique position in the European context: they belong to the "high use – high risk" category and yet have been left mostly to their own devices in exploring the online jungle, despite their parents' belief that they are not always able to manage the risks involved.

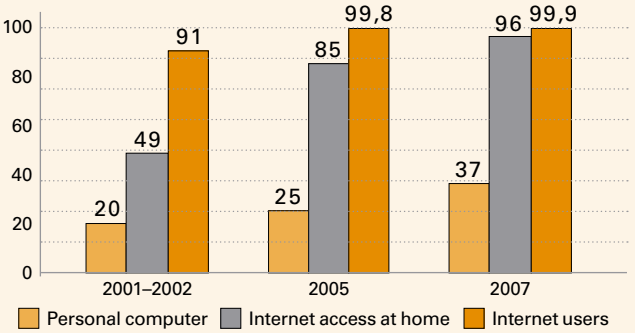
In the European context Estonia also stands out as the only EU member state that lacks an organization engaged in raising awareness of topics related to Internet safety. Organizations functioning as Internet Safety Nodes elsewhere in Europe actively provide information both to children and adults. The lack of a corresponding organization in Estonia has caused puzzlement in the international circles.

Table 5.4.4. Classification of countries belonging to the EU Kids Online network based on children's Internet use and online risks

Online risk level	Level of children's Internet use		
	Low	Medium	High
Low	Cyprus Italy	France Germany	
Medium	Greece Portugal Spain	Austria Ireland	Belgium Denmark Sweden
High	Bulgaria	Czech Republic Poland Slovenia	Estonia The Netherlands Norway United Kingdom

Source: Hasebrink et al. 2008: 75

Figure 5.4.5. Home access to the Internet and the percentage of Internet users among 6th to 12th year pupils of city schools with Estonian as the language of instruction (%)



Sources: Estonian schools pupils' media use survey 2001–2002; Noored ja meedia 2005; Noored ja Internet 2007[28]

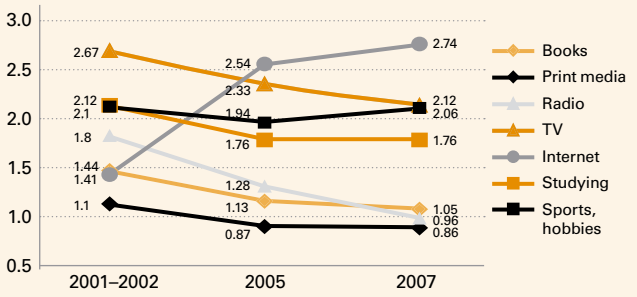
Internet use by Estonian school pupils

There have been fast and comprehensive changes in Estonian school pupils' media use during recent years. Internet has become an inseparable part of pupils' lives: while already 91% of 6th to 12th year pupils in city schools with Estonian language instruction used the Internet in 2001–2002, it is possible to speak of universal Internet use with regard to this age group as of 2005 (see Figure 5.4.5.).

Pupils' opportunities for Internet use have also increased quickly. In autumn 2007, 96% of the respondents studying in Estonian language schools in Tallinn, Tartu and Pärnu reported that they were able to use the Internet at home – exactly double that of pupils who had home Internet connections five or six years before (see Figure 5.4.5.). According to the 2007 data, an overwhelming percentage of pupils (94% of all cases) had broadband Internet connections (in 2005, 82% and in 2001–2002 26% of the respondents had broadband Internet connections). In

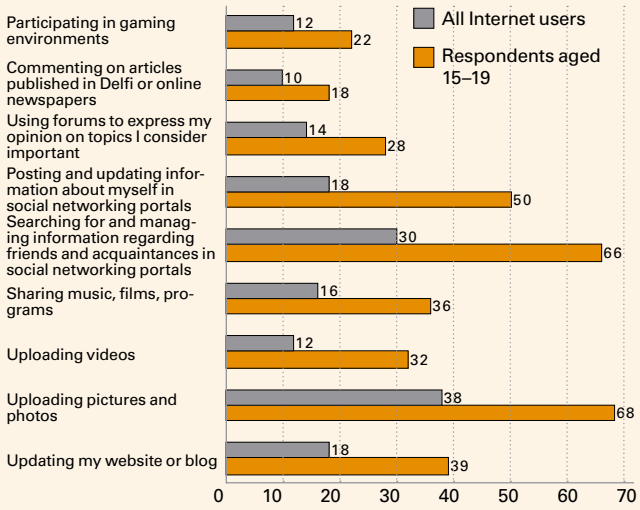
[28] The data has been taken from three questionnaire surveys conducted among 6th to 12th year school pupils by the Institute of Journalism and Communication of the University of Tartu: Estonian school pupils' media use survey (November 2001 and October 2002), Estonian school pupil survey *Noored ja meedia* (September–October 2005), and the survey *Noored ja Internet* conducted among pupils of Estonian language schools in Tallinn, Tartu and Pärnu (October–November 2007). In order to view the changes over time on a comparable basis, we have focused our analysis on data regarding pupils of city schools with Estonian as the language of instruction (2001–2002 N=554; 2005 N=650; 2007 N=713).

Figure 5.4.6. Time spent on the consumption of media, doing homework, and engaging in sports and hobbies among 6th to 12th year pupils of city schools with Estonian as the language of instruction (means on a scale of frequency 0 – "not at all" ... 4 – "more than 3 hours a day")



Sources: Estonian schools pupils' media use survey 2001–2002; Noored ja meedia 2005; Noored ja Internet 2007

Figure 5.4.7. Percentage of people who engage in online content creation activities "often", "consistently" or "sometimes" among all Internet users and the 15–19 age group



Source: Mina. Maailm. Meedia 2008

autumn 2007, 37% of school pupils had their own computer which was connected to the Internet (the corresponding figures were 25% in 2005 and 20% in 2001–2002).

The improved availability of home Internet access has probably had a considerable effect on simultaneous changes in the pupils' time budget: the growth curve of the time spent on the Internet in Figure 5.4.6. is very similar to the growth curve of home Internet connections. During the 2001–2005 period there was a sharp increase in the amount of time spent online on average; the Internet surpassed books, radio, sports and other hobbies, doing homework, as well as television as a means of spending time. It is noteworthy that in 2005–2007, the increase in time spent on the Internet has coincided with the continuous decrease in time spent watching TV and listening to the radio, while the time spent on doing homework and reading magazines and newspapers has remained the same, the relative importance of reading books in pupils' time budget has decreased a little, and sports and hobbies have regained the level of importance they held in 2001–2002. Thus, the increase in the relative importance of the Internet has primarily affected the share of time devoted to traditional electronic media – television and radio; the decrease in the time spent on print media has been somewhat smaller.

The central role of the Internet in school pupils' daily lives and use of time can also be expressed vividly in terms of percentages: over 3 hours per day is usually spent on the Internet by 28% of the respondents, while 30% spend approximately 3 hours online, 30% spend 1–2 hours on the Internet and only less than 10% of the respondents spend less than an hour online on a daily basis (1% consider the time they spend online to be insignificant).

Estonian youth as Internet users and creators of online content

According to the 2008 population survey *Mina. Maailm. Meedia*, young people in Estonia generally tend to characterize their computer skills as good. Among respondents aged 15–19, 13% rate their skills as very good, 38% as good, and 24% as satisfactory. In terms of these indicators, their self-assessed level of skill falls below that of the 20–29 age group but surpasses all others. It is important to note that the girls in the 15–19 age group have a significantly lower evaluation of their computer skills than boys of the same age.

In the following section we will analyze the respondents in the 15–19 age group in terms of the frequency and type of their Internet use (for the typology of Internet users see 5.3). Of the young people in this age group, 88% had used the Internet on the day of the survey or on the previous day, 7% had used the Internet within one week preceding the survey and approximately 1% used the Internet on a less frequent basis. Young people use the Internet primarily at home (81% of the respondents use it at home on a daily basis), and significantly less frequently at school (61% at least once a week) and other places, for example a friend's home or an Internet access point (43% at least once a week).

The most widespread Internet user types among young people aged 15–19 are *entertainment-oriented active users* (43%) and *entertainment and communication-oriented infrequent users* (38%). *Active versatile Internet users* make up 9% of the age group and *infrequent users* account for 8%. Thus, the majority of young people aged 15–19 use the Internet mostly for entertainment and communicating, while Internet use for practical purposes and information-oriented activities is less important for them.

A new potential in Internet use is seen in creative online activities. Figure 5.4.7. compares the frequency of content creation among young people aged 15–19 with that of all Internet users.

As is often common in the case of new opportunities and services, online content creation activities are mostly popular among young people. The most common activity both among the youngest age group and all Internet users is the uploading of pictures. The second most important activity is searching for and managing information on friends in social networking portals (Orkut, Facebook, Rate.ee, Myspace, LinkedIn, etc.). Commenting on articles published in the Delfi news portal or online newspapers is, somewhat surprisingly, a relatively uncommon activity, ranking even below expressing one's opinions in online forums in terms of popularity.

Attitudes and beliefs related to the Internet

As we have seen in the previous subchapters, the Internet plays a very important role in the use of time and the daily lives of young people in Estonia, in addition to having a considerable influence on their lifestyles. Thus we consider it important to take a closer look at the beliefs related to the Internet.

The importance of the Internet in the lives of Estonian school pupils is reflected in the excessive self-confidence and overwhelmingly positive attitudes of the young people in question. More than 90% of the school pupils polled in autumn 2007 were confident in their ability to use the Internet for any purpose (see Table 5.4.5.). The trustworthiness of the Internet as a source of information is relatively high, having experienced a considerable growth compared to the survey data dating back to 2005: 72% of school pupils considered the information available online trustworthy in 2007 (compared to 41% in 2005). During the two years, the Internet surpassed television in terms of reliability, rising to the 6th position after family members, reference literature, school textbooks, teachers, and friends. In addition to television, school pupils also have less confidence in radio as well as newspapers and magazines than in the Internet. Although the majority of pupils are critical of the credibility of forum entries posted anonymously, as many as one third of Estonian young people take this source of information seriously.

Estonian pupils mainly see the Internet as a source of opportunities: a large majority (83%) considers the information they obtain from the Internet to be important in terms of their studies. This percentage has increased somewhat since 2005. Pupils generally believe (as indicated by a stable percentage of respondents over a period of two years) that the role of the Internet in allowing children to learn about the world faster is positive. A little over half of the pupils sense that this opportunity may be connected to the danger of children experiencing the unpleasant side of the world of adults through the web at an unsuitably early age, while a third of the respondents do not consider this to be a problem.

Survey results allow us to postulate that Estonian children see the Internet more as a separator of generations than a means of uniting them, although this opinion is changing. Compared to 2005, the percentage of pupils who believed that adults do not understand what children do online had decreased somewhat in 2007, while the percentage of pupils that disagreed with this statement showed some growth. A little over a half of the respondents saw the Internet as a bridge between the generations and a means of facilitating mutual understanding. It is worth noting that compared to 2005, the pupils' opinion of their teachers' Internet skills has improved significantly. At the same time, pupils tend to consider their parents to be more familiar with the Internet than their teachers. A considerable segment of school pupils (36%) believed that the Internet allows younger generations to outpace older generations in terms of knowledge, although the percentage of those who did not agree with this statement was somewhat larger (51%).

The relative importance of attitudes related to gender stereotypes has remained relatively stable during the two years. In the case of both of the surveys, nearly one fourth of the respondents thought that the early use of computers and the Internet by boys should be facilitated first and foremost. Compared to 2005 however, the number of pupils who took it for granted that boys be better at using computers was somewhat smaller in 2007 (44% compared to 48%).

Table 5.4.5. Attitudes and beliefs related to the Internet of 6th to 12th year pupils of city schools with Estonian language instruction (%)

	2007		2005	
	Agree	Do not agree	Agree	Do not agree
I can use the Internet very well (for any purpose)	91	7	-	-
The information found on the Internet is trustworthy*	72	24	41	47
I trust anonymously posted forum entries	34	57	-	-
Information obtained from the Internet is important for studying	83	1	78	2
It is good that the Internet allows children to develop and discover the world faster	77	17	75	18
Children find out about the unpleasant side of the world of adults too early through the Internet	53	34	-	-
Adults do not understand what children do online and this causes problems between the generations	68	27	77	18
The Internet allows parents to experience their children's world and this facilitates mutual understanding	55	31	-	-
My teachers are proficient in Internet use*	43	32	23	22
My parents are proficient in Internet use	57	38	-	-
The Internet allows children to become smarter than their parents and teachers	36	50	-	-
The use of computers and the Internet must be made available early on primarily to boys	24	63	23	61
It is natural for boys to be better at using computers than girls	44	46	48	43

** The data for 2005 has been taken from the Estonian language city school sub-sample of the international research project MEDIAPPRO.*

Sources: Noored ja meedia 2005, Noored ja Internet 2007

Attitudes and beliefs regarding children and young people in Estonian society

The socialization of children and youth in contemporary society is affected by the notions, attitudes and beliefs held by the older generations regarding the phenomena connected to the developing information and consumer society and the perception of related problems. Table 5.4.6. comprises some of the problems related to children and young people in contemporary society, ranked according to the level of concern they generated among Estonian residents at the end of 2008. The respondents mainly worried about the significance of parties and alcohol consumption in the young people's lifestyles, with 68% deeming this phenomenon to be a problem. However, the opinions of young people themselves and older age groups differ considerably with regard to this subject: only 42% of respondents aged 15–19 consider lifestyles that favour partying and the consumption of alcohol to be problematic, while 27% believe such lifestyles to be normal.

The important position held in the ranking of problems by phenomena related to the Internet and other new

Table 5.4.6. The perception of problems related to children and young people among Estonian residents (%)

	It bothers me, I consider it a problem	It does not bother me, I consider it normal	Difficult to say
1. The important position of parties and alcohol consumption in the lives of young people	68	9	23
2. Children meeting strange adults online	68	6	26
3. Children and young people looking at online pornography	66	6	27
4. Children and young people spend too much time online and playing computer games	60	24	16
5. New technologies (the Internet, mobile phones) allow children to bully each other	52	8	40
6. Rate.ee and other similar online environments play a very important role in young people's lives	44	20	36
7. Various consumption opportunities and the availability of trendy items affect the relationships between young people	41	19	40
8. The media has a significant effect on the values and lifestyles of young people	39	20	40
9. Children and young people today spend too much time in shopping centres	35	24	41
10. Young people devote much attention on their own appearance and clothes as well as those of others	27	48	24
11. Young people today have a very positive self-esteem	19	34	47

Source: Mina. Maailm. Meedia 2008

technologies can be explained through the serious nature of the potential risks and their more vigorous recognition in public discourse during 2008. Estonian residents consider dangers related to children meeting strange adults online (68%) and looking at online pornography (66%) almost equally concerning. Similar problems related to new technologies also cause the most concern among the parents of children aged 6–17 in the European Union (Flash Eurobarometer 248 2008). It must be admitted, however, that Estonian parents are relatively carefree with regard to online risks concerning their own children: for example, 39% of Estonian parents with children aged 6–17 worry much or to some degree about their children falling victim to online grooming (the EU average is 60%; in France the level is 90%; Flash Eurobarometer 248 2008).

The relative carelessness of Estonian residents regarding dangers related to new technologies is reflected by the low awareness of cyber-bullying between children, which can have very serious consequences: 40% of respondents do not have a clear opinion on the subject and 52% believe this phenomenon to be a problem. Young people are even less sensitive to the seriousness of the problem, with 38% of teenage respondents reporting that they are bothered by cyber-bullying, while 15% consider it normal. The lack of concern of Estonian parents regarding this issue stands out in the context of the European Union: while 33% of Estonian parents with children aged 6–17 are concerned about the possibility of their children being bullied online, the average level of concern in the EU is 54% and the level of concern in France is 83% (Flash Eurobarometer 248 2008).

Estonian residents perceive phenomena caused by the consumer society as less of a problem for children and young people than the issues related to new technologies. For example, 41% of the respondents see the discords in young people's relationships arising from the inequality of consumption opportunities and the potential teasing of less trendy individuals as a problem, while nearly as many respondents do not have a clear stance on this issue. Young people themselves consider the role of inequality in consumption opportunities as a factor affecting relationships as normal. This opinion is characteristic of 36% of respondents aged 15–19, while only a fourth of them see it as a problem. Attributing importance to appearance and clothes and therefore also consumption is becoming self-evident among young people: 48% of all respondents and the majority (58%) of teenagers consider it normal.

References

1. Buckingham, D. (2000) After the Death of Childhood: Growing up in the Age of Electronic Media. Cambridge: Polity Press.
2. Featherstone, M. (2007) Consumer Culture and Postmodernism. London: Sage.
3. Flash Eurobarometer 248 (2008) Towards a Safer Use of the Internet for Children in the EU: Draft Analytical Report. The Gallup Organisation upon the request of European Commission.
4. Hasebrink, U., Livingstone, S., Haddon, L. (2008) Comparing Children's Online Opportunities and Risks Across Europe: Cross-National Comparisons for EU Kids Online. London: EU Kids Online (Deliverable D3.2).
5. Järve, L. (2008) Eesti eelteismeliste ja teismeliste tarbimise analüüs uuringu "Noorte elustiil 2007" põhjal. Unpublished Bachelor's thesis. Tartu: University of Tartu, Institute of Sociology and Social Policy.
6. Kalmus, V., Keller, M. (2008) "Teen Consumption in Estonia: Brands, Consumerism and Sustainability." In: Child and Teen Consumption 2008; Trondheim, Norway; 24-25 April 2008. Trondheim: Norwegian Centre for Child Research.
7. Livingstone, S. (2003) Children's Use of the Internet: Reflections on the Emerging Research Agenda. New Media & Society, 5 (2), 147–166.
8. Livingstone S., Bober, M. (2004) UK Children Go Online: Surveying the Experiences of Young People and Their Parents. London: London School of Economics and Political Science.
9. Turu-uuringute AS (2006) Lapsed ja internet. September 2006. http://www.peremeedia.ee/public/LapsedInternetUuring.ppt

5.5. General relationships between the indicators of the consumer and information society and the quality of life

In this subchapter we will examine the relationships between one aspect of subjective well-being – satisfaction with life – and the aggregate indicators reflecting consumption and Internet use as well as orientations related to the consumer and information society.

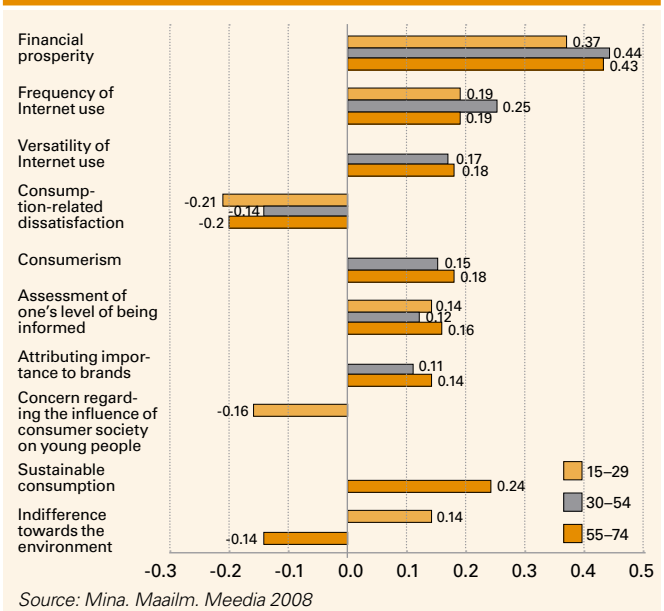
Figure 5.5.1. lists the relationships between people's satisfaction with life and the indexes related to consumer and information society based on the correlation coefficients calculated on the basis of the entire sample of the 2008 *Mina. Maailm. Meedia* survey. We see that people's assessment of their satisfaction with life is most strongly related to the index of *financial prosperity*, which measures the availability of money for various expenses, ranging from eating adequately to travelling and educating children. It can be concluded, therefore, that in the context of aspects of the consumer and information society, people's subjective well-being is primarily dependent on their material consumption opportunities.

The indicators related to Internet use, including *frequency of Internet use* (summated frequency of use at work / school, home and elsewhere) and *versatility of Internet use* (summary indicator of the relative importance of engagement in 22 different online activities), occupy important positions in the hierarchy of factors: the level of satisfaction with life is higher in the case of people who have more resources (opportunities, time and skills) for using the Internet in various ways. Among attitudinal indicators, *consumption-related dissatisfaction* has the strongest (and, as expected, negative) connection with people's satisfaction with life. This perceived lack of opportunities for enjoying a healthy diet, and the insufficient selection of food and clothing have a negative effect on the general level of satisfaction with life. More hedonistic consumption orientations focused on lifestyles and self-expression, such as *consumerism* and *attributing importance to brands*[29], have less of a connection with people's assessment of their quality of life than the previously described consumption and Internet use indicators related to resources and daily life.

Satisfaction with life is affected equally by consumerism and the tendency to value brands as well as people's level of *being informed* regarding the events taking place in their immediate environment, Estonia, and the rest of the world. Orientations that are critical of consumer society and focus on the conservation of the environment as well as the opposite orientations[30] have a weaker connection to people's assessment of their level of satisfaction with life. The strength of the relationships and their positive or negative nature vary considerably in terms of different age groups.

The youngest generation of respondents (aged 15–29) differs from middle-aged and older respondents mainly with regard to the fact that several orientations related to consumer and information society, including versatile Internet use, consumerism, and attributing importance to brands, are so widespread among them that they are not related to the differences in satisfaction with life that appear within the group. The intra-generation differences in subjective well-being are reflected primarily in the variations regarding the availability of financial resources and activeness related to Internet use, as young people who are wealthier and use the Internet more frequently tend to be more satisfied with their lives. A higher level of criticism towards consumption opportunities and choices is also related to a lower level of satisfaction with life in the case of the youngest age group. Compared to middle-aged respondents, the relationships is even stronger. It is noteworthy that for the younger generation, satisfaction with life is connected to a lower level of concern regarding the

Figure 5.5.1. Relationships between people's level of satisfaction with life (5 – "completely satisfied" ... 1 – "not at all satisfied") and indexes related to consumer and information society by age groups (Pearson correlation coefficients, p<0.01)



Source: Mina. Maailm. Meedia 2008

[29] The index measuring the attribution of importance to brands combines respondents' affirmative answers to the following statements: "The brands people consume tell a lot about them"; "It is important to me what impression the brands I consume make".

[30] The index "Indifference towards the environment" combines the following indicators: "I do not use/know organic products", "I never wear second-hand clothes", "I do not consider myself an environmentally friendly consumer", "my family does not sort waste at all", "I do not consider environmental friendliness important when buying and using cars/household appliances/household chemicals", "I do not consider environmentally conscious consumption important since nothing depends on my consumption practices". The index "Concern regarding the influence of consumer society on young people" combines affirmative responses to statements 1, 7, 9, and 10 presented in Table 5.4.6., which express negative attitudes towards young people's consumerist lifestyles.

influence of consumer society on young people as well as to an indifferent attitude towards the environment. Thus, among Estonian youth satisfaction with life is somewhat higher in the case of young people who are less critical of their consumption opportunities, who take the problems of the consumer society for granted, and who attribute little importance to environmentally friendly consumption. In the case of the oldest age group, however, the subjective well-being is highest among those who are able to and want to exercise environmentally friendly consumption.

In the light of the pattern of connections described above, we can interpret the relationships between the quality of life and aspects of consumer and information society from the standpoint of social adaptation which gives rise to two types of assessments. On the one hand, we see that fast adaptation to the development of information and consumer society, which includes active and versatile Internet use, consumerist orientation, being informed about events taking place in the society, has a positive effect on quality of life in terms of subjective well-being. In addition, the feeling of "not missing the boat" plays an especially important role in the satisfaction with life of middle-aged and elderly people. On the other hand, there exists the danger of successful adaptation to social changes causing a tendency to accept problematic phenomena as natural and thereby bringing about their normalization, especially in the eyes of the youngest generation. If social adaptation causes a lack of critical sense and the spread of indifference, it should be seen primarily as social accommodation which, at the level of the society, brings about a decrease in solidarity and cohesion.

5.6. Summary

To briefly summarize the tendencies and conclusions described in this chapter, we can say that the phenomena related to the development of consumer and information society in Estonia have both a positive and a negative effect on Estonian residents' quality of life, acting simultaneously as sources of opportunities and risks. Consumerist orientations tend to increase satisfaction with life and provide opportunities for the construction of identities and shaping of lifestyles. At the same time, excessive and irrational consumption and borrowing are not sustainable, causing many individuals to borrow beyond their means and become insolvent, while also increasing various environmental risks. The effect of the consumer society on children and young people is also two-sided. Most children in Estonia receive an allowance from their parents, which allows them to make independent decisions related to consumption and saving money. However, a significant level of inequality in terms of the amount of pocket money received is evident already in the case of children aged 11–14 and there is a considerable degree of school bullying based on the clothes and appearance of schoolmates taking place in primary school.

Information and communication technologies have become an integral part of the daily lives of most Estonian residents. Increasingly, new media allows people to satisfy their need for information, entertainment, and self-expression, while also providing more and more opportunities for democratic participation. Estonia's relatively high position in the international rankings related to the development of e-technologies does not allow us to become complacent and halt our progress, because with regard to the implementation of ICT innovations to increase actual competitiveness and democratic citizenship we are lagging behind many countries. In addition, the widespread use of the Internet by Estonian children and young people does not have an unambiguously positive effect on their quality of life, competitiveness, and development into active citizens capable of critical thought. Estonian children also lead the pan-European charts in terms of experiencing risks related to the Internet and most young people aged 15–19 use the Internet primarily for the purpose of entertainment and communication. Online content creation, a phenomenon potentially conducive to involvement and participation in civic society, is also dominated by activities aimed at communication and identity creation, while voicing opinions online and commenting on the opinions of others is relatively uncommon among young people.

Young people themselves are relatively uncritical of several problems related to children and young people in the information and consumer society, tending to take these phenomena for granted or being unwilling or unable to provide any reflexive evaluation at all of their peers' social practices. Estonian parents stand out in the context of average EU indicators in terms of their unfounded optimism with regard to online risks related to children. Our parents are also among the least active in Europe in terms of counselling and monitoring their children's Internet use. Awareness of the significant aspects of consumer competence is in its early phase both in the case of older generations and young people themselves. This means that the phenomena and problems related to children and young people in the information and consumer society merit a more thorough approach and discussion, both among the general public and within the third sector.

The current economic crisis is likely to have a negative effect on the development of the consumer and information society. Despite the fact that private consumption is a significant factor in economic growth, it would be immoral to call for people to engage in more consumption indiscriminately. Instead, more attention should be attracted to well-informed consumption choices that coincide with the interests of the Estonian economy, conservation of the environment, and people's health, for example, products manufactured in Estonia, environmentally friendly products, organic foodstuffs, people's own health, and the education of children. The main issues that should be considered during difficult times and addressed with suitable action strategies include the problem of socializing young people and training adults to be socially active, instilling in them a healthy sceptical attitude and clarity of thought, as well as the capacity to take a critical approach, if necessary. It should be our aim to educate consumers and users of the new media who are skilled in using all of the opportunities available to them while avoiding the risks involved, skilled in making competent decisions and standing courageously for their own rights and public interests.

CHAPTER 6

Well-being and economic development

6.1. Introduction

Since social factors are related to human development in the broadest sense, we often deal with them as separate values, independent of economic opportunities. There is nothing wrong with this approach until a question develops about the resources that are required, while the key question for the economic approach involves the calculation of budgetary restrictions.

The emphasis on the assessment of the relationships between the economic and social fields has shifted due to the development of a better understanding of the reasons for growth and changes in the types of economic growth. With respect to the latter, one can differentiate growth based on industrialization, which is related, to a great extent, to "investments into iron and concrete" and service-based economic growth, which is based, to a great extent, on investments into human and social capital, and in which case, a large number of developmental factors are related to costs rather than investments from the standpoint of national statistics. Therefore, countries in the first phase of development are characterized by a high ratio of investments in GDP (often 25–30% and more); this percentage is lower, however, in countries in the second phase of development.[31]

It is typical of economists to value economic growth as such. However, it should be noted immediately that in the 1960s and 1970s the emphasis on the assessment of policies supportive of economic growth shifted from an approach based on the accumulation of production factors to the valuation of human and social capital. Since the creation of human and social capital is affected by social policies, the interconnection between social and economic policies has also become more important for economists.

In order to ascertain whether economic development or general social development is moving in an acceptable direction, one must inevitably measure objective levels of various aspects of well-being, or the quality of life, on the one hand, and subjective aspects of well-being, i.e. the perception of these aspects by the members of society, on the other hand. Moreover, it must be considered that objective levels of well-being result from economic development, while at the same time, the various components of the society's well-being, such as health and education, are also inputs for economic development, i.e. they significantly affect economic development.

We find very different divisions for the aspects of well-being, and indicators to describe them in the literature. It is generally understood that the economic wealth of a society, which is measured at the country level by created income per capita, is the basis for everything. From the standpoint of well-being, not only wealth, but also its distribution, is significant (see Chapter 1 above) – not only between individuals, but also to guarantee the achievement of various developmental objectives (physical and social security, democracy). Another objective aspect that is often considered is the health and educational level of the members of society, as well as their access to health care and educational services. In summary, this can be called the human capital aspect of well-being. The social side of well-being can also be objectively reflected through governmental organization, especially through social policy indicators, which will be discussed below. From here, we arrive at the social capital aspect of well-being. Satisfaction studies have added a subjective social dimension to the analysis of well-being (see Chapter 3 above). Since the subjectively perceived feeling of happiness is considered the most important indicator of well-being, well-being also has an emotional aspect. Exclusion that is related to poverty and long-term unemployment is frequently a reason for negative emotions about society. Therefore, the lack of exclusion could be interpreted as a connection to society that provides people with emotional support in assessing their situation.

6.2. Subjective and objective indicators of well-being

In this subchapter, we will examine how the components of well-being and their perception are mutually related and also related to different parameters of economic development. Both the objective and subject variables of well-being will be examined along with the actual situation and the assessments made by people

[31] In China the corresponding indicator, the exact name of which is gross fixed capital formation, has been 35 to 40% for years. In Estonia, it was 31.9% in 2007, while at the same time, the percentages in the following countries with larger service economies and growth based to a greater extent on human capital were 20.3% in Finland, 18.9% in Sweden, and 18.7% in the US (Eurostat, 2008)

Table 6.2.1. Objective and subjective indicators describing the aspects of well-being

	Economic aspect	Human capital aspect	Social capital aspect	Emotional aspect
Nature of the component	Wealth and income distribution	Health and education	Institutions and networks	Absence of social exclusion
Objective indicators	Income, Gini index, ratio of income groups and income	Life expectancy, years of enrolment, education and health care costs	Governance quality	Life expectancy at birth, lack of unemployment
Subjective indicators	Satisfaction with the economic state of the country and one's living standard, assessment of sufficiency of income	Health assessment, satisfaction with access to education and health services	Confidence in people and institutions	Satisfaction with life, feeling of happiness

(Berger-Schmitt, Noll 2000: 8). Subjective assessments have been obtained from the data on the countries that were included in the third round (2006) of the European Social Survey. Therefore, the objective indicators for well-being were also collected for the same countries. Since in previous years, subjective indicators were collected for fewer countries, it is not possible to analyze the trends related to changes in assessments. In the analysis, we rely on the data collected for 24 European countries[32]. Since we are dealing with countries at different developmental levels (positions in the Human Development Index from two to seventy), which all belong to the European cultural space, it is possible to draw conclusions based on the results regarding the general tendencies of the connections between various aspects of well-being and economic development.

The subjective indicators of well-being can be divided into three groups: subjective assessments of individual aspects of well-being (economic state, health), assessments of satisfaction and feelings of happiness and confidence indicators reflecting social capital. In summary, the well-being aspects and indicators used in this analysis are shown in Table 6.2.1.

The Human Development Index, which essentially reflects the wealth and human capital aspects of well-being based on objective indicators, is the most popular generalized indicator for determining the developmental level of countries. Consequently, the correlation of the remaining aspects of well-being with this indicator can be analyzed and an answer sought to the question of whether subjective indicators of well-being are dependent on the level of development. Two factors often received attention in the analysis of well-being: the connection between well-being and income distribution and the connection between well-being and economic growth. Hereinafter, we will try to concentrate on examining these connections.

The analysis method was based on the generalization of indicators of subjective and objective well-being measured on various scales into a composite indicator for specific countries and the analysis of the mutual connections between these composite indicators. Thus, for instance, based on the results of the European Social Survey, it was possible to get generalized assessments regarding countries in answer to specific questions that were measured on various scales: the respondent had to provide an assessment for the question "How happy are you?" on a scale of 1–10, but support for the idea that "The government must do something to even out income differences between individuals", could be given on a scale of 1–4. In order to generalize these individual assessments measured on various scales, we combined them using factor analysis based on the principal components method. Thus, mutually connected combinations of individual variables were ascertained, to which we applied a name that generalizes its content. Thereafter, the component scores of these general indicators were used to compare the countries and to analyze the connections between the subjective and objective aspects of well-being. Component scores indicate the relative position of each country in the sample according to the described aspect; the average value of the component scores of one indicator is zero. Therefore, in the countries where the value of the component score is positive, the situation based on the aspect concerned is above average, and if the component score is negative, the situation is below average.

In order to guarantee better comparability of objective and subjective indicators, we also synthesized the objective indicators of well-being using the same method. Most of the objective indicators originate from the 2007 UN Human Development Report and most describe the situation in 2005. In some cases, the income distribution indicators date from earlier years, but they do not change very quickly. Economic growth in 2005 is examined as are the annual averages for 1990–2005.

The objective general indicators for the economic aspect of well-being became the wealth indicator, which described the variations between GDP and the GNP per capita by country, and the income distribution indicator, which described the variation in the relationship between the Gini coefficient and the income groups. The general *income distribution* indicator is constructed so that the evener the income distribution, the greater the value of the indicator.

In order to obtain the subjective general indicator for the economic aspect of well-being, a generalization was made of the satisfaction indicator for the country's economic situation and one's own living standard as well as an assessment of the sufficiency of one's income for coping with daily life. Generally indicators for wealth and satisfaction with the economic situation are closely related (correlation coefficient of 0.92[33]). Figure 6.2.1. shows the placement of the countries in the sample based on wealth and satisfaction with the economic situation.

A general tendency for a strong correlation is clearly visible. However, some interesting deviations can also be observed. Thus, there is much greater satisfaction with the economic situation in Estonia than in Slovakia or Hungary, which are more or less as wealthy. Satisfaction with the economic situation is at almost the same level in Germany and France, although objectively, they

[32] Sample included Austria, Belgium, Bulgaria, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, the Netherlands, Latvia, Norway, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine and the United Kingdom

[33] All the correlation coefficients presented here and hereinafter have a reliable probability level of 0.01

are much wealthier. An exception is the status of Slovenia, where wealth is below average, but satisfaction above average. In the figure, Denmark is distinguished by a higher level of satisfaction, while it is at the same level as the Netherlands and Austria if measured objectively based on wealth. If we look for reasons for differences in income distribution (see Figure 6.2.2.), in the case of Denmark and Slovenia, one can assume that the higher than average subjective assessment results from evener income distribution. However, in the case of Estonia, this assumption does not apply, because income distribution is less even than in Germany or France, not to mention Hungary and Slovakia.

From this figure, it is obvious that there is no clear correlation between income distribution and wealth nor was it possible to identify a reliable correlation between these indicators. For instance, Ireland and Switzerland, which are among the richest countries, rank lower than average in the sample with regard to the evenness of income distribution, while Bulgaria and Romania, which are among the poorest countries, rank above average as far as the evenness of income distribution is concerned. Apparently, it is not possible to unequivocally determine whether more or less even income distribution is good or bad in and of itself. However, whether people perceive uneven distribution to be a problem can be determined. It turned out that the subjective assessment for income distribution in our sample as a whole was not related to the objective indicator, but there are correlations in the groups of countries at different levels of prosperity. As expected, the question, "Should the country do something to even out the differences in income levels?," tended to be answered in the affirmative by the residents of poor countries (correlation with wealth –0.741).

A general indicator that associates the average life span with the indicators for public sector education and health care costs has been used as the objective indicator for the human capital aspect of well-being. The indicator is quite closely related to the general research and development indicator (correlation coefficient of 0.60), which we obtained as a result of generalizing the initial indicators describing patents, research and development costs and the number of scientific workers. Thereby, this indicator provides a generalized picture of the creation and nature of human capital in the country. In order to obtain a subjective assessment of health and education, the satisfaction assessments from the European Social Survey were combined with the assessments for the availability of education and health care services and the state of one's own health. The obtained general indicator was also related to the respondent's level of formal education (years of school enrolment) (correlation coefficient of 0.58).

The mutual correlation between the general objective and subjective indicators for the human capital aspect of well-being was 0.76, and therefore, the correlation is weaker than between the various indicators of the wealth aspect of well-being. The distribution of countries based on the general objective and subjective indicators are shown in Figure 6.2.3. We can see that the placement of the countries is quite logical. Based on both the objective situation and subjective assessments, the Nordic countries are at the forefront, while both indicators are low in Russia and Ukraine, as well as Bulgaria and Romania.

Figure 6.2.1. Relationship between objective and subjective assessments in the economic aspect of well-being

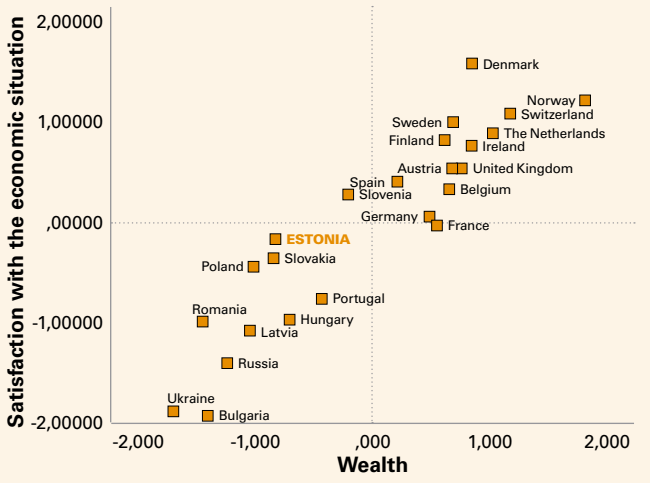


Figure 6.2.2. Relationship between income distribution and satisfaction with the economic situation

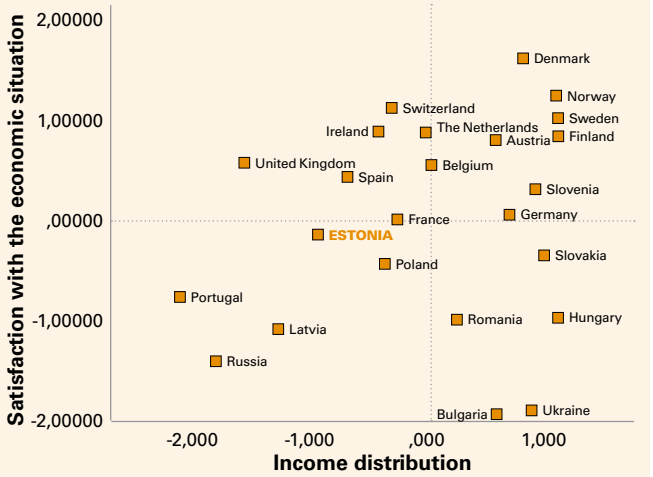


Figure 6.2.3. Relationship between human capital and satisfaction with health and education

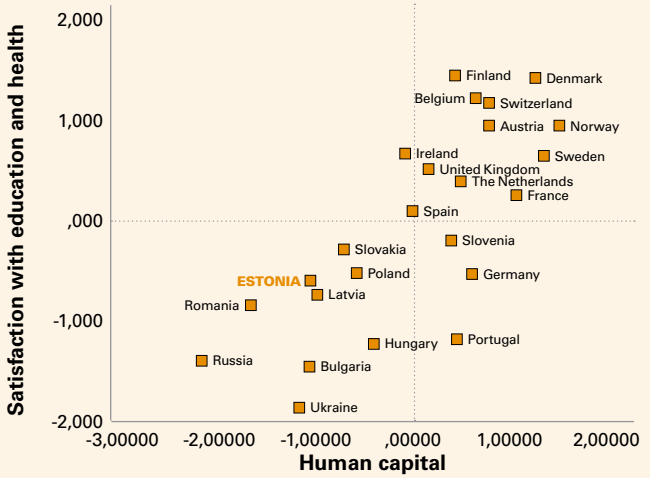


Figure 6.2.4. Relationship between the objective and subjective indicators of social capital

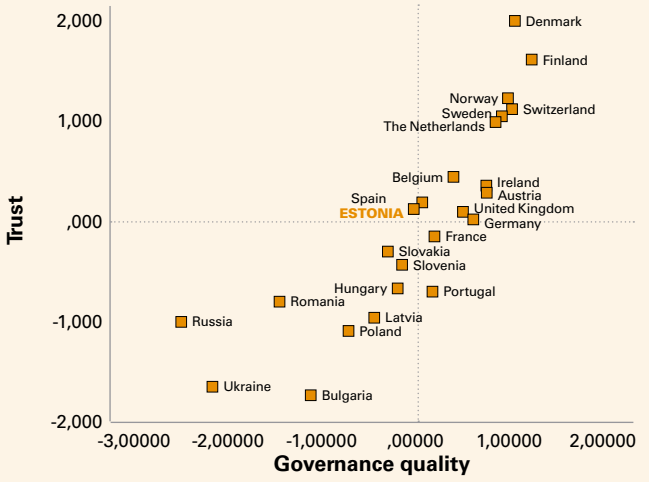
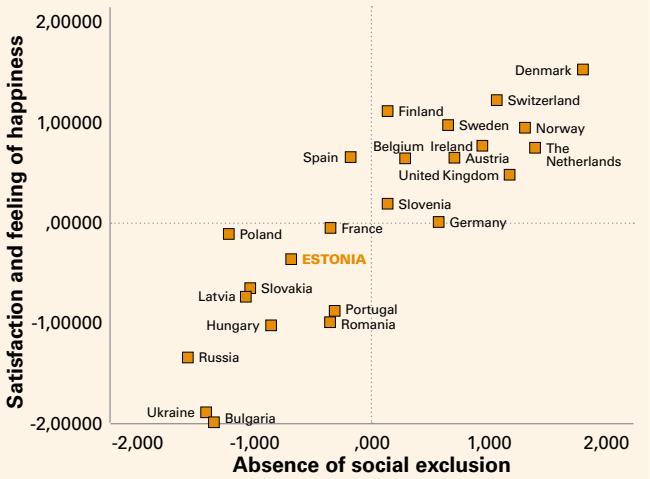


Figure 6.2.5. Absence of social exclusion, satisfaction and feeling of happiness



In some countries with similar objective situations, the difference in subjective assessments is quite large. For instance, in Estonia, there is much greater satisfaction with the human capital aspect of well-being than in Bulgaria and Ukraine, which are in more or less the same situation. Estonia's objective indicator is reduced by short average life expectancy (for more about this, see Chapters 1 and 2 of this report), but people do not think about this when assessing the state of their own health. The difference of the positions of Finland and Portugal are especially drastic, where the subjective assessment given to similar objective situations differs by more than two and a half standard deviations. One reason for this may be that, according to the European Social Survey, the length of formal education in Portugal is only 7.4 years, which is the minimal value for the indicator and significantly below the average (12 years). Therefore, the questionnaire's respondents have apparently perceived problems with the availability of education.

Social capital indicators have not been used very often when analyzing well-being. At the same time, this is a significant aspect that definitely affects people's feelings and their assessment of their situation. In this treatment, the government organization indicator has been used as the objective measure of social capital, which was obtained as a result of a study conducted by the World Bank. In this study, the following six aspects for describing governance were collected and synthesized into a general indicator (Kaufmann et al, 2007): 1) Voice and Accountability measure the citizens' ability to express their opinions, participate in elections and form associations; 2) Political Stability and Absence of Violence measure the perceived ability of the government to cope with destabilizing groups; 3) Government Effectiveness expresses the availability of services and confidence that the state will be able to fulfil its obligations; 4) Regulatory Quality measures the capacity of the government to work out and implement regulations that enable the development of the private sector; 5) Rule of Law indicates to what extent people are willing to comply with established rules, how well contracts are adhered to, and also reflects the activities of the police and courts; 6) Control of Corruption expresses the power of public authority to inhibit corruption and the extent to which public power is used for personal interests.

The aforementioned indicators describe the quality of the activities of the institutions that organize societal life. Therefore, they can be interpreted as objective indicators of social capital at the society's macro level.

The generally recognized output of social capital is trust. In order to obtain the general confidence indicator, we synthesized the assessment taken from the European Social Survey regarding other people, parliaments, laws, politicians and political parties. The value of the coefficient showing the correlation between the objective and subjective aspects of social capital was 0.85. The placement of countries based on these two indicators is shown in Figure 6.2.4.

The general picture is already familiar: Denmark and Finland are distinguished by positive assessments, and those lagging behind include Russia, Ukraine, Romania, and Bulgaria. One can also note that in the countries with below-average indicators, governmental organization varies to a greater extent, and in countries with above-average indicators, confidence fluctuates to a greater degree. Estonia is closer to the average of the sample than in the previous figure. Heretofore, both of Estonia's indicators were below the sample average, whereas the confidence indicator was slightly above average.

One circumstance that amplifies the subjective perception of well-being is the absence of social exclusion (connection with society). Social cohesion helps to form social capital and enables one to collect human capital and use it effectively. It is quite difficult to find objective indicators to measure cohesion. Generally, poverty and long-term unemployment are considered to be indicators that at least indirectly reflect social exclusion. Unfortunately, identical poverty and long-term unemployment indicators did not exist for all the countries in our sample. Therefore in order to describe alienation, we chose the ratio of unemployment in the labour force (an indirect indicator of the opportunity to use human capital), the probability that a newborn's prospective life span is less than 60 years (indirect indicator of the opportunity to create human capital) and added the assessment that the state should do some-

thing to even out income differences (indirect indicator of prevailing inequality). Hereinafter, we will use the component scores for social exclusion with the opposite sign as the cohesion indicator.

To obtain the generalized indicator of the emotional component of well-being, we combined the assessments of life satisfaction and the feeling of happiness. The correlation coefficient for the indicators for the emotional aspect of well-being in 0.86 and the placement of the countries based on their indicators is shown in Figure 6.2.5.

Since the cohesion indicator that we have constructed is not perfect, the picture is better than expected. Portugal, which already stood out in the previous figures with its lower positions compared to the other "old" European Union member states, also ranks below average according to both these indicators. However, we see relatively large differences in objective and subjective assessments, especially among the countries that lag behind.

Finally, we combined the aforementioned indicators for the various aspects of well-being into general objective and subjective indicators. A general objective indicator for well-being was obtained by combining the health, human capital, government organization and cohesion aspects. To obtain a general subjective indicator for well-being, we combined the following subject components of subjective well-being into one composite indicator: the indicators for satisfaction with the economic situation, satisfaction with education and health, confidence as well as life satisfaction and a feeling of happiness. The mutual correlations of the indicators describing the general aspects of well-being were all over 0.73.

Since the most popular indicator for the evaluation of a country's developmental level is the Human Development Index, we checked the correlation of the aforementioned objective and subjective indicators with this indicator (see Table 6.2.2.).

Therefore, the Human Development Index also essentially reflects well-being. Based on the methodology that was constructed, it can be expected that the correlation is strong with the objective indicator, and the correlation with the indicator that reflects a subjective perception of well-being is also very strong.

As a result of the cluster analysis made on the basis of the countries' individual aspects of objective and subjective well-being, two groups of countries were differentiated. The first group included 14 countries that were better developed based on both objective and subjective well-being and 10 countries with lower levels of development (see Figure 6.2.6.). The figure shows the placement of the countries based on the general objective and subjective indicators for well-being, whereas the countries that belong to the other cluster are written in capital letters. As we can see, as a rule, the countries with lower objective well-being also have lower subjective indicators, while higher objective indicators of well-being are related to higher subjective well-being. Yet, among both groups we can see fluctuations between countries. In the cluster of countries with higher levels of well-being, based on the assessments of objective indicators, Norway is in a better position and Slovenia and Spain are in relatively worse positions. However, the subjective perception of well-being is higher in Denmark and lower in Germany. In the group of countries with lower well-being levels, the value of the objective indicator is highest in Portugal. However, Russia stands out for its very low level of objective well-being, but based on the subjective indicator, it lies almost in the middle of its group. Subjectively, of the people who filled out the European Social Survey questionnaire, those in Ukraine gave their well-being the lowest assessment, while those in Estonia the highest. As shown in the figure, the subjective assessment of well-being in Estonia is significantly higher than in Hungary, which has an objective indicator similar to Estonia. At the same time, Estonia's subjective well-being level is approximately as high as in Germany, despite the great difference in the value of the general objective indicators of these two countries.

It is interesting to analyze the ranking of the countries based on the differences in their subjective and objective assessments (Figure 6.2.7.). The countries above the median line in Figure 6.2.7. are the ones where the subjective perception of well-being is higher than the objective indicators. The countries below the line are the ones where satisfaction with well-being is lower than one might assume from the objective well-being indicators (let's recall that the subjective assessment of well-being originate from the 2006 European Social Survey). The placement of the countries starts from the ones with the greatest satisfaction. Some of the results are quite surprising and hard to justify.

Table 6.2.2. Relationship between the general objective and subjective well-being indicators with the Human Development Index

Objective indicators		Subjective indicators	
Wealth	0.944	**Satisfaction with the economic situation**	0.901
Human capital	0.895	**Satisfaction with health and education**	0.850
Governance quality	0.907	**Trust in people and institutions**	0.804
Absence of social exclusion	0.829	**Satisfaction and feeling of happiness**	0.887
General objective indicator of well-being	0.947	**General subjective indicator of well-being**	0.881

Figure 6.2.6. Relationship between general objective and subjective indicators for well-being

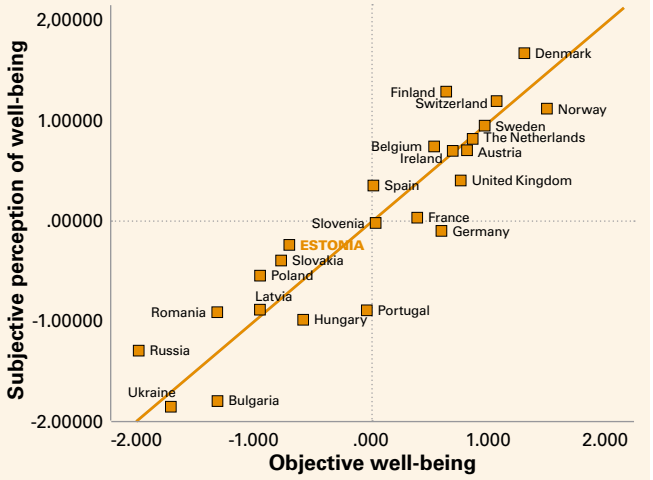
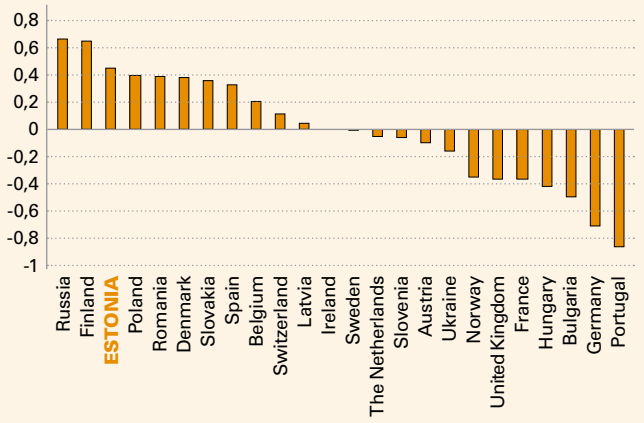


Figure 6.2.7. Difference between the values of the subjective and objective indicators of well-being



The greatest overvaluation of subjective well-being with respect to objective indicators exists in Russia. At the same time in Ukraine, which has a similar historical and cultural background, the indicators are much closer. Another interesting pair of countries is Bulgaria and Romania, where the situation is overvalued in Romania by a similar amount as it is undervalued in Bulgaria. The greatest dissatisfaction is expressed in Germany and Portugal. And why are people relatively satisfied with their life in Slovakia, but not so much in Slovenia, although Slovenia lies among the countries with the highest level of well-being? Apparently, we cannot answer these questions based only on the indicators included in the analysis, but more complicated cultural and social factors must be taken into consideration. The fact that satisfaction is always based on expectations must be taken into account. It can be said that in the highly developed countries with lower levels of satisfaction, such as Germany, France and England, expectations are greater for historical or cultural reasons.

However, if we generally examine how the composite indicator of the objective side of well-being (including the country's wealth, health, education, institutional organization and lack of alienation) is related to people's satisfaction and feeling of happiness, then this correlation appears only in the group of countries with a higher level of well-being (correlations coefficient 0.915), while in less-developed countries, satisfaction tends to be related not to the achieved level of well-being, but rather to the speed of economic growth.

Estonia's relatively high subjective assessments of well-being compared to the actual situation are probably impacted by rapid economic development and a discernible improvement in the standard of living compared to the recent past. This is an interim situation. Compared to the other transition countries, Estonia has achieved a relatively high level, which is to some extent comparable to the less-developed "old" European Union member states. However, in the case of Estonia, two points provoke interest: firstly, the comparison of the self-assessment of the society with the level of institutional development and its assessment; and secondly, how Estonia's subjective level of well-being will be affected by the fact that we are moving from the league of Europe's less-developed countries into the group of more-developed countries, where the general expectation level is more demanding and assessments are more affected by current objective institutional indicators than by comparisons with the past.

Based on an assessment of wealth, we still lag behind the "old" EU member states, at least in the context of the statistical bases used in this chapter, as well as behind Slovenia and Hungary (the Czech Republic was not included in the sample of countries under examination); we barely outdistanced Slovakia, and are somewhat ahead of Poland, Latvia, Russia and the other countries of the former Soviet Union. However, by taking subjective satisfaction with the economic situation as the basis, we advance a few places in the ranking, overtaking Hungary and Portugal. Based on the human capital indicators, we outpace only Romania and Russia. The primary reason for the poor position is our short average life span. At the same time, our ranking based on the assessment of health and education is higher than that based on objective indicators. We are almost as satisfied with our health and education as the Germans.

Estonia stands out for its high assessments of governmental organization, which are the best in the transition countries. Surprisingly high is the generalized confidence indicator, based on which we outpace Germany, France and England. As governmental organization is interpreted as an indicator of the objective preconditions for social capital at the macro level and confidence as the subjective indicator of social capital, one could draw the conclusion that Estonia has already exceeded the shortage of social capital inherent to transition countries and we are among the countries with a balanced and trustworthy organization of life that is characteristic of the Nordic countries. There are arguments both for believing this and for doubting it.

Estonia's ranking based on the assessments of general satisfaction and the feeling of happiness is approximately the same as that based on wealth. In other words, our much lower indicators for the quality of life – poor health and short life expectancy – have not affected our feeling of happiness or satisfaction to date. Or our belief in ourselves, our own prospects and institutional capacities has helped to eliminate the impact of these negative factors. The question is whether this optimism and positive attitude will survive the current period of economic recession.

References

1. Berger-Schmitt, R., Noll, H. H. (2000) Conceptual Framework and Structure of a European System of Social Indicators – EuReporting Working Paper No. 9
2. European Social Survey [http://ess.nsd.uib.no/index.jsp?year=2007] 30.09.2008
3. Human Development Report 2007/2008 (2007) United Nations
4. Kaufmann, D., Kraay, A., Mastruzzi, M. (2007) Governance Matters VI: Aggregate and Individual Governance Indicators 1996–2006, World Bank Policy Research Working Paper 4280.

6.3. Relationships between economic and social policy

The three whales of economic policy

We will start this subchapter by introducing some principles of economic policy, by describing the importance of the institutions that link and direct participants in the economy. We will continue with social policies, thereafter we will present a matrix of governance correlations, and end with some conclusions about Estonia. In this case, we are dealing with social policy in the broader sense, which includes the entire social sphere. In this approach, education and health care are added to social protection and security. Materials from the Commission on Growth and Development, which was formed under the auspices of the World Bank, have been used as background for the following text, which includes a rather broad attempt to encompass growth and development correlations and influence factors (The Growth Report, 2008).

The first and most important starting point for economic policy is the fact that the economy is based on market mechanisms that are guided by price signals, decentralized decision-making, and the preferences of consumers directed from the demand side to the supply side. The functioning of markets is framed by the property rights, which guarantee companies and entrepreneurs asset rights that are sufficient for making investments to increase the assets and use them in the best way.

This is the general starting point for the shaping of economic policy that needs to be supplemented and regulated. The general reasoning for the latter is that economic activity itself may not suffice for the creation of the information necessary for realizing property rights or for the functioning of the markets. Therefore, the need develops for economic and other policies.

Another prerequisite is related to the fact that the economic activities of all countries are more or less internationally open. Besides everything else, this also means that most knowledge and skills, including technological ones, are usually learned from others rather than being the result of invention. The widespread transfer of knowledge and technology from other countries has occurred in all countries with rapid and long-term economic growth. Moreover, knowledge includes both abstract formulas and practical applications, such as skills necessary for traffic management or for the construction of multi-level intersections. Moreover, the social organization side is at least as important as technical solutions.

The third general condition is macroeconomic stability, the internal aspect of which is related to price stability and the external aspect to the stabilization of exchange rates, currency convertibility, balance of payments and currency reserves. The most universal consideration of stabilization is related to the uncertainty and risk of the economic environment. High inflation rates, as well as disturbances in the cash and capital flows related to other countries reduce the reliability of market signals, which has a critical impact on long-term investment decisions. The stabilization aspect and its impact on economic activity are often expressed as a restriction on social costs. The requirements for a balanced budget, or for a limited deficit (e.g. the 3% of GDP limitation, which is a condition for acceding to the European Monetary Union), are often a significant restriction on social costs, especially in the case of costs financed from the budget.

Rules and economic policy

During the past few years, theories on economic growth have placed great importance on the impact of institutions directing the functioning of markets. In economics, Douglas North's approach, according to which institutions comprise formal rules (laws and other regulations), informal rules, (standards and practices), and enforcement mechanisms for rules (e.g. courts in the case of laws, public condemnation and alienation in the case of the non-fulfilment of informal rules) is widely accepted. The immaturity of institutions, e.g. the improper observance of good business practices, is the mark of an immature society.

The insufficient performance of institutions manifests a negative impact on economic growth. A weakness of regulations, practices and their enforcement mechanisms increases uncertainty, which is expressed, for instance, by insufficient protection for investments or intellectual property, uncertainty about the impartiality of economic policy decisions, and an assumption of corruption in order to gain access to the infrastructure, real estate, and state procurements of the given country. The ratio of the black market in the country's economy and the ability of the country's institutions to curb this black market are also important.

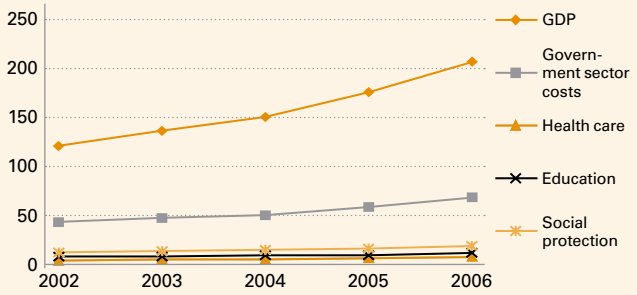
However, institutions are not absolute or definite, but rather develop along with economic conditions. For instance, accounting precision improves as the credit market develops. Institutional development is related to human and social capital, their performance assumes an accumulation of knowledge, learning and adaptation to economic needs. The performance of institutions is directly impacted by social capital, the strength and operation of connections between people.

Human capital and social capital and the policies impacting them

To form the factors related to the social side and assess their impact on economic activities and well-being, we used the concepts of human and social capital. Human capital is defined as the education, health and skills of a country or some other body of humans. The definition of social capital includes formal and informal networks, general confidence, specific confidence in institutions and the impact of standards.

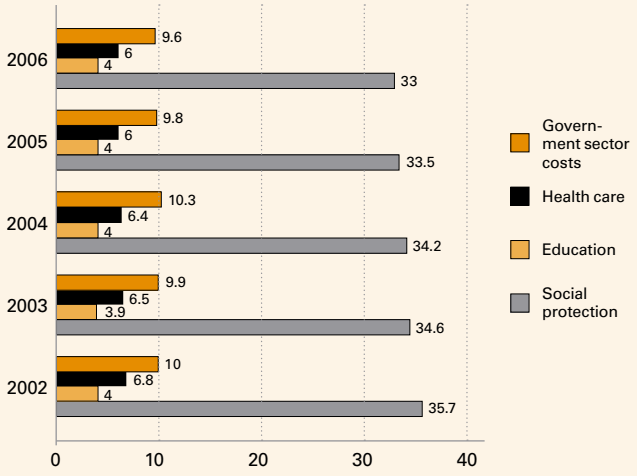
These concepts expand a strictly economic treatment of capital, by highlighting the impact of social factors on

Figure 6.3.1. GDP, government sector costs, billions of EEK



Source: Estonian Statistical Yearbook, 2007, 2008

Figure 6.3.2. Ratio of government costs, social protection, education and health care costs of GDP, %



Source: Estonian Statistical Yearbook, 2007, 2008

indicators that primarily characterize economic performance, such as GDP or economic growth.

By utilizing the concepts of human and social capital, on the one hand, it is possible to correlate the functioning of the economic and social spheres, and on the other hand, to provide an opportunity to analyze the policies directed at these fields of activity. The majority of social scientists maintain that investments into human capital – into health, knowledge and skills, and the policies directed at them – are just as important as investments into physical capital. At the same time, this statement is far from self-evident, because it is not simple to statistically validate this connection (El Erian and Spence, 2008, p. 37): it is easier to precisely assess the input that shapes human or social capital (education costs, years of school enrolment) than the outputs achieved thereby (ability to learn, receptivity to innovations, socialization, capacity for empathy, etc.). It is also important to consider that for the achievement of socially desirable results (for instance, well-being) the supply side does not suffice, demand is also required.[34]

Nevertheless, social services are often approached primarily from the supply side. They are treated as something that is unconditionally beneficial. The conditions and limitations predicated on the economic side are often seen as unpleasant restrictions that inhibit useful expenditures that promote societal development. At the same time, we must consider that the removal of these restrictions and the limitless expansion of social expenditures have a destabilizing effect on the economic environment that increases uncertainty, reduces investments and ultimately, reduces the future tax base from which social costs are financed. Since institutional activities, such as guaranteeing lawmaking, the judicial system and public procurement, are financed, to a great extent, from the budget, institutional development is directed in relation to the tax burden. Through taxes, the state guarantees resources to assure institutional efficiency. Therefore, the sufficiency of the tax burden is measured by the effective performance of institutions, which is not directly related to any formal percentage of the GDP. At the same time, the shortage of institutional resources also becomes a serious problem when there are insufficient resources for the protection of health and ownership, for the effective and speedy work of the courts, and for guaranteeing the security of the country. In the case of institutions, the risk of overregulation in sensitive fields, such as the labour market, must also be taken into account.

As we saw in the previous subchapter, a disparity between a relatively low level of the quality of life and a relatively high subjective indicator of well-being is typical of Estonia. For a long time, it has been typical of Estonia that this disparity is objectively expressed by a weak connection between economic growth and an increase in social costs (see Figure 6.3.1.).

Under conditions of rapid economic growth, in which GDP in current prices increased from 121.4 billion EEK in 2002 to 207.1 billion EEK in 2006, government costs have also increased, including the nominal costs for health care, education and social protection. At the same time, the given cost increase has been much more modest than the economic growth, which shows that their ratio of GDP decreased (see Figure 6.3.2.). Government costs decreased as a ratio of GDP from 35.7% in 2002 to 33% in 2006, education costs from 6.8% to 6.0%, and social protection costs from 10.0% to 9.6%. Health care costs remained at the same relatively low level, constituting 4% of GDP. Therefore, costs in the social field did increase, but less than GDP on the whole. This also points to the fact that a balanced budget was maintained and a surplus achieved during this period due to the relative restriction of costs in the social sphere. Keeping in mind the importance of workers' education and health in the creation of necessary human capital in the long run, the relatively significant reduction in the percentage of educa-

[34] India is one of the contradictions of this type that are treated in papers on economic growth theories. World-class engineers and scientists have been educated there for decades, although its impact on economic development has been very modest. The reason was that domestic industry did not create sufficient demand for the use of this human capital and a great deal of the brain power left India. A positive impact developed with the creation of a global software industry, and the demand for the skills that resulted from this. This caused a broader impact on the entire service sector, especially though demand intermediated by the Internet. The impact of human capital on economic growth and well-being needed an impulse based on demand in addition to the supply; see *The Growth Report: Strategies for Sustained Growth and Inclusive Development* (2008).

tion costs and essentially freezing health care costs have a negative impact on developmental prospects and the economy (see a detailed treatment thereof in Chapter 2 of this report).

Education policies and the economy

Education is of critical importance in the creation of human capital. It provides people with the opportunity for self-development and makes all other resources available to them that society uses to support various groups. The educational system has a strong impact on the creation of standards and value judgements, which are the basis for cohesion in the economic and social activities of a society with varied ethnic and religious backgrounds. Therefore, education has a much broader importance than just the acquisition of knowledge and skills.

The indicators of various countries confirm the importance of the state's contribution to the financing of education. According to economic theory, the reason is positive external influences, according to which social income exceeds private income and the benefit to society is greater than the amount received from the educational attainments of a single individual. The second circumstance is related to the correlation between income distribution and the availability of education. In the case of education services, from an availability standpoint, a restrictive condition may be the lack of guarantees that are necessary for the financing of education with credit. A more equal distribution of assets increases the number of people for whom loans provide availability to education. Since the educational services market presents serious difficulties, the greater future reward that accompanies the acquisition of education is an insufficient reason for acquiring it.

In the case of the connection between educational policy choices and economic policies, there are significant differences between educational levels. In the case of primary and basic education, which includes everyone's legal right to education and the state's obligation to provide it, the socialization of young people is as important as the acquisition of knowledge. Without education, no one has the right to demand work that assumes competence and the corresponding wages. From the viewpoint of income distribution, primary and secondary education financed by the state is progressive, since statistically lower-income families have slightly more children than those with higher incomes. If we assume that the financing per student is the same for everyone, then there are slightly more children from lower income families whose education is supported by the state. As an absolute amount, the same-size contribution received from governmental financing of education has greater weight in the budgets of lower-income families than in the budgets of wealthier families. These are very strong arguments for the financing of primary and secondary education from national or local budgets.

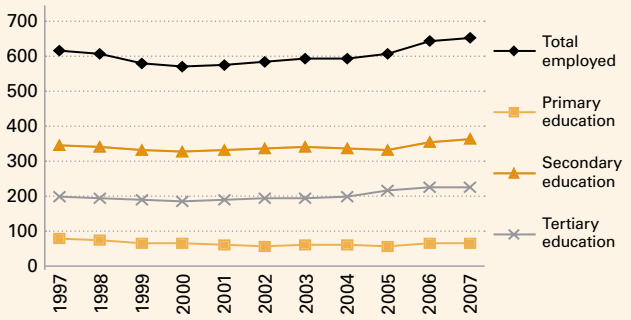
The situation in higher education is more diverse in the sense that one must consider both individual- and society-based circumstances, such as which is more important – the benefit to the individual with a better education in the form of a higher position or higher salary or the benefit to society based on the greater contribution that better educated people can be expected to make to the wealth of the society? In the first case, the question develops – why should people not partially or totally pay for their education? One counterargument is related to the income that is not earned during the study period. However, from the perspective of an entire life span, the amount of income unearned during the study period is small compared to the additional income that may be earned as a result of education, which would not be earned if the person had a job that does not require higher education. This fact supports the argument that people themselves should contribute, by covering at least some of the costs related to the acquisition of higher education. To avoid or reduce working while studying, one's contribution should probably be made with credit and combined with governmental support either through the financing of student places (as currently) or by some other means.

Estonia is currently implementing an education financing model whereby the state charges higher education institutions with the task of providing a certain number of graduates by speciality and educational level, while the higher education schools also have the opportunity to admit students at their discretion to non-budgetary places. This provides young people with more opportunities for choosing specialties and higher education institutions, but this is accompanied by a large number of questions and conflicts of interest. Without breaking these down in detail, we should highlight the issue most often presented by student organizations regarding social guarantees during studies, which belong to the field of social assistance. To date, this issue has stood apart from issues related to the direct financing of higher education, although it is definitely an estimable circumstance when dealing with social guarantees generally. In this field, under conditions of low taxes and limited budgetary resources, the traditional family-centred aspect has forcefully predominated and the indirect costs related to the acquisition of education have not been considered at all.

A topic of political discussion that is constantly on the table is the relationship between the state-commission education and labour market needs. There are many sides to this issue, the first is definitely the fact that in Estonia, as elsewhere in the world, the number of students studying "soft" subjects has increased as the freedom of choice has expanded, while the interest in engineering and natural sciences has not increased to the same degree, but has even decreased. At the same time, the state procurement has generally taken the disparity between demand and market supply into account. For instance, in the business and legal fields, the state procurement covers only a small part of the higher-education financing.

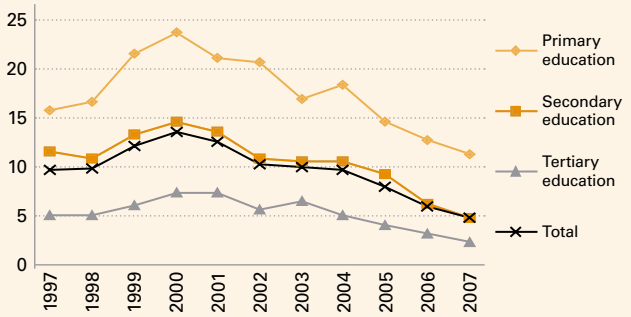
One of the indicators of the economic effectiveness of education is the ratio of employed people with different educational levels (see Figure 6.3.3.). Moreover, special attention should be paid to the correlations between the levels of education and the probability of becoming unemployed. Employment and unemployment indicators confirm that compared to unemployed people with tertiary education, there are twice as many with secondary education and three times as many with primary education (see Figure 6.3.4.).

Figure 6.3.3. Employed 15–74-year-olds[35]



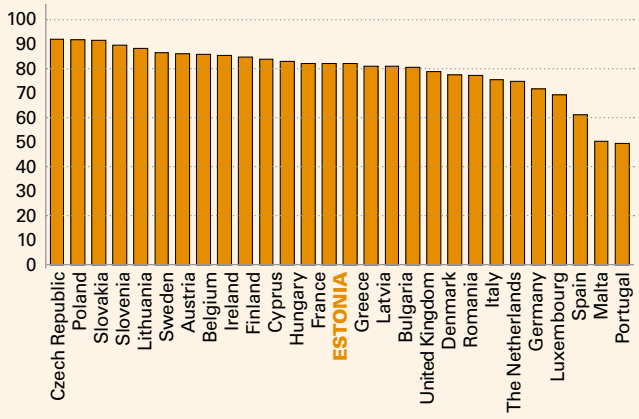
Source: Estonian Statistical Yearbook, 2004, p. 208, 2007, p. 219, 2008, p. 188.

Figure 6.3.4. Unemployment among various education levels



Source: Estonian Statistical Yearbook, 2004, p. 208, 2007, p. 219, 2008, p. 188.

Figure 6.3.5. 25–64-year-old population with at least secondary education in the European Union



Source: Social Life in Figures, 2007, p. 13.

The conformity of education with the needs of the labour market can be understood as setting restrictions on the supply of "less necessary" professions, by referring to possible unemployment. However, one must recognize that actual demand is quite a good indicator of the direction of the market and people are usually quite sensible, at least with regard to recognizing great risks, such as studying useless professions. The great difficulty of predicting labour market trends increases the probability of errors, especially when economic cycles are changing. At the same time, there is no guarantee that planning jobs and replacing the market with the political preferences of a "smart" government would be more successful in preventing these errors. All the more because, in the case of a small open economy, job-related decisions are often made at the headquarters of international companies located outside Estonia.

Another important topic in the given field is the relationship between academic and vocational education. A more direct connection with enterprise exists in the case of vocational education than in the case of academic education. However, one must keep in mind that this concerns current enterprise, but sufficient information about enterprise in Estonia in ten years is unavailable. However, one can ascertain that the connection between vocational education and enterprise has significantly improved during the last ten years. Companies have invested in the infrastructure of vocational educational institutions, the connection between learning and practical training has intensified, and the financial resources of schools and companies have increased significantly. EU funds have played an important role in supporting these types of connections.

According to the theories of economic growth, a positive correlation exists between more comprehensive and better education and economic modernization. Educated workers make the implementation of more complicated technology possible in order to develop the economic structure and make it more competitive. When the service economy started to develop, it was determined that employment would increase in the occupations that require a higher level of education (Bell, 1975). The increase of Estonia's educational level has also promoted changes in the economic structure and thereby increased the incomes of people with higher education and improved their position in the labour market.

Compared to the other European Union member states (Figure 6.3.5.), Estonia's educational level indicators are somewhat higher than average. In Estonia in 2006, the ratio of those with secondary education among the 25–64-year-old population was 82%, while the EU average was 77.8%. The number of people among 25–29-year-olds with higher education was significantly higher than the European Union average, 37.7% and 28% respectively. At the same time, there are great differences between the determination, quality and resource allocation of higher education by countries. This makes the comparability of formal indicators difficult. The ratio of people with at least secondary education is a slightly better general indicator for such comparisons.

[35] Estonia's educational levels: primary level or lowest level – without elementary education, elementary education, basic education, vocational education for young people without basic education; secondary education – vocational education based on basic education, general secondary education, secondary vocational education based on basic education, secondary specialized education based on basic education; tertiary education – secondary specialized education based on secondary education, higher education, master's and doctoral degrees.

Health care financing

Health and health care are treated as a right in both the Estonian Constitution, which speaks of everyone's right to health protection (Estonia…, 1992), and in the European Union Charter of Fundamental Rights, which defines preventive health care and treatment as a right based on the terms of domestic legislation and practices, (European Union Charter of Fundamental Rights, 2004). This right is defined by the general objectives of the health care system, which include the good health of the population, satisfaction with the system and protection against financial risks (The World Health Report, 2000).

Estonia, like the majority EU countries, implements the principle of national health care insurance, whereby a third party (the Health Insurance Fund) provides the population with financial protection for the use of services. The money is collected as a social tax, the insurance is compulsory, the insurance coverage is universal and availability depends on need. These principles generally apply although various countries may organize the financing from general taxation, from income taxes, or from compulsory private insurance (Aaviksoo, Paat, 2007).

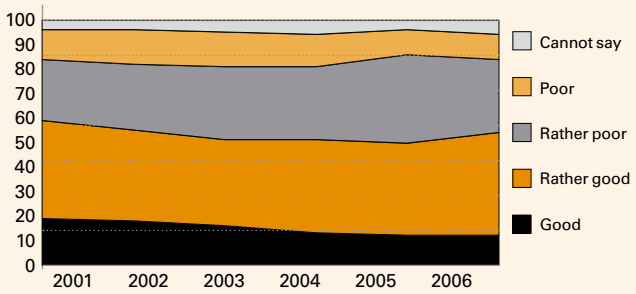
In addition to national health insurance and the national budget, which provide financing for the treatment costs of uninsured persons, financial coverage is also provided by private insurance. This component is currently marginal in Estonia.

The other important aspect of health care related to financial resources is the distribution of costs or the rate of the patients' cost-sharing. The largest portion of health care costs was covered by the Health Insurance Fund (in 2004, 66%, and the national budget 8.5%) and the self-financed portion was 21% (Aaviksoo, Paat, 2007). Moreover, the patients' cost-sharing has continually increased; in 1999 it was only 14%. The increase of health care costs in budgets is also confirmed by household surveys (Household Budget Survey, 2006). This is primarily related to paying for medicine, although in 2003 and 2004, visit and in-patient fees were established and the procedure for paying for adult dental care was changed (Aaviksoo, Paat, 2007).

Due higher health insurance tax revenues, the quantity of services financed by the Health Insurance Fund has also increased although, as mentioned above, the patients' contribution has increased even more. Health insurance coverage has improved, although in 2007, there were still 60 thousand uninsured persons in Estonia. The waiting period for out-patient visits to specialists has constantly increased. However, assessments for the availability of medical treatment have not significantly worsened during the last few years (Aaviksoo, Paat, 2007).

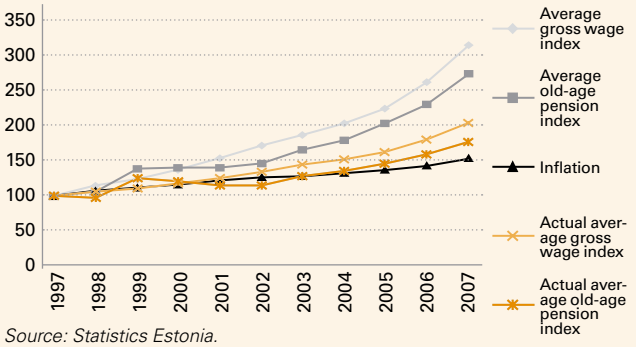
On the one hand, the situation in the health care system reflects the state of country's well-being, while on the other hand it affects what happens in the economy. Statistics confirm that the greater the role of market relations in this field, the greater the increase in health care cost as related to the increase in the standard of living, both absolutely as well as in relationship to GDP. At the same time, this does not guarantee equal access to health care services. The US is a typical example of this (Paying for Healthcare, 2004).

Figure 6.3.6. Assessment of the availability of medical services, 2001–2006



Source: Aaviksoo, A., G. Paat (2007).

Figure 6.3.7. Figure 6.3.7. Average gross wages, old-age pensions and inflation, 1997=100%



Source: Statistics Estonia.

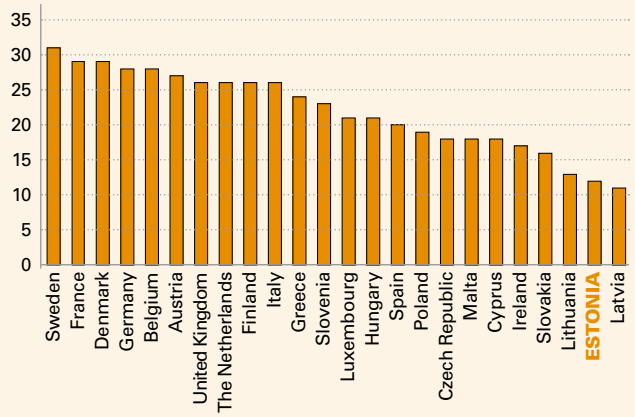
The financing of the Estonian health care system is designed according to a European model, whereby the basic part is covered by health insurance tax, and the service side is standardized to a great extent. This system, which has functioned with only small problems, has been implemented under conditions of certain economic growth. The expansion of the tax base has guaranteed the increasing flow of resources and has smoothed the faults of the system. Economic recession, the reduction in tax revenues and possible deficit of services will increase dissatisfaction with the system and will create pressure for the expansion of private insurance.

Social insurance and the economy

Expenditures on social insurance include pensions and pension supplements financed from social tax revenues and the national budget, national family and parental benefits, social benefits for disabled people, and other benefits paid to families (for instance funeral benefits, student loan write-offs). The largest ratio of these costs is pensions, which constituted 6% of GDP in 2007. In the same year, national family benefits constitute 1.1% of GDP, including parental benefits totalling 0.5% of GDP.

The average old-age pension has increased 2.7 times between 1997 and 2007, while actual purchasing power has only increased 78.7%, since a portion of the nominal pension increase has been eaten away by inflation. During the same period, average gross wages increased 3.2 times and the actual wage increase was 106% (2.06 times). The

Figure 6.3.8. Percentage of social protection costs in European Union countries in 2005, % of GDP



Source: Statistics Estonia.

average pension was 33% of average wages, and this ratio has decreased since wages have increased faster than pensions (Statistics… 2008, p. 162).

The sufficiency of resources for social insurance are guaranteed by the social tax rate (more exactly the pension insurance portion), the number of those covered by social insurance, employment, and workers' wages. The disbursement conditions (incl. indexing), the number of pensioners and the retirement age that affects the latter are all important from the standpoint of the system's disbursements and the size of pensions.

In Estonia, a three-pillar pension system is in use, in which pillar I is solidarity-based, which means that today's pensions are financed by today's social taxes; pillar II is pre-financed in principle by social tax, the resources are invested and the payments depend on both the deposits and the success of the investments; and pillar III is pre-financed and financed by voluntary contributions. Although the pre-financing system makes it possible to use money and capital market opportunities to finance the pension system, this method does not resolve the problems that develop as a result of the ageing of the population or other reasons. This method is a means of spreading risks, which improves the possibilities for balancing the system.

Decisions regarding the pension system have diverse correlations with economic policies. Firstly, the average pension and its trend compared to the average wage and inflation is a politically sensitive issue, because it can be used as a basis for drawing conclusions about the government's attitude toward a population group that constitutes a large portion of the electorate. Secondly, all decisions affecting the financial balance of the pension system have a great impact on the economy as a whole. In case of a shortage of financial resources, revenues can be increased by increasing social tax, while one possibility for reducing disbursements is to increase the retirement age, which decreases the number of pensioners. Taking into account the large percentage of the social tax in the general tax burden and the relatively short life expectancy, implementing either decision is political almost impossible. At the same time, this field will not be left untouched by the deepening of the financial and economic crisis.

Viewed from the economic demand side, however, pension system disbursements are actually earned back because the majority of them are spent on consumption, where primarily domestic products and services (food products, utilities and transport costs) are consumed.

Subsequently, we will compare Estonia's social protection costs with the corresponding data from the European Union (see Figure 6.3.8.), where this includes all the resources that are allocated for the purpose of easing the ability of individuals or households to cope in case of a partial or total loss of income. In this comparison, Estonia's indicator is next to last, ahead only of Latvia, and lagging significantly behind the European Union average. In the European Union, social benefits constituted 26.2% of GDP on average, while it was only 12.3% in Estonia. We can see a trend in social protection, whereby the percentage of GDP corresponds to the level of GDP, i.e. countries with higher standards of living also have comparatively better social protection. The comparative levels of social protection in the "new" European Union member states rank below the corresponding European Union average. However, Estonia and Latvia also significantly lag behind the other Central and East European countries. As we saw above, economic growth in Estonia has not been accompanied by an increase in social protection as percentage of GDP, rather a slight decline. Therefore, if the Estonian economic situation worsens, one can predict significant coping risks in an estimable part of the population.

Implementation of polices through governance

On studying the modest level of Estonia's social sphere compared to other European countries, a question arises about the governance of these fields and the actions of public authority. The broader understanding of governance connects this activity not only to the national and local governments that must base their activities on public interest, but to other bodies that should protect the general interests of other stakeholders in the private sectors (e.g. owners and workers). Governance includes executive agencies, representative bodies, as well as enforcement and monitoring systems and informal regulators. An important part of governance is related to the realization of power, in either the public interest or in the case of companies, in the owners' interest (European Commission (2005a), Jessop (2002), Kaufmann (2003), Michalski et al (2001)).

The description of various aspects of governance is based on an approach that, on the one hand, divides governance into public and private spheres, while on the other hand, into supportive, regulatory, and compensatory measures (Gereffi, Humphrey and Sturgeon, 2003) (see Table 6.3.1.).

The policies related to the social sphere can be divided into *supportive*, *regulatory* and *compensatory* models. The first create conditions for the realization of the abilities, individuals and companies; the second establish certain standards, for instance, in the field of health care; the third are based on redistribution and create resources and services for the population. The primary emphasis of this redistribution is that, while economic activity is related mostly to private ownership,

a large part of the supportive and regulatory influence is related to the public sector, is enforced by the state and uses tax resources.

The private and public sector and the supportive, regulatory and compensatory fields of governance are integrated and their differentiation into the aforementioned models helps to define the particularities of the policies of various fields of activity, while also simplifying their actual character. After all, the same policy can be related to various governance models, for example, in addition to a supportive role, education and research policy also has a regulatory and somewhat compensatory role; in addition to compensation, health care policy can be used to support certain options, etc. At the same time, one governance aspect can be considered to be more important in the case of any policy. For instance, with regard to education, the *supportive* aspect of governance is emphasized, although education also includes regulatory and compensatory aspects to a certain extent. Health care policies also have an important supportive aspect, especially in the case of various preventive programs. In other spheres of social policy, the compensatory aspect is most important and some regulatory aspects are added.

Voluntary agreements, companies' social responsibility and pressure group activities are the most direct reflection of the population's intervention in shaping its living and working conditions. Informal associations and the development of the non-profit sector, are related to both the better and more specific definition of the various interests of the citizens as well as to the general development of democracy. The development of these associations and active participation in influencing various processes reflects the general organizational abilities of the society members as well as the political process in relation to the perception and protection of interests.

Ideology also plays an important role in shaping the character of policies, if only to determine how great or small the role of the state should be in a specific field. This determines the extent to which one or another policy is implemented. At the same time, policies remain in the public sphere in any case, where it is possible to distinguish the measures designed at the local, national and EU levels and their impact on each other.

Enforcement and monitoring mechanisms are important to the governance models and the policies related thereto. In the case of education, health care and social protection, the primary role is played by the national and local governments. The companies' social responsibility and various agreements reflecting societal interests are voluntary and their violators are faced primarily with moral condemnation. It is worth emphasizing that the latter can apply very strong pressure. At the same time, crisis situations test various regulations and it is easier to withdraw from voluntary agreements than from regulations supported by government enforcement.

Summary

In Estonia the extensional development of the economy, where economic growth has been primarily based on a simple manufacturing base, has been gradually supplemented by activities that need more human and social capital. On the one hand, the level of economic development is determined by the extent of resources that can be placed in the social sphere. On the other hand, a critical component is the human and social capital that is created by the social sphere, and which determines what type of economic development is possible.

Table 6.3.1. Models and fields of governance

	Field of activity	
Governance model	**Public**	**Private**
Supportive	Property rights Business laws Competition policy Education and research policy	Market ideology Specialized standards and practices
Regulatory	Labour laws Regulations related to the natural environment Health and safety measures	Voluntary agreements Companies' social responsibility Pressure group activity and consumer boycotts
Compensatory	Social insurance (In-service) training and retraining programs Health care policies	Collective contracts Philanthropy

Source: Gereffi, Humphrey and Sturgeon, 2003.

Since economic growth is related to savings and investments, this also means postponing consumption, for instance, taking home loans now that must be repaid in the future at the expense of consumption. When taking such risks related to the future, confidence in the governmental institutions is important. Moreover, guarantees are also important so that the benefits derived from economic growth are distributed to all citizens. This is guaranteed by the social policies in various fields of activity.

These types of guarantees are especially important in countries with diverse ethnic compositions, like Estonia. The diverse ethnic and religious composition of a country's population usually increases the cost of coordinating economic and social policies, since there are more points of departure and applications in this case than in countries with homogeneous ethnic and religious populations (La Porta et.al., 1998).

The connection of social and economic viewpoints to human development and the assessment of corresponding policies and governance models must be based on mutual connections as well as significant differences. Economies based on private ownership and profits cannot be subordinated to the social needs, in order to establish rules that are primarily and principally based on the social dimension. At the same time human development, of which economic activity is an important part, is related to the social aspects of societal organization.

One of the reasons for a divergence in economic and social policy lies in the difference in time ranges. Sociopolitical measures develop the population's potential during a longer period, and therefore, the payment of expenditures takes time. For instance, general literacy assumes the long-term functioning of the school system and the involvement of the entire cohort of children of a corresponding age in the education system for decades. The use, not to mention development, of modern technology is not possible without education.

With regard to Estonia's choices, this signifies the need to concentrate the scarce resources made availa-

ble through education policy and the need to make the relevant measures a part of comprehensive political choices. Changing the educational system at the basic and upper secondary school level is significantly related to regional policies, including administrative reform. With regard to higher education, the sharp decline in the birth rate that took place in the 1990s means significantly lower enrolments in higher education schools as of 2010. A need for competition also develops and institutions that cannot compete internationally on the education market must inevitably merge with stronger universities. The state's education policy is more critical to the direction of this process than in case of the current choices.

The state's policies and people's economic and social behaviour are interrelated. This relationship is not limited to political mechanisms serving as the connection between the will of the electorate and political power under democratic conditions. There is also another aspect to adjustment, according to which people adjust their behaviour within the conditions set by policy. Sometimes this adjustment has a positive meaning for the society and sometimes it does not. For instance, under otherwise equal conditions, relatively modest social protection increases transfers between generations, while a poor ratio between treatment, services and prices increases pressure on the private sector for action or for the purchase of services from abroad. The existence of such possibilities reduces the resources for the financing of services provided in Estonia, although at the same time, the promotion of such development through political choice mechanisms should increase pressure on the government and lead to the corresponding adjustment of social policies.

Estonia's choices also considerably affect the EU background. Studies and comparisons confirm that Estonia's percentage of costs for social protection is second to last among European countries (besting only Latvia) (Developments in the Social Field, 2007). On the one hand, this ranking proves the correlation between the ratio of relative social protection costs and the standard of living (at least in the European context). Despite the rapid economic growth of the previous years, Estonia is at the bottom of the GDP *per capita* ranking. At the same time, this correlation is also an opportunity, because economic growth and a small ratio of social protection costs should create conditions for greater contributions to this field of activity. This in turn has a positive effect in the long run on the development of an economy with a complicated structure.

References

1. Aaviksoo, A., G. Paat. (2007). "Tervishoiuteenuste kättesaadavus" (Editor, A. Purju). Sotsiaaltrendid 4. Tallinn: Statistics Estonia, pp. 78–86.
2. Aghion, P. and P. Howitt (1998). Endogenous Growth Theory, MIT Press, Cambridge, Mass. And London.
3. Bell, S.G. (1975). The Coming of Post-Industrial Society. New York, Basic Books.
4. Constitution of the Republic of Estonia. (1992). Tallinn.
5. Estonian Statistical Yearbooks 2004, 2007, 2008. Tallinn: Statistics Estonia.
6. El-Erian, A. and M. Spence. (2008) "Growth Strategies and Dynamics: Insights from Country Experience", Working Paper No. 6, The Commission on Growth and Development, The World Bank, Washington.
7. European Commission (2005), Cohesion Policy in Support of Growth and Jobs: Community Strategic Guidelines, 2007–2013. (http://www.europa.eu. int/comm/cohesion_ policy guidlines/index_en.
8. Gereffi, G., J. Humphrey and T. Sturgeon, T. (2003), "The Governance of Global Value Chains", Review of International Political Economy, No. 4, pp. 45–61.
9. Jessop, B. (2002). The Future of the Capitalist State, Cambridge, Polity.
10. Koppel, A., Lai, T., Aaviksoo, A. (2007). Tervishoiuteenuste kättesaadavust puudutavate valmislubaduste analüüs, Tallinn, Praxis.
11. La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert Vishny, 1998, "The Quality of Government", NBER Working Paper Series, No. 6727.
12. Leibkonna eelarve uuring, (2006). Tallinn: Statistics Estonia.
13. Michalski, W., R. Miller, B. Stevens (2001), Governance in the 21st Century: Power in the Global Knowledge Economy and Society, Paris: OECD.
14. North, D. (1990), Institutions, Institutional Change and Economic Performance, Cambridge, Cambridge University Press.
15. "Paying for Healthcare. A Survey", (2004), Economist, 17–23 July.
16. Sotsiaalvaldkonna arengud 2000–2006, 2007. Sotsiaalministeeriumi toimetised nr.2. Tallinn: Ministry of Social Affairs.
17. The Growth Report: Strategies for Sustained Growth and Inclusive Development (2008), The Commission on Growth and Development, The World Bank, Washington.
18. The World Health Report 2000 – Health Systems: Improving Performance. (2000),WHO.

6.4. The labour market and the policies related thereto

In dealing with problems related to the Estonian labour market in the following subchapter, we take two types of background information into account: the corresponding policies of the European Union and the trends predominant in the global economy.

Since its creation the European Union has valued social aspects in the economy. The conclusion has been reached that certain common values exist that can be summarized under the concept of the European social model. The European social model includes people's social security and the idea of cooperation, which is primarily expressed in the activities of social partners, and the topic of social cohesion, or the reduction of inequality. In the course of the Lisbon process, Europe has decided to increase the

economic competitiveness of the EU and reduce its technological gap with the US. One possibility is to modernize the European social model, including increasing the flexibility of the labour market.

By implementing certain concepts related to social and labour policies, the EU is attempting to find a balance between social security for the workers and the flexibility of the labour market. This new approach has started to be called flexicurity, which includes elements of labour market flexibility and social security[36]. The basic elements of flexicurity are a flexible labour market, active employment policy, social protection and lifelong learning.

Another background element we must inevitably consider is the financial crisis, which began in the US in the autumn of 2008 and now affects the global economy, and the consequences thereof. The global economy is undergoing difficult and anxious times. The debt crisis that began in the real estate sector, also bankrupted commercial banks, and caused a wave of bankruptcies in investment banks as well. The investment bank crisis globalized the US crisis, because the projects of US investment banks are global in scope. This resulted in forceful governmental intervention, whereby the UK and the US governments essentially started nationalizing the financial sector; they were followed by the other EU member states. Banking was taken under strict government control and one can probably say that investment banking in the form we have known will never be restored.

In 2009, it is still too early to tell what the global impact of the financial crisis will be on the real economy. As a rule, the labour market reacts to changes taking place in the economy with a time delay. An example is wage formation, where the established principle is that wages are agreed upon a year in advance. In other words, 2007 wages were agreed upon in 2006 and 2008 wages in 2007. Therefore, it is not surprising that in many Estonian industries wages increased by tens of percentage points in 2007, while at the same time, the economy was already starting to show obvious signs of slowdown in the middle of that year. The particularity of Estonia, and apparently the other Baltic countries, is that the role of trade unions is relatively marginal and employees usually agree on wages with their employers individually. The result is that employee salaries consist of relatively low basic wages and relatively high additional fees and bonuses. When the economy is booming, performance pay increases rapidly, but when things go badly, this may result in a rapid decline of gross wages in certain sectors.

Are there grounds to compare the financial and economic crisis with the 1929 crisis in the US and the world, as some analysts have rushed to do? Probably not. In 1929, workers did not have the same social guarantees that we see in today's market economy: starting from property and life insurance and ending with social guarantees in case of unemployment. At the end of the 1920s, the unemployment rate in the US climbed to 25%, people were ruined, social stratification and poverty increased sharply, and the same occurred in Europe. In today's world, there is no basis for predicting a massive increase in poverty in developed countries. The governments have also reacted much more forcefully, intervening actively with measures to keep the financial system functioning. In any case, one can say that the economic crisis is a test for the aforementioned European social and labour market policies and will probably modify them to some degree.

Before setting out to deal with individual aspects of flexicurity, we will pause briefly at changes in the Estonian labour market as a context for the processes that are taking place.

General changes in the Estonian labour market

Since the impact of the global financial crisis was just starting to affect the real economy at the end of 2008, the labour market situation in 2008 does not yet reflect the events that will start to occur.

The cooling of the economy that began at the end of 2007 was accompanied by a notable wave of layoffs in the second half of 2008, the extent of which is yet to become clear.

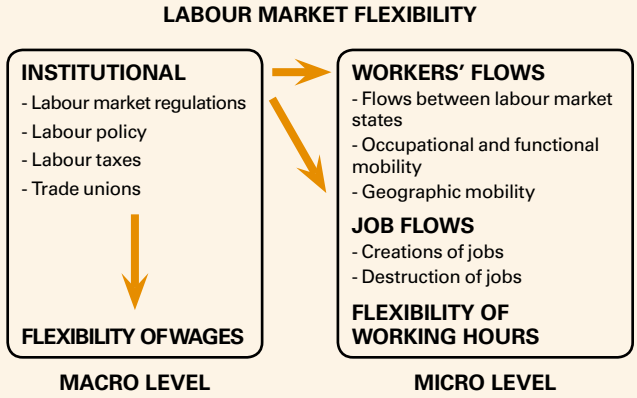
According to Ministry of Finance data, real wages increased in 2007 by 13% (nominal wages 20%) and productivity by only 5.6%. Although this gap has probably decreased during 2008, there is great economic pressure for layoffs. Many industries that rely on cheap labour have already laid off workers or even closed their companies (for instance, Narva Kreenholm). In 2006, the number of people that received special benefits as a result of collective layoffs was 1,595, whereas in 2007, the number stood at 2,567, and the number of people receiving relevant benefits in the first three quarters of 2008 reached 3,854. This is a relatively small number compared to the total number of unemployed individuals. Time-wise, the most exact picture of the number of unemployed is provided by the data on registered unemployment. At the beginning of October 2008, 20,000 unemployed people registered with the Labour Market Board, which is 54% more than at the same time in the previous year. According to the data of the Estonian Labour Force Survey, unemployment in the third quarter of 2008 was 6.2%. At the same time, we see that change in employment in the third quarter of 2008 was not especially affected by the economic recession.

According to Bank of Estonia projections, the average unemployment indicator in 2009 will be 7%, and in case of negative growth, unemployment could reach 9–10%. In next few years an increase in unemployment based on the economic environment can be predicted, and therefore, people's social protection, the effectiveness of active labour market policies and training for workers will become even more important.

At the same time, the labour market should not forego its flexibility, because we are in a situation today, where fiscal policy in Estonia tends to be pro-cyclic, and amplify the growth phase during periods of economic boom and intensify the decline during a downturn. Active fiscal policies to stabilize the economy are

[36] To read more about this in Estonian see the secondary school economic textbook dealing with the globalization of the Estonian economy (see Eamets, 2008).

Figure 6.4.1. Labour market flexibility at the micro and macro levels



not implemented in Estonia today, based on an ideology that supports a general liberal market economy and the idea of a "thin state". One of the results of this ideology is a relatively low tax burden, and therefore, scant opportunities for influencing the economy, because the state just does not have sufficient resources and corresponding policy instruments. Based on the currency board system, the possibilities for the central bank to affect the money supply and to restrain inflation are also quite limited. Therefore, the flexible labour market is the only economic "buffer" for adjustment, and as Estonia's relatively short economic history to date demonstrates, it has fulfilled its role quite well.

Subsequently, we will examine four aspects of labour market flexicurity.

Labour market flexibility

The labour market flexibility is a topic that has been much discussed in the press and which different authors treat very differently.

Labour market rigidity is the most serious problem of the Estonian economy. This is often mentioned (see for example Ansip, 2008) in connection with Estonia's 163rd ranking among the 181 countries in the World Bank's Ease of Doing Business Index.[37] At the same time, we should remember that by using only one indicator, the picture is very one-sided and we are not considering all the aspects of labour market flexibility.

Labour market flexibility can be assessed at micro and macro levels. At the macro level, the flexibility of the labour market is measured by legislation and regulations and the flexibility of wages; the latter also reflects the influence of trade unions. The aforementioned international indexes reflect this aspect of labour market flexibility. At the micro level, or at the worker and company level, flexibility is indicated by how often workers move between different labour market stages, for instance, how easy it is to move from unemployment to employment. In addition, the flow of workers also includes functional flexibility or occupational mobility, or how often people change their occupation, or how simple it is for companies to replace workers with each other, etc. The third aspect of worker mobility is geographic mobility. Job flows show how many companies create new jobs or eliminate old jobs during a given time period (usually one year). The last element at the company level is the flexibility of working hours or to what extent flexible work schedules, part-time work, overtime, etc are implemented (see Figure 6.4.1.).

There is a paradoxical situation in Estonia, where according to the macro indicators, i.e. the OECD Employment Protection Legislation Index, the Estonian labour market is rigid and overregulated, but when we examine data from the company level, it turns out that the labour market is flexible (see Eamets, Masso 2005). Similarly, according to the World Bank's Ease of Doing Business Index and the Heritage Foundation's Index of Economic Freedom, the Estonian labour market is rigid and overregulated. However, the fact is often ignored that the rigidity indicators operating at the state level are established by regulations or laws. In many other European countries, very minimal requirements are established at the legislation level and the majority of regulations are left for the social partners to agree upon. In other words, many international indices do not reflect the actual regulation of the labour market in the countries were the influence of trade unions is the strongest. In order to see the actual flexibility of the labour market, it would be necessary to analyze the macro data. Below, we try to fill this gap in the description of Estonia's labour market.

Let's examine two aspects of labour market flexibility – the flow of workers between different labour market states and the number of jobs created and eliminated in companies.

Firstly, let's see how people move between different labour market states. People have three different states in the context of the labour market – employed, unemployed or inactive. The employed are those who have jobs; the unemployed are looking for jobs; and the inactive are not looking for jobs and are not employed.[38] Since people are constantly moving from unemployment to employment, they become unemployed or someone leaves the labour market, or become inactive, there is a constant flow in the labour market and this is called labour market mobility.[39] The number of flows in the labour markets differs by year. Great changes in the economy/society (reforms, crises) cause an increase in labour market mobility, while during stable periods, there is less movement between various labour market states. Based on various flows, a matrix can be constructed. The first letters of the English-language words are used a labels – E for employed, U for unem-

[37] To assess the severity of the labour market regulations, various indices have been used, the most famous being the Organization for Economic Development and Cooperation (OECD) Employment Protection Legislation (EPL) Index, the sub index on the severity of employment laws in the World Bank's Ease of Doing Business Index and the sub index for economic freedom indicators in the Heritage Foundation's Index of Economic Freedom.

[38] The exact definitions of the three situations can be found in Statistics Estonia compendiums dealing with ETU methodology, see Statistics Estonia: 2006 Labour Market in Figures.

[39] A separate issue is the geographical mobility of the workforce, which was not examined here.

ployed, and I for inactive.[40] Flows are indicated by the combination of the corresponding letters, or EU means moving from employment to unemployment, and IE from inactivity to employment. In total, there are nine potential flows.

A person's situation in the labour market is assessed during one year, for instance from January to January. Or, if a person was unemployed in January 2000 and employed in January 2001,[41] we get one movement from unemployment to employment. In reality, as we move diagonally along the matrix we see flows within the same state, or "stable" states. In other words, if a person was unemployed in July 2006, and still unemployed the next year, then he or she was in the same situation throughout the year and a real flow did not occur. In principle, he or she may have ended up in another state at some time during the year, but this method does not consider this.

There is one exception: within employment (EE flow, or job-to-job flow) we can speak of movement in a certain sense, because a person may change jobs during the year without leaving employment.

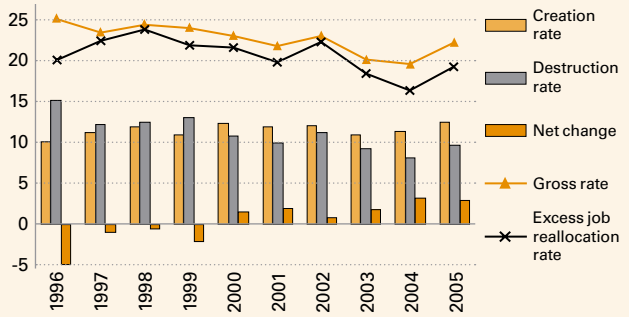
When analyzing empirical data, it is important to know what percentage of all employed people or all unemployed people changed their status. This shows us the ratio of flow compared to the number of people that are in the specific labour market state. The corresponding percentages are shown in following table.

Table 6.4.1. Flows of workers between various labour market states

	1996/1997	1998/1999	2000/2001	2002/2003	2004/2005	2006/2007
Employment to employment (EE)	16.8	11.8	9.6	10.3	10.3	10.1
Employment to unemployment (EU)	5.4	6.1	5.2	4.1	2.6	1.6
Employment to inactivity (EI)	6.1	5.7	5.3	4.5	4.7	3.6
Unemployment to employment (UE)	53.5	53.3	55.5	69.0	70.9	86.5
Unemployment to inactivity (UI)	13.1	12.8	25.6	25.0	23.6	13.5
Inactivity to employment (IE)	11.0	5.4	5.6	6.3	6.8	7.6
Inactivity to inactivity (II)	3.5	2.3	3.8	3.2	2.6	1.6

Source: Estonian Labour Force Survey

Figure 6.4.2. Job flow indicators in Estonia (% of unemployment)



Source: J. Masso's calculations based on Estonian Business Register data

Job flows

Job flows are not defined as the physical movement of jobs, for instance from Estonia to countries with cheaper labour such as China, but the creation or destruction of jobs within companies. Using the data from the Business Register, a job is eliminated when, compared to the previous January, the job no longer exists in January of the following year. The creation of jobs is the opposite. Five indicators are used – the job creation rate, job destruction rate, net change, and the gross rate or change between the two and excess job reallocation rate, i.e. the gross effect subtracted from the absolute value of the net effect. The higher the net effect, the more volatile or flexible the labour market, the more jobs are eliminated and new jobs created.

Examining the dynamics of the net effect in Estonia (Figure 6.4.2.), we see that this has constantly fluctuated at about 20%. When good times prevail in the economy, it is slightly less than 20%, for instance, the corresponding indicator was 19.1% in 2006 and during the economic recession of 1999 the corresponding indicator was 21.7%.

When we put the Estonian indicators into an international context (Figure 6.4.3.), we see that labour market volatility is lower in Estonia than in the Nordic countries, but at the same level as the US. We can observe that job flows in Lithuania and Poland are slightly higher compared to that of Estonia. Job creation and destruction indicators for the old EU member states are many times smaller than the corresponding indicators for Estonia. Therefore, the flow of people between various labour market states and the statistics for the destruction and creation of jobs do not confirm that Estonia is characterized by a very rigid labour market.

There is definitely some statistical information noise in this data, because the relabeling of jobs and redistribution of functions within companies are reflected ostensibly as job destruction or creation. But similar bias exists in all databases that reflect register data.

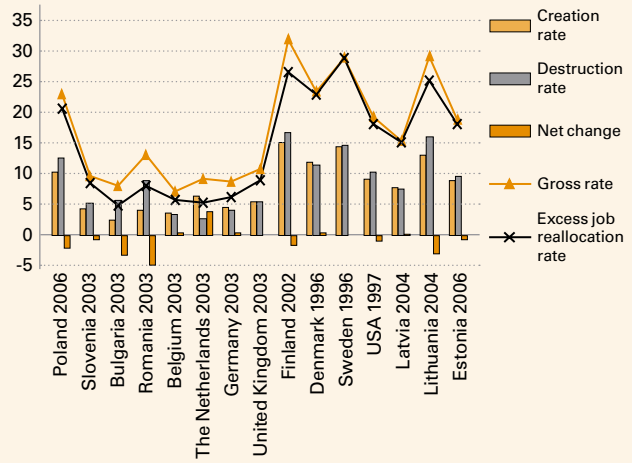
In addition, Eamets & Masso, 2005, have given violations of the labour laws as the reason for job mobility. Although it is relatively complicated to lay off workers according to the law, a large number of workers leave their jobs by "mutual agreement", which usually means that the worker often does not receive the benefits he or she is entitled to (unless a special agreement is reached).

In summary, it can be said that an analysis of the micro indicators confirms our assertion – Estonia's labour market is flexible and operates as a kind of buffer for balancing the economy. This is proven by the relatively large flows between labour market states and the high rate of job creations and destructions. The final indicator is the rapidly increasing unemployment rate under conditions of the economic recession during the third quarter of 2008.

[40] In English, E for employment, U for unemployment and I for inactivity.

[41] Before 2000, changes in situations were examined from January to January. As of 2001, movement has been defined as a change in situation compared to the same month of the previous year. Therefore, all the movements for a year are totalled by month and then an average obtained. Arithmetically: average annual movement = total (January-January, February-February, ….)/12

Figure 6.4.3. Creations of jobs indicators in international comparison (% of unemployment)



Source: Masso, Eamets, Philips 2006

Table 6.4.2. Use of employment services

	2000	2002	2004	2005	2006	2007
Labour market training	8156	10 021	6968	9852	7073	5503
Community placement	3954	453	353	188	-	-
Business start up subsidy	441	375	296	320	289	141
Wage subsidy	189	230	441	727	238	127
Career counselling	2055	8130	7877	9494	8356	8272
Public work	-	-	-	-	170	231
Coaching for working life	-	-	-	-	446	1208
Work practice					676	792
Measures for disabled people, incl.	-	-	-	-	109	60
- adaptation of premises and equipments	-	-	-	-	1	2
- special aids and equipment					5	3
- working with a support person	-	-	-	-	60	30
- communication support at interviews	-	-	-	-	43	25
Inflow of new unemployed individuals during the year	81 482	64 537	51 361	42 618	26 329	28 312

Source: Ministry of Social Affairs, 2008

Active labour market policies

An important component of flexicurity involves active labour market policies for productive employment, which help both unemployed and employed people to find suitable jobs. Active labour market policies include employment services provided by the public employment offices, for example employment mediation, counselling, labour market training, support for starting up companies, and wage supports. In Estonia, the provision of employment services started at the beginning of the 1990s, and the last extensive reform was carried out at the beginning of 2006, when the new Labour Market Services and Benefits Act came into force. Based on this law, thirteen different employment services are provided by the public employment offices today according to the principles of case management (see also Table 6.4.2.). This means that each unemployed person is handled by a case worker, whose assignment is to resolve the client's unemployment problem and to help him or her find a job as soon as possible.

Compared to the total number of registered unemployed, the number of participants in active labour market policies is still relatively small[42]. From the table, we can see that the greatest number of job seekers participated in career counselling (almost half the participants) and employment training (almost a third of the participants), and the least participated in measures targeting disabled people (see Table 6.4.2.).

Lille & Palmet (2008) argue that the reasons behind the small number of participants in measures targeted to disabled unemployed individuals include excessive bureaucracy, difficulties in the finding suitable support persons, too short counselling period, and a shortage of service providers.

Empirical evidence from many countries suggests that with the exception of certain disadvantaged groups active labour market policies should not be offered in the very beginning of the unemployment spell to encourage personal initiative of the job seekers. This would help to exclude the most competitive unemployed who are able to find jobs by themselves from the pool of unemployed and target active labour market policies at the most disadvantaged groups. This would also reduce the deadweight and substitution effects. For instance, according to the EU Employment Guidelines "every unemployed person should be offered a new start before reaching 6 months of unemployment in the case of young people and 12 months in the case of adults in the form of training, retraining, work practice, a job or other employability measure, combined where appropriate with on-going job search assistance," (Council of the European Union, 2007). However, the practices of different countries vary to a great degree.

Examining the expenditures on active labour market policies, it becomes clear that in comparison to the other countries of the European Union, the expenditures are one of the lowest in Estonia, even if we only compare ourselves to countries with similar unemployment rates (see Figure 6.4.4.). In 2006 the following countries had a lower unemployment rate than that of Estonia's (5.9%): Denmark (3.9%), the Netherlands (3.9%), Austria (4.8%), Ireland (4.5%), United Kingdom (5.4%), Lithuania (4.6%) and Cyprus (4.6%). However, all these countries spend considerably more on active labour market policies. Compared to the average level of the 27 EU countries, Estonia spends less than one tenth on active labour market policies. Furthermore, Estonia remains in its position also if we compare the expenditures on active labour market policies per person wanting to work in Purchasing Power Parities (Eurostat, 2008). If we also consider the projects financed by the European Social Fund, Estonia's expenditures are somewhat higher – 0.11% in 2005 and 0.09% in 2007 (Ministry of Social Affairs, 2008). Nevertheless, even based on these numbers, Estonia would be one of the

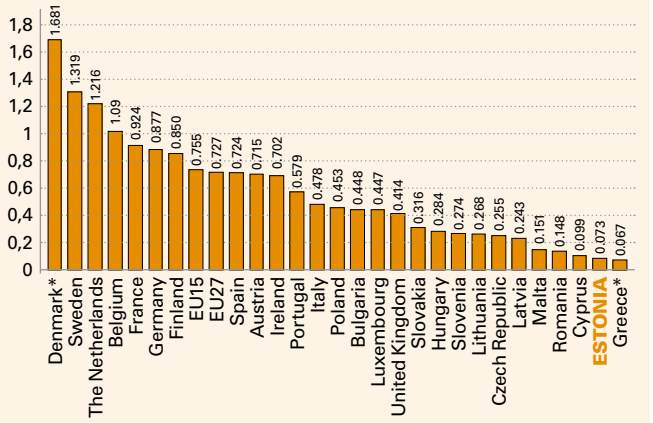
[42] The figures in Table 6.4.2. do not reflect the total number of those who participated in the services since one person may have participated in several services. Unfortunately, the data on the total number of persons is not available.

European Union countries with the lowest expenditures. The reasons behind the low expenditures on active labour market policies could include the different composition of the services offered to unemployed, differences in target groups entitled to services (in Estonia only registered unemployed, while elsewhere also the employed at risk of involuntary job loss and inactive persons who would like to enter the labour market) as well as the short duration of the programs in Estonia compared to the other countries. For instance, in Ireland the maximum duration of the training programs is three years (Irish National Training & Employment Authority, 2008), in Estonia it is one year; in Norway, the maximum duration of work practice for disabled people is three years (Ministry of Labour and Social Inclusion, 2008) while in Estonia it is three months.

Labour market services in Estonia are provided by the National Labour Market Board, which has a network of public employment offices in all the counties and Tallinn, as well as branch offices in smaller regions, when needed. The Estonian Labour Force Survey data shows that the percentage of unemployed people who turn to the Labour Market Board for help in finding jobs has noticeably decreased. While 63% of unemployed people turned to the Labour Market Board in 1999, only 28% did so in 2007. The surveys conducted by the Ministry of Social Affairs in 2002 and 2008 regarding the image of the Labour Market Board indicate that barely a fifth of job seekers and 41% of employers contacted the Labour Market Board for help. The wish of employers to turn to the Labour Market Board has declined in comparison to 2003 (Faktum Research Centre, 2003; Turu-uuringute AS, 2008). One of the reasons for this may be the improved situation on the labour market in the given period, whereby people prefer to look for work on their own. While 14% of unemployed people stated that it was not necessary to turn to the Labour Market Board in 2000 because they managed on their own, the corresponding percentage had increased to 32% by 2007, according to the data of the Labour Force Survey. A second reason is apparently the poor reputation of the Labour Market Board and the insufficient information provided about the available services. The surveys have also pointed to the fact that the poor image of the Labour Market Board is related to the shortage of consultants and low salary levels (see Leetmaa et al 2003), which may become important obstacles in expanding the services during the current economic recession.

Unlike in many European countries and the United States, the evaluation of active labour market policies in Estonia has been irregular and only a few studies have been conducted. Since the expenditures and the number of participants involved in active labour market policies have been small, these employment policies have not exerted any significant impact on the general rate of unemployment. All the more, during the period of economic growth the rapid reduction of the unemployment rate was affected primarily by the increased demand for labour. However, the available studies indicate that participation in active labour market policy measures has helped the unemployed people who have participated to return to work faster. Thus, for instance, in 2000–2002, those who participated in labour market training were 7–15% more likely to get jobs compared to those who had not received any training (Leetmaa et al 2003). The participants in the service provided by the Estonian Unemployment Insurance Fund in reaction to collective layoffs in 2005–2007 were also later more likely to find jobs than those who did not participate (Võrk, Leetmaa 2007). At the same time, the National Audit Office has identified many shortcomings in the provision of employment services to risk groups and has also emphasized the need for regular impact evaluations of active labour market policies (National Audit Office, 2008).

Figure 6.4.4. Public expenditures on active labour market policies in the EU countries in 2006, % of GDP



** 2004 data for Denmark, 2005 data for Greece*

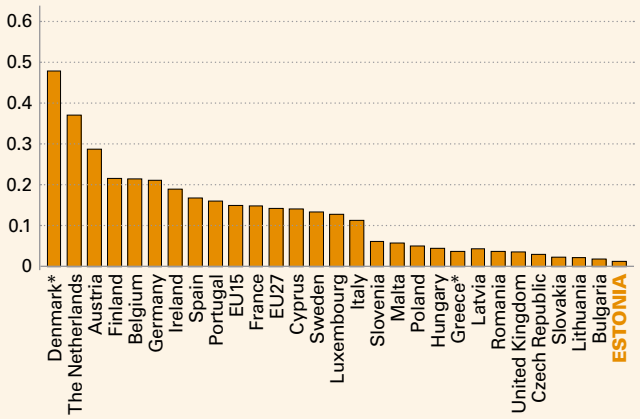
Source: Eurostat

All in all, the existing studies and statistics tend to point to the fact that the role of active labour market policies in supporting the flexicurity approach in Estonia has been modest and the given field of activity needs greater attention. This applies especially in the current situation where the workers' skills must adapt to the changing needs of the labour market.

Modern social security systems

The flexibility of the labour market is supported in turn by the social protection system that helps workers to move from one job to another, by guaranteeing them sufficient income during the period they are unemployed. Thereby the social protection system supports the mobility of workers between jobs and contributes to structural changes in the economy. At the same time, it must be considered that excessively generous benefits and their long payment duration may inhibit active job search and lengthen the duration of unemployment (see European Commission, 2006; OECD, 2005). In order to prevent the potential adverse effects, the receipt of benefits provided by the social protection system should be accompanied by monitoring and sanctions as well as the implementation of active labour market policies. Also, the social security system must include incentives that motivate people to work. In addition to social benefits, the flexible combination of work and family life has an important place in the concept of flexicurity, which assumes the existence of high-quality care services, such as childcare and care for the elderly.

Figure 6.4.5. Public expenditures on labour market policy supports in the EU countries in 2006 (% of GDP per one percentage point of the unemployment rate)



** 2004 data for Denmark, 2005 data for Greece*

Source: Eurostat, author's calculations

Public sector expenditures for social protection in Estonia are among the lowest in the European Union. In 2006, social protection expenditures in Estonia constituted 12.4% of GDP, while the EU27 average was 26.9% of GDP (Eurostat). In case of unemployment the benefits and assistance related to job loss are of primary importance, and these have been among the lowest in Estonia compared to other EU countries[43]. In the EU the expenditures on these benefits average nearly 1.2% of the GDP, while in Estonia the corresponding expenditures are only in the range of 0.08%, which is the lowest compared to the other EU countries. On the other hand, Denmark even spends 2.7% of GDP on unemployment benefits and Germany spends almost 2.1%. Estonia's expenditures are the lowest even if we consider the differences in the unemployment rates of different countries (see Figure 6.4.5.). Therefore, one can conclude that generally social security during an unemployment period in Estonia is among the lowest compared to the rest of Europe.

Estonia's low social benefits generally encourage people to remain employed. Income earned from employment usually exceeds income from social benefits, since both unemployment and subsistence benefits are significantly lower than wages and the labour taxes paid by employees are not high. An international comparison also shows that in the Estonian tax and benefits system people have greater financial incentives to work than in the majority of other European Union states (Võrk et al 2007, Eurostat).

However, the current social protection system could be made more supportive of employment. Firstly, the benefits system could do more to support those who only work part time. This would help to preserve or more quickly restore people's connections to the labour market and would also increase families' incomes. Currently in Estonia, we are sometimes dealing with a situation where part-time employment does not increase a person's total income but rather reduces it since all social benefits are lost (see Võrk & Paulus 2006). For instance, people lose their entire unemployment insurance benefits even if they start working at jobs with very small workloads. People are also deprived of their early retirement benefits if they continue working before the official retirement age. In some cases, a person's employment in a low-paying or part-time job can be inhibited by the subsistence benefits system, since subsistence benefit are reduced by an amount that equals the person's wages. Although the opportunity to work and receive wages is partially built into the parental benefits system, studies point to fact that the speed of high-salaried women returning to the labour market has declined due to parental benefits (Võrk, Karu & Tiit 2009).

Another example of how the system in Estonia lengthens the duration of unemployment is the simultaneous receipt of redundancy payment and unemployment insurance benefits. Research has shown (see Leetmaa & Võrk 2004 and 2006) that the receipt of redundancy payment lengthens the duration of unemployment even when we take into account the impact of other factors with the help of statistical models (we account for age, gender, length of service in the company, previous salary, region, size of the layoffs). Therefore, a small portion of those who have lost their jobs, i.e. those who get both redundancy payments and unemployment insurance benefits (almost 0.3% of the employed in 2005) are well protected and the income they receive at the beginning of the unemployment spell as benefits exceeds wages by 1.5 times. Those laid off in the public sector can feel especially secure, since their redundancy payment can equal a year's salary. However, the level of social security for the majority of unemployed is low. For instance, in 2007, only 23% of the newly unemployed people registered by the Labour Market Board received unemployment insurance benefits and approximately 46% received unemployment assistance benefits. Almost a third of the registered unemployed did not receive any benefits, although they had the opportunity to apply for subsistence benefits.

At the same time, the rapid employment growth in recent years and empirical research (see Võrk & Paulus 2006) show that during the period of economic growth, the social benefits system as a whole has not reduced people's motivation to go to work. However, there is reason to believe that the connection between work incentives and social benefits on the one hand and part-time employment on the other will become important again when wage growth starts to slow down significantly in the next few years and finding jobs becomes increasingly difficult again.

As mentioned above, the reconciliation of work and family life plays an important role in the concept of flexicurity. The obligation of caring for children and other

[43] Eurostat treats labour market policy (LMP) supports as out-of-work income maintenance and support (mostly unemployment benefits) and early retirement benefits that are paid due to reasons resulting from the labour market. The proportion of early retirement benefits that are paid based on reasons resulting from the labour market in relation to the entire expenditures on LMP supports is quite small (see Eurostat). In most countries, a more important role is played by early retirement benefits that are part of the pension system and are one of the most important reasons for older workers to leave the labour market. In Estonia to date early retirement benefits have also been part of the general pension system and been financed from pension insurance payments. Research conducted in Estonia has shown that the main reason for taking early retirement is already being unemployed (Leppik et al 2004).

family members is considered to be one of the main factors inhibiting women's employment and gender equality in the labour market. The availability of childcare service has continually been a problem in Estonia. In 2002–2008, 40–50% of local governments had kindergarten waiting lists (Ainsaar, Soo 2008). In 2004, almost 16,000 children were on kindergarten waiting lists (Kask, Rummo-Laes et al 2005). Also, kindergartens were overcrowded – there are almost 2,500 more children in kindergartens than there are normative places (Statistics Estonia database). In 2006, 18% of children under three received childcare services and 85% of older children received at least one hour, but the majority over 30 hours (Leetmaa, Karu 2008). The averages of EU countries were 26% and 84% respectively (Eurostat 2008). The objective of the European Union for 2010 is to provide childcare services to 33% of children under the age of three and to 90% of those over three.

In addition to formal childcare services, a third of children under three were in the care of grandparents and other people, seldom professional childminders and then only for 2.5 hours per week on average (Leetmaa, Karu 2008). Therefore, parents are those who primarily mind small, under-three-year-olds, which is clearly discernible in employment statistics – the employment rate of women with under-six-year-olds in 2006 was 25.7 percentage points lower than that of childless women (the EU average is 13.6 percentage points) (European Commission 2008).

Lifelong learning

In addition to the training of unemployed people, an important part of the concept of flexicurity involves the training of workers. As shown in last year's Human Development Report, Estonia ranks among the bottom third of the EU member states with respect to adult education or about 6.5% of adults in Estonia participated in lifelong learning (Human Development Report, 2007). Below, we make a closer examination of participation in adult education, by using two surveys that were conducted recently – Adult Education in Enterprises 2006 (and a similar survey from 2000 for comparison) and the 2007 Estonian Adult Education Survey (personal survey). The primary focus of these analyses was the participation of 20–64-year-old employed persons in training and the provision of training in companies with at least 10 employees[44].

Participation in training. Of the 315,000 men included in the sample, 134,000 (42.7%) had received some sort of training; the corresponding indicators for women were 314,000 and 166,000 (52.8%). In addition, especially in the case of women, it is people with higher qualifications and levels of education that received training. Women with low qualifications, who are actually in the worst position in the labour market, receive comparatively less training. A good example are the layoffs at Narva Kreenholm this year, where hundreds of people who lost their jobs due to the closing of the enterprise did not benefit from active labour market policies until after the company had closed, and they were already unemployed. Unfortunately, there is no system of preventive training in Estonia, which would deal with people who are about to become unemployed.

Table 6.4.3. The workers that have participated in adult education by gender and occupation

	Total		Participants in adult education	
20–64-year-olds, %	Men	Women	Men	Women
Total	100%	100%	100%	100%
Managers, professionals*	32%	48%	43%	63%
Other white-collar workers**	2%	8%	...	8%
Blue-collar workers ***	66%	45%	55%	29%

**Managers, professionals, legislators, senior officials and managers; middle-level professional and technicians, officials.*

*** Other white-collar workers; officials.*

**** Blue-collar workers: service and sales personnel; skilled agricultural and fishery workers; skilled workers and craftspeople; equipment and machinery operators; unskilled workers; armed forces.*

Source: Estonian Labour Force Survey.

Table 6.4.4. The participation of 20–64-year-olds in adult training during the last 12 months (Gender, educational level, and training provider)

2007 Ratio (total people completing training=100), %	Total training providers	In the workplacetöökoht	School, educational institutions, training company	Other agency, company	Nonprofit organization	Other training organizer
Men	100.0	35.7	40.2	14.3	6.1	..
Women	100.0	27.1	47.4	11.9	9.0	4.6

Comment: If the person participated in several trainings during the last 12 months.

Source: Statistics Estonia

When people are asked their reasons for participating in training, the primary reason is clearly their jobs – training is needed primarily for their jobs. Of women, 86% of the training participants thought so; among men, the indicator was even greater – 90%.

Among men, 30–39-year-olds are the most active training participants; while among women, it is both 30–39 and 40–49-year olds, with about 50% of the workers in the corresponding age groups participating in training (Figure 6.4.6.).

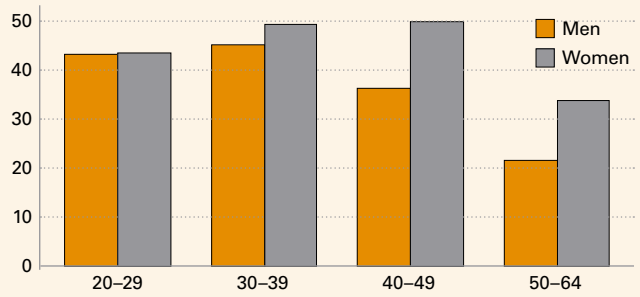
It is principally large enterprises that deal with worker training (250 and more workers), with over 90% of these companies dealing with worker training (Figure 6.4.7.). The average indicator was near 70%, with small businesses around 60%. If the sample had included micro enterprises, which are actually most numerous today on the entrepreneurial landscape, the average indicator would have been significantly lower.

Summary

In summary, I would like to stress that while the role of social partners in the regulations of issues related to the labour market is relatively modest in Estonia our corresponding governmental regulations are still relatively

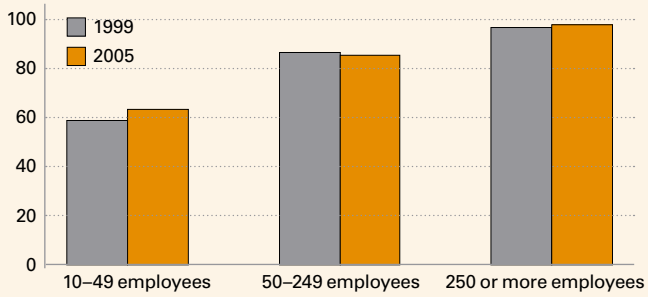
[44] The general sample of the survey comprised companies with at least 10 employees that were included in the commercial register as of 2005 and were engaged in a principal activity related to the survey .

Figure 6.4.6. Ratio of the participation of 20–64-year-olds in adult education during the last 12 months (total number of participants and non-participants in adult education = 100), %



Source: Statistics Estonia

Figure 6.4.7. Companies organizing in-service training (by size)



Source: Statistics Estonia

strict. Therefore, in the context of the strictness of labour legislation, Estonia is relatively regulated or a country with a rigid labour market. At the same time, when we examine enterprise statistics, we see that at the enterprise level many new jobs are created and eliminated each year. There are also relatively active flows of people between various labour market states; however, it is true that the flows have decreased during the last few years. Another argument in defence of the flexibility of our labour market is macroeconomic. In Estonia, neither fiscal nor monetary policies are very active, i.e. they are not used to adjust of cyclical fluctuations in the economy. At the same time, there has to be a buffer for balancing the economy, and according to the general logic of macroeconomic models, this can only be the labour market. At the end of last year (2008) we already saw how unemployment increased in connection with the economic recession. Today, average wages have yet to react but it is probable that average wages in sectors will decline as they did during the 1999 crisis.

The second component of flexicurity – an active employment policy – has gotten effective support from EU Structural Fund resources in the last few years, but here too we must recognize our lag compared to average EU levels. On average, Estonia expends 10 times less than the EU on active labour policies (the comparison is based on the percentage of GDP spent on active labour policies). The primary reason is a very restricted target group (only registered unemployed people) and the short duration of the programs. In addition, a relatively large number of unemployed people search for new jobs without the help of the Labour Market Board; therefore it is not possible to provide them with the relevant services. It is also unclear whether the provided services have helped to improve the prospects of the participants in the labour market.

As far as the third component of flexicurity i.e. social protection is concerned, Estonia is unfortunately among the least developed EU member states. Our public sector expenditures for social protection are among the lowest in the EU. Our unemployment benefits are also among the lowest. In addition, our unemployment insurance system is relatively rigid – e.g. part-time employment is not encouraged, because people lose all their benefits even when working with very small workloads. Therefore one of the principles of flexicurity – that a person should be guaranteed as large an income as possible during the unemployment period – is not always fulfilled in Estonia. For instance, surveys show that those who have received collective layoff benefits and those who have worked in the public sector are in a better position in comparison to the others. On the other hand, one can always argue that low social expenditures encourage people to return to the labour market. This is also conforms to the liberal economic ideology that has dominated to date, which minimizes the state's intervention and values individual initiative. However, this ideology is not in agreement with Europe's social model.

One of the components of social protection is the combination of work and family life. In this regard, the greatest problem lies in the deficit of flexible pre-school childcare possibilities.

As far as adult education is concerned, relatively few people participate in Estonia compared to other EU countries. Generally, governmental support for adult education only covers about three broader categories of people. These include government officials, teachers, and the registered unemployed, as well as some smaller target groups that are financed in the framework of specific projects. It is also common that more white-collar workers and competitive worker groups receive more training. Less-qualified and older workers as well as other risk groups, who probably need more training, actually receive less. Furthermore, it has not been assessed whether the training provided corresponds to the needs of the labour market.

Therefore, you could say that examining the four components of flexicurity, one can only be more or less satisfied with labour market flexibility. In the remaining flexicurity components, Estonia still has much to accomplish in order to feel on a par with the old EU member states and to guarantee the flexible functioning of the labour market. A step in this direction was taken by the new Employment Contracts Act and the trilateral agreement accompanying it, which increases the flexibility of the employment relationship primarily by liberalizing the regulations related to layoffs and thereby improves the position of Estonia in the rankings based on various indices. On the other hand, the new law increases the benefits paid in case of unemployment (unemployment insurance, unemployment benefits) and expands the circle of those receiving unemployment insurance benefits. As a result, the social security of the unemployed increases and reduces the current ine-

quality in social protection. The opportunities for adults to participate in job-related training and in formal education are also improving. The new law and the agreements accompanying it will not bring about any changes with respect to active labour policies, although in the current economic situation, the expansion of labour market services and the anticipatory provision of training for workers threatened with layoffs would be very necessary.

References

1. Ainsaar M., Soo K. (2008) Kohalike omavalitsuste toetus lastega peredele Eestis. Institute of Sociology and Social Policy of the University of Tartu. http://www.rahvastikuminister.ee/public/ARUANNE_2007_30.pdf
2. Ansip, A 2008 "Andrus Ansip: majandus ei kasva anonüümselt" Postimees 3.10.
3. Arrak, A., et al 2008, Eesti majandus: lõimumine Euroopa ja globaalses kontekstis, Avatar, 2008
4. Council of the European Union (2007). Council decision on guidelines for the employment policies of the Member States http://ec.europa.eu/employment_social/employment_strategy/pdf/guidelines07_en.pdf
5. Eamets, R., Masso, 2005 J "Labour Market Flexibility and Employment Protection Regulation in the Baltic States" in European Journal of Industrial Relation Vol 11, No 1, 2005, pp 71–90.
6. Employment Contracts Act 299SE. http://www.riigikogu.ee, last viewed on 09.01.2009.
7. Employment Service and Benefits Act. RT I 2005, 54, 430
8. European Commission (2008) Indicators for monitoring the Employment Guidelines including indicators for additional employment analysis. 2008 compendium. European Commission, DG Employment, Social Affairs and Equal Opportunities ec.europa.eu/employment_social/employment_strategy/pdf/2008compendium_en.pdf
9. Eurostat (2008) Childcare in the EU in 2006, Eurostat News Release STAT/08/172, 5 December 2008.
10. Eurostat. Electronic database. Tax rate on low wage earners – Unemployment trap. Last viewed on 09.1.2009.
11. Eurostat. Electronic database tables Social benefits by function (% of total benefits) and Total expenditure on social protection - Current prices (% of GDP). Last viewed on 09.01.2009
12. Eurostat. Electronic database. Labour market policy - Public expenditure on labour market policies, by type of action (% of GDP) Last viewed on 09.01.2009
13. European Commission (2006). Employment in Europe 2006. Office for Official Publications of the European Communities.
14. Irish National Training & Employment Authority (2008). Overview Paper on the Individual Learner Plan for Community Employment Participants. An Innovation in identifying, recording and reporting on individual learner activities & preparation for progression. Official Paper. http://pdf.mutual-learning-employment.net/pdf/IE08/Official_paper_IE08.pdf. Viewed on 09.01.2009
15. Kask U., Rummo-Laes T-L., Eomois P-P., Denissov G. (2005) Laps ja sotsiaalne keskkond. Statistics Estonia topical paper, Mai 2005
16. Leetmaa, R., Võrk, A. Eamets, R., Sõstra, K. (2003) Aktiivse tööpoliitika tulemuslikkuse analüüs Eestis. PRAXIS Center for Policy Studies.
17. Leetmaa, R., Võrk, A. (2004). Do Post-Soviets Behave According to Search Models? Econometric Analysis of the Effects of Incentives in the Estonian Unemployment Insurance System.
18. Leetmaa R., Karu M. (2008) The Provision of Childcare Services in Estonia. External report commissioned by and presented to the EU Directorate-General Employment and Social Affairs, Unit G1 'Equality between Women and Men', March 2008
19. Leppik, L., Võrk, A., Tiit, E., Leetmaa, R. (2004) Euroopa Liidu ühiste pensionieesmärkide mõju Eesti pensionisüsteemile. PRAXIS Center for Policy Studies.
20. Lille, T., Palmet, L.(2006) Presentation project "Puuetega inimseste tööhõive edendamine" final seminar 07.12.2006
21. Masso, J., Eamets, R., Philips, K. (2006), "Job Flows and Worker Flows in the Baltic States: Labour Reallocation and Structural Changes", in T. Paas and R. Eamets (Eds.), Labour Market Flexibility, Flexicurity and Employment: Lessons of the Baltic States, Nova Science, p 79.
22. Ministry of Labour and Social Inclusion (2008). Vocational Rehabilitation in Norway. Official Paper. http://pdf.mutual-learning-employment.net/pdf/NO08/official_paper_NO08.pdf. Viewed on 09.01.2009
23. Ministry of Social Affairs (2008). Tervis, Töö ja Sotsiaalelu 2007. Tallinn.
24. OECD (2005). From unemployment to work. Paris.
25. National Audit Office of Estonia (2007). Riigi tegevus tööturult tõrjutute tagasitoomiseks tööturule. Tallinn. http://www.riigikontroll.ee/
26. Statistics Estonia: Tööturg arvudes. 2006. Labour Market in Figures.
27. Turu-uuringute AS (2008). Tööturuameti maine uuring 2008. Tallinn http://213.184.49.171/www/gpweb_est_gr.nsf/HtmlPages/TTA_maine_2008/$file/TTA_maine_2008.pdf
28. Võrk, A., Leppik, L., Leetmaa, R. (2005) Kollektiivsete koondamiste andmete ja praktika analüüs. Final research report. PRAXIS Center for Policy Studies. http://www.praxis.ee/data/Kol_koondamised_14092005.pdf, Last viewed on 09.01.2009
29. Võrk, A., Paulus, A. (2006) Eesti sotsiaaltoetuste ja maksude mõju inimeste tööjõupakkumise stiimulitele. Research report. PRAXIS Center for Policy Studies.
30. Võrk, A., Leetmaa, R., Paulus, A., Anspal, S. (2007) Tax-benefit Systems in the New Member States and their Impact on Labour Supply and Employment. PRAXIS Working Paper No 26/2007.
31. Võrk, A. Leetmaa, R. (2007). Kollektiivsetele koondamistele reageerimise teenuse tulemuslikkus. PRAXIS Center for Policy Studies.
32. Võrk, A., Karu, M., Tiit, E.-M. (2009) Vanemahüvitis: kasutamine ning mõjud tööturu- ja sündimuskäitumisele 2004-2007. PRAXIS Center for Policy Studies

6.5. Cities as development engines

Today over 70% of the population in the European Union lives in cities and metropolitan areas [Fostering the urban..., 2008.]. The majority of innovation takes place in cities. The international competition between cities decides, to a great extent, which region or even country will be able to keep pace with the expanding possibilities of today's international division of labour, and which not. Moreover, it should be emphasized that since the borders of the city have increasingly started to blur (a large number of people working in cities, especially those earning higher incomes, live outside the city; some industrial manufacturing plants and service providers e.g. transport and warehousing, which require larger territory, are moving to the outskirts of cities; in some countries, multi-centred metropolitan areas are consciously designed, etc.), the territorial economic unit is no longer a city that is treated separately from its surroundings, but a city together with its outskirts, i.e. an urban or metropolitan region. The differences between the developmental indicators (level of education, ratio of more complex production and service, income per capita, etc.) of the metropolitan regions that have achieved international success and the indicators of the remaining parts of the country may be surprisingly large in today's Europe.

Therefore, turning our attention to the cities, especially to the role of Tallinn and Tartu in Estonia's regional development, in the following subchapter is justified.

By comparing the developmental indicators of Northern Estonia (Tallinn with Harju County that surrounds it) with the average in EU regions, we see more or less comparable numbers. And with respect to the ratios of people with higher education, if we leave aside the issue of the structure of higher education, "Greater Tallinn" and actually all of Estonia significantly surpass the average for EU regions (Table 6.5.1.).

While the Northern Estonia region can actually be construed as an agglomeration of Tallinn, in the generalized indicators for Southern Estonia, it is not the indicators for Tartu but those of the rural counties that dominate. Therefore, great differences between the two Estonian regions stand out. However, if we compared the Northern Estonia indicators not with all of Southern Estonia, but only with the indicators for Tartu County (which can be treated as an agglomeration of Tartu with a certain, but greater conditionally, than it can be done in the case of Harju County and Tallinn), we get a significantly different picture. We see that the ratio of those employed in mid- and high-tech (industrial) manufacturing and knowledge-intensive high-tech services is practically the same in Tartu County as it is in Northern Estonia (the former between 4% and 5% and the latter between 3% and 4%, although if it is compared not to the average for EU regions, but to the metropolitan areas at the forefront, these numbers are not anything for either to be proud of), and the gap in the ratio of professionals and experts (HRST) is not hopelessly large compared with Northern Estonia (about 38–39% in Tartu County) while the percentage of those participating in lifelong learning (about 10%) is higher than in Northern Estonia. It's true that the ratio of people with higher education is 6% lower in Tartu County than in Harju County, but a partial reason for this may be the large concentration of public sector jobs requiring higher education in Tallinn.

Table 6.5.1. Developmental indicators for Estonia's regions compared to the average for EU regions

Indicator	Average of EU regions 2005	Northern Estonia		Southern Estonia	
		2005	2007	2005	2007
Ratio of people with higher education	23.59	42.2	43.4	29.3	28.3
Participants in lifelong learning, %	10.25	7.0	8.6	7.0	7.5
Ratio of employment in high-tech services	3.21	3.5	3.7	2.6	2.4
Ratio of employment in mid- and high-tech manufacturing	6.45	5.3	4.4	1.8	2.9
Ratio of professionals/ experts in the workforce (HRST)	36.31	41.9	42.9	28.3	29.3

Source: Eurostat, Statistics Estonia.

A high-tech manufacturing city or a knowledge-based city

It is clear that at least in the European Union context, becoming one of the successful cities/metropolitan areas is not possible without a large part of employment being concentrated in the more complicated niches that are highly valued in the international market. In many cases, this means an ability to participate in high-tech developmental and production processes or at least to operate modern high-technology. However, the picture appears quite confused with regard to which specialization options that might represent such success and how typical they are. Some clarity is provided by the results of the recently completed Crossworks cooperation project under the EU's 6th Framework Program, with the participation of researchers from the Netherlands, Belgium, Germany, Estonia and Finland. In the course of the project, a statistical analysis was made based on existing developmental indicators (technological, educational and economic) of the variables of the most successful regions in the European Union. More than 50 European Union regions were classified as successful based on higher-than-average level of economic development as well as positive dynamics. It should be emphasized that there are not grounds to compare the current developmental indicators of Estonia's regions, i.e. the Tallinn and Tartu regions with the indicators of the top regions in the EU; Estonia's market economy is still too young and its EU membership too new. However, from Estonia's viewpoint, the situation of the EU's leading regions can serve as objectives for setting long-term goals.

The survey, which was primarily conducted by Bart van Looy and Catherine Lecocq of the University of Leuven, demonstrated that successful regions possessed both similar and dissimilar traits. Two types of successful regions could be distinguished based on the structure of employment: firstly, a type that has a relatively large number of mid- and high-tech industrial enterprises, and a second

type, where the leading role was played by high-tech services (Crossworks, 2008: 9–21). The authors of the survey named these metropolitan areas high-tech manufacturing regions and leading knowledge regions respectively.

A very high number of patents is typical of high-tech manufacturing regions. A generally high level education of the workforce is typical of both high-tech manufacturing regions and leading knowledge regions, whereas, the latter has an especially large percentage of workers with university education. Successful high-tech manufacturing regions also require the existence of quite a large well-educated "blue-collar" workforce with vocational education. The high intensity of lifelong learning is necessary for the success of both types of regions.

The statistical analysis shows that there are slightly more knowledge regions than high-tech manufacturing regions among Europe's successful regions. What is more important, the knowledge regions have recently prospered better than the high-tech manufacturing cities, and their economic growth has been faster.

For the Tallinn and Tartu regions, the news about the prospects for the knowledge region/city model is probably positive since this enables the better implementation of their greatest advantage, the high percentage of people with higher education and it somewhat reduces Estonia's greatest disadvantage, the small number of patents compared to other developmental factors. One can also presume that movement in the direction of a high-tech manufacturing region/city model, which would definitely assume a strong emphasis on vocational learning and higher education engineering studies would be more difficult to combine with the value orientations predominant among young people in Estonia than the movement towards a knowledge region model. However, it must also be considered that the goal to become a leading knowledge region even in the distant future assumes a significant increase in the number of people working in mid- and high-tech sectors (industrial and service combined) from the current level of 10% to at least 15% (and even higher in the future). It also assumes the existence of internationally competitive universities that cooperate with the economic environment as well as significantly more intensive activity in the field of lifelong learning.

The surveys of the European cities prove that successful economic development at the middle and higher developmental levels is not possible without a diverse and attractive cultural environment that stimulates general creative growth. Since an international search for talent is typical at higher developmental levels – for top information technologists, designers or investment bankers – the attractiveness and creativity of the urban environment is one of the key factors for the quality of life that will attract an international level of top people (and their families). In the course of the Crossworks survey, interviews were conducted in five cities where the knowledge city model is considered to be an important developmental prospect (Leuven, Endhoven, Aachen, Tallinn and Helsinki). It was found that in all the cities issues related to the attractiveness of the cultural life, creative economy and urban environment arose in connection with the development of high-tech-based manufacturing and service. Moreover, these aspects were very critical in cities with less than 200 thousand residents, in which case attracting talented people was hindered by the fear that while the city may be convenient and secure, the cultural life may not be sufficiently diverse or interesting enough to set down roots for a longer period.

Traits of a creative knowledge city

In the EU 6th Framework project entitled "Accommodating Creative Knowledge Competitiveness of European Metropolitan Regions within the Enlarged Union – ACRE" the future development opportunities for 13 cities to become creative knowledge cities was examined. Based on this analysis, in which factors related to culture and creativity were a focal point, it was found that the following types of cities have the best prerequisites for becoming knowledge cities:

1. Cities that are known as national or international political and economic decision-making centres have better preconditions for innovative restructuring (into a creative and/or knowledge city) than do cities where significant decision-making does not take place.
2. Tolerant and multicultural cities where everyone is welcome have greater potential to attract people with various lifestyles and cultural backgrounds and thereby to increase innovativeness than closed cities.
3. Cities where small businesses and high-tech manufacturing dominate and which have been service-based early on and never had large manufacturing have better preconditions for transitioning to a creative knowledge-based economy.
4. Internationally renowned historical-cultural cities are attractive to the creative class and thereby they have the prerequisite to become creative cities.
5. Well-managed cities with financial and organizational resources are more able to provide suitable environments for a creative economy.
6. It was emphasized that a well-formulated, well-financed and achievable city/region innovation and technology policy is an important factor in its movement on the described path.

Based on the survey and an assessment of the aforementioned compendium of criteria, the following cities could be considered to be creative cities: Amsterdam, Barcelona, Dublin, Munich and Helsinki with certain reservations. The qualifications of smaller cities and those that are not capitals is made more difficult due already to the first criterion. Nevertheless two cities that were examined – Toulouse and Birmingham – which are not among the capitals of countries, autonomous units or states collected relatively good scores, based on which they are at least approaching the ideals described above. The example of Birmingham is interesting because it is not a city with great historical-cultural value and in previous periods has not been considered to be a multifaceted city. Its success has been achieved recently by developing and realizing conscious policies directed at promoting creativity and a creative economy.

Attempting to assess Tallinn and Tartu based on the aforementioned aspects, it seems that Tallinn has relatively good prerequisites regarding most of the criteria. Although, like most other cities it was over-industrialized ("Fordized") during the socialist period, its restructuring into a modern service economy has occurred quite

Table 6.5.2. Existence of development plans or strategies

	Tallinn	Tartu
Culture	**Separate development plan lacking**	**Development plan exists:** Development Plan for Tartu Culture, Sports and Youth Activities for 2008–2013
Enterprise	**Development plan exists:** Tallinn Small Business Development Program for 2006–2009	**Development plan exists:** City of Tartu Enterprise Development Plan for 2007–2013
Transport	**Various development plans:** - Sustainable Development Plan for Public Transport of Unified Ticket System for 2004–2010 - Tallinn program for safer traffic in 2008–2014 - Development Directions for Tallinn's Major Road Network for 2005–2014	**Separate development plan lacking**
Innovation	**Development plan exists:** Innovation Strategy for Tallinn for 2009–2013	**Development plan at the city level lacking.** The relevant regional strategy exists: Innovation Strategy for the Tartu Region
Development of technology, e-services, etc.	**Various development plans, programs:** - Development Plan for an Information Technology Environment to Guarantee the Development of Tallinn Public Services for 2008–2013 - Basic Directions for the Action Plan for E-Tallinn	**Separate development plan lacking**
Tourism	**Separate development plan lacking**	**Development plan exists:** Development Plan for Tourism in the City of Tartu for 2008–2013
Environment	**Various development plans, programs:** - Environmental Strategy until 2010 - Environmental Health and Safety Action Plan	**Various development plans, programs:** -Waste Management Development Plan for the City of Tartu for 2005–2009 - Environmental Development Plan for the City of Tartu for 2006–2013
Education	**Various development plans, programs that are related to individual aspects of the educational sector:** - Action Plan for the Organization of the Tallinn Municipal School Network for 2006–2008 and - Plan for the Organization of the Tallinn Municipal School Network for 2003–2012	**Development Plan for the Municipal Educational Institutions of the City of Tartu for 2008–2013**

Source: Authors based on data from Tallinn City Government and Tartu City Government.

quickly. An advantage is definitely its status as the capital city, its historical-cultural reputation, relatively high level of internationalization and level of multiculturalism/tolerance. Expert discussions showed that Tallinn is considered open, and welcoming to creative people from outside; Tallinn's various contrasts have an inspirational effect. The disadvantages include the poor level of development reliance on cars, inadequacy of meetings and cooperation between creative people, and the lack of suitable places to achieve this, the paucity of "bridges" between the separate worlds of the Estonians and Russians. The creative potential is not underutilized, and the involvement of creative people in city projects is not sufficiently well organized (Loova Tallinna…2008: 93–95). Tartu's advantage is the existence of a historical and recognized university; its disadvantage is that it is not a decision-making centre at the national level; it exhibits a certain ethnic seclusion, and a distance from main international communication paths, if we leave aside the University of Tartu's international contacts. At the same time, Tartu's creative community has shown a great and commendable wish to be involved in the development of the city's cultural environment.

The progress of Tallinn and Tartu toward becoming creative knowledge cities

However, what is needed to start the movement towards the creative knowledge city/region model that is based on the aforementioned international experience? In summary, the following is needed: a) a comprehensive vision related to the development of the economy and living environment at the metropolitan region level; b) the long-term planning of all fields of activity related to increasing innovation, knowledge and creativity; c) the interconnection of these long-term plans in order to intensify their effects; c) an instrumental mechanism to institute the aforementioned plans.

Let's compare the development visions, as well as the existence of the relevant development plans and strategies from this viewpoint (Table 6.5.2.).

A superficial conclusion to be drawn from the above table is that Tallinn's development is focused on being technology-based and Tartu's development is focused on being culture-based. After all, the Innovation Strategy for Tallinn was completed last year, which for the first time specified the fields for knowledge and technological development that Tallinn considers priorities from the viewpoint of the city's development. It also includes some measures to be taken by the city in order to help increase the relative importance of high-tech manufacturing and high-tech services. In Tartu, on the other hand, a significantly more detailed development plan for cultural activities was prepared. However, such a conclusion does not reveal the basic nature of the problem. Both Tallinn and Tartu have started to plan their development in a more comprehensive manner, i.e. they have devoted more attention to phenomena like innovation, the knowledge base, and creativity. However, it cannot be said in the case of either city that the given development strategies or development plans are specifically based on a modern integrated vision or conception of urban development. Therefore, it is not quite clear to what extent intensification will occur between the individual plans or strategies as they are realized. Secondly, innovation polices at the city level are also quite a new phenomenon internationally, therefore there is no clear understanding of what such policies should include, how they should

be formulated (the Crossworks survey showed clearly that it occurs extremely differently in the urban regions of different countries), how to connect these policies to national innovation policies that are usually (at least in regard to R&D) planned from the top down not from the bottom up, etc. With respect to the above, there are also doubts about how realistic the realization mechanisms are for the innovation policies and other complexes at the metropolitan region level. In other words, the city declares (as does a country or private sector) that it considers one or another development to be important and tries to help it along. Yet to what extent it can support this development with its own resources remains somewhat up in the air, especially under conditions of economic recession. However, we can state that Tallinn and Tartu have taken certain steps to make their movement in the direction of a knowledge city model more comprehensive. We can hope that lessons can be learned from this process and that future movement along this path will occur in an even more informed manner.

References

1. Crossworks: R&D Investment, R&D Capacity, R&D Cooperation. Final report of the project. Eindhoven 2008
2. Fostering the Urban Dimension. Analysis of the Operational Programmes co-financed by the European Regional Development Fund (2007–2013). European Commission. November 2008;
3. Florida, Richard, The Flight of the Creative Class. The New Global Competition for Talent. New York, HarperCollins Publishers,2005
4. Loova Tallinna visiooni kontseptsioon. (2008) Tallinn City Government. http://www.tallinn.ee/est/g2402s39407
5. Acommodating Creative Knowledge – Competitiveness of European Metropolitan Regions within the Enlarged Union – ACRE, project funded under the Sixth Framework Programme of the EU, http://www2.fmg.uva.nl/acre

6.6. Summary

- By comparing the objective indicators of the European countries that characterize the different components of well-being as well as the peoples' assessment of these components and the quality of their functioning, we see that European countries can still be divided into "two leagues" – into stronger and weaker countries. Yet the division of the countries into these two leagues depends only to a small extent on which criteria are used for this classification. Estonia currently clearly belongs to the second, weaker league, not only based on an assessment of the general synthetic human capital indicator, but also based on economic wealth despite the booming economic growth that has taken place in recent years. The only synthetic component regarding which we can assert that Estonia is about to cross the border between two leagues, or at least is very close to it, is social capital – the institutional quality and confidence in institutions with regard to other people in general as well as state institutions.

  However, it is characteristic of Estonia that people's subjective assessments of the majority of the evaluated components are higher than the actual level of the phenomenon being assessed. In comparison to other countries, our satisfaction with our economic situation is higher than our economic wealth; satisfaction with education and health ranks higher than the objective state of human capital, etc. It is possible that such relative overvaluation has helped us develop our economy faster, and it cannot be ruled out that it has prompted us to over-consume or to significantly underestimate important phenomena, such as health, a level of stratification, etc. The question is how this somewhat inflated self-evaluation will survive the setbacks that will arrive with the economic recession and whether the confidence in each other and our common institutions will survive.

- Starting from the beginning of this decade, GDP has increased in Estonia as have social expenditures, while GDP growth has been significantly faster than the increase in social expenditures (health care, education, and social protection). This type of development did guarantee a balanced budget and a surplus (the latter is quite significant, considering that we have entered a period of economic downturn). However, it makes one cautious from the standpoint of the long-term strengthening of human capital, which is also an important prerequisite for future economic growth. The economic recession threatens to lower a series of social expenditures that are already at a critical level, and to thereby inhibit the unleashing of a new vigorous economic growth cycle upon emerging from the crisis. A serious analysis should be made of the sustainability of Estonia's education model.
- In connection with increased unemployment related to the economic recession, there has been a great deal of discussion in Estonia about the need to make the labour market more flexible. The new Employment Contracts Act has already taken steps in this direction. At the same time, Estonia's labour market cannot be considered rigid on an international basis. Although the governmental regulations related to the labour market have been relatively strict, this is compensated by the weakness of the regulations that operate based on agreements between social partners. Mobility of jobs has been quite active and one can assume that heretofore the restructuring of the Estonian economy and emergence from the crisis will take place primarily through the labour market, not through the government's macroeconomic measures.

  Actually the problem in Estonia is that the systems that should contribute to a flexible labour market (flexicurity systems or secure flexibility systems), such as adult education and active employment policy measures,

have been underfinanced or are not effective for other reasons. At the same time, Estonia's expenditures on social protection have also been low and the unemployment insurance system has been comparatively rigid.

- While the central issue in Estonia during the next few years will probably be the state of industry and industrial employment, our future in the longer term will depend primarily on how successfully we are able to move in the direction of a modern knowledge region model. The realization of this model will play a key role for cities that are able to seize new, primarily service-related, functions for themselves in the international division of labour. It is extremely important that the Tallinn and Tartu metropolitan areas be able to concentrate employment in knowledge-intensive high-tech services, to gain international recognition and become well-networked knowledge regions.

Some prerequisites, primarily the high percentage of employees with higher education, already exist, while some still need to be created. One of the preconditions for the development of a knowledge city/knowledge region is the attractiveness of the environment to talented people and the ability of the urban environment to support and encourage creativity. Thus movement towards the creation a knowledge city also means aspiring to realize a creative city model. However, this creates a need for treating culture and cultural prerequisites differently in a contemporary context in order to develop modern economic structures that function through international communications; to expand the mentality of the city and increase its creativity; to develop a symbiosis of culture and enterprise (creative economy); and to make the urban environment more attractive by implementing the ideas of creative people.

CHAPTER 7

Human development and social risks in Estonia in the context of the economic crisis

How would you rate the social sustainability of the Estonian society in its current state of development, where growth has turned into decline?

When we analyze human development in Estonia in the context of the current economic crisis, we inevitably focus on questions that are different from those asked a year ago. During the period of economic growth, the fact that human development lagged behind economic development was at the centre of our attention as proof that we needed to invest more resources in social development. Although the gap between Estonia's level of economic development and, for example, public health has not narrowed during the past year, we now have much more reason to see human development as a resource that allows (or does not allow) a society to survive difficulties.

What have been the results of the rapid economic growth during the period 2004–2008 with regard to the material and social quality of life of the Estonian population?

Looking back, many of the authors who participated in preparing the chapters of the Human Development Report agree that the years 2004–2008 marked an unprecedented period in Estonian history in terms of the fast growth in people's well-being, which was reflected in the high levels of satisfaction with life. On the on hand, there was a slight decrease in income disparity and a smaller number of people lived in poverty or were at risk of poverty. On the other hand, an increasingly large percentage of the society reached a quality of life comparable to that of wealthy countries in terms of their level of consumption. It can be said that the economic growth of recent years was accompanied in Estonia by an increased sense of security among the middle class. People's social self images were affected more and more by the attitudes and opportunities characteristic of an information and consumer society. Meanwhile, there was also an increase in carefree consumerism, importance attributed to items as well as social passiveness. Furthermore, the gaps between the quality of life of the older generation and the younger generation grew, as did the gaps between the quality of life in different regions. The disparity between the opportunities for self-realization that existed between the Estonia-speaking population and the Russian-speaking population persisted.

What are the greatest social risks and weak points that endanger human development at this stage of development in the Estonian society?

The most significant problem that poses a serious danger to the quality of life of the Estonian population is low life expectancy, especially in the case of men, which is primarily the result of social and behavioural causes, as well as the scarcity of healthy and active life years available for both men and women. Despite women's longer life expectancy, their period of active participation in society is, on average, as short as that of men, as they become dependent on welfare services and the health care system relatively early in their old age. Careless health behaviour, described in the Human Development Report as a cause for the loss of life and working years and the resulting effect on the development of the Estonian economy, is one of the most topical problems in Estonia. The goal for the next decade is to increase the average lifespan of men and women in Estonia as well as to support the active participation of the elderly in the society. It is time to mobilize the entire society for the achievement of this goal, including state institutions, health and education systems, civil society, as well as all families and communication networks. We have sufficient information on the dismal situation and know how we should act. We need the state and the public to strive towards a common goal and to be able to take specific steps in order to make Estonia a healthier living environment, despite economic difficulties.

The problems related to public health are related to a wider set of issues regarding values, lifestyles, human relations, upbringing, and culture. Thus, another risk area, in addition to health, is the variety of problems related to young people's lifestyles and values as well as their quality of life. The latter has been shaped by the sudden increase in the availability of material opportunities and has resulted in the spread of social risks that seriously threaten the social sustainability of the Estonian society during the next decades. The facts presented in the Human Development Report regarding alcoholism, school bullying, the lack of contacts between young people and the older generation point to the inability of the youth's socialization environment (which includes family, school, recreational environment outside

Table 7.1. Factors that favour and hinder our recovery from the economic crisis as seen in the Human Development Report

	Factors favourable to the society's handling of and recovery from the crisis	Factors hindering or endangering the society's handling of and recovery from the crisis
Development of the population See Chapter 1	• Increased birth rate • Increased well-being of households, decrease in the number of people who are profoundly poor or at risk of poverty • Moderate emigration	• Short average lifespan • Low birth rate • Negative natural increase • Large income gaps (Gini coefficient) • The "emptying" and social degeneration of certain regions due to internal migration • Ethnic differences
Education See Chapters 1 and 6	• High average level of education and involvement in studies	• High dropout rate • The disparity between the content and structure of the education and the needs of the labour market
Health See Chapters 1 and 2	• Attributing greater value to health with respect to the criterion of active life years • The positive effect of certain measures (e.g. the reduction of "passive" smoking)	• Large losses of labour force and working time due to bad health • The heightened health risks of people in their prime working age, especially men, including the high rate of mortality related to injuries and cardiovascular diseases • A comparatively very small number of healthy life years, reflected in the increased need for care and high health care costs already in early retirement, prevents the rise of the general age of retirement • Growing rate of alcoholism in the society, including among women • The spread of drug addiction, alcoholism, smoking, and sexual risk behaviour among progressively younger age groups • Health disorders resulting from an unhealthy diet and a lifestyle that does not include enough physical movement •The sharply increasing burden of the HIV epidemic on the health care system
Quality of life, social cohesion, involvement See Chapter 3	• The general improvement in the quality of life, including the improvement of living conditions, the increase in expenditures not related to food, active travelling, etc. • Increased participation in civil societies	• Growing difference in the quality of life of younger and elderly people as well as wealthier and less wealthy population groups.
Integration See Chapters 3 and 4	• A certain decrease in the gap between the overall level of the well-being and quality of life of the Estonia-speaking population and the Russian-speaking population • The increased competitiveness of the younger generation of the Russian-speaking population with Estonian citizenship in the labour market and their relatively higher satisfaction with life • The adoption of the Equal Treatment Act and the more active involvement of the Russian-speaking population in the Estonian media space	• Increased unemployment and economic risk among the Russian-speaking population, especially among non-citizens with limited language skills • The increased distrust and dissatisfaction of the Russian-speaking population regarding national institutions and Estonian policies, accompanied by heightened expectations for the state to act as a guarantor of well-being and security • The social exclusion and alienation syndrome
Consumer culture See Chapter 5	• The general improvement in the quality of life has also increased the activeness of the consumers, the diversity of their needs, and their attention to quality • Increased attention towards self-expression and identity-related non-material needs and healthy lifestyles • The creation of an environmentally conscious consumer culture among the more affluent and active young consumers • The persisting effect of conservative thrift among the middle-aged and elderly population	• The "cult" significance of consumption, the equation of successful consumption with a person's success in the society • The fast proliferation of consumerism among young people and children, including the increasing effect of advertisements on children • "Overconsumption" as a result of the dominance of consumerist values, including the rise in the trend among young people and less well-to-do groups to take out consumption loans
Development of information society See Chapter 5	• Widespread Internet access and the spread of services available through the Internet throughout all social groups have become important factors in quality of life • The widespread use of the Internet for public communication expands the possibilities for civic initiatives • The transparency of state authorities and other agencies achieved through the Internet increases public trust and people's opportunities for being involved in and having control over policy implementation • Open access to important information increases people's ability to function independently in a crisis situation • It is possible to use online communities to mitigate social dangers and crises, to express solidarity, and the receive mutual support	• The different level of Internet use in various social groups increases the danger of social inequality and exclusion if the Internet becomes the only or dominant information channel used by the state authorities or source of public services • The inadequate recognition of risks related to the Internet in the society, especially by the parents • The increasing gap between the online competence of different generations, including pupils and teachers • Children's Internet use is not subject to the supervision of either parents or teachers • The transformation of the Internet into a place for expressing social animosity and other negative emotions could, in a crisis situation, amplify the sense of panic and the danger of ethnic conflicts • The Internet enables users to manipulate the public
General level of economic development, economic growth See Chapter 6	• Estonia definitely belongs among countries with a high level of development • Even in the case of poor objective conditions, Estonian residents have had a relatively high level of satisfaction with their well-being • Estonia's fast economic growth during recent years has also contributed significantly to the objective well-being of its society	• The liberal economic model used up to the present has not allowed for sufficient investments to be made into human development • The previous source of economic growth is no longer sustainable • Estonia lacks a clear strategy for its transition into a new paradigm of economic development and has made no clear choices with regard to economic policy
Labour market See Chapter 6	• Low unemployment rate • Relatively high level of activity of the elderly in the labour market • Flexibility of the labour market is guaranteed at company level	• Lack of active labour market policy • Lack of opportunities for retraining or in-service training, which would increase the flexibility of the labour market
Social policy See Chapters 2 and 6	• Unemployment insurance	• The constant under-financing of social policy • A system of social benefits that does not pay sufficient attention to the needs of the target groups, is inflexible and does not do enough to decrease income disparity • The underdeveloped state of the care system, especially the inadequacy of home care • Lack of kindergarten places •The under-financing of health care and public health measures, including the lack of preventive systems related to diseases, such as cancer and cardiovascular diseases, which significantly affect the length of one's life, • Lack of social policy experts

school, and the media) to avoid the marginalization of a troublingly large proportion of young people, such as the unemployed, drug addicts, or lawbreakers. Meanwhile, international studies of education indicate that while our current education system guarantees the success of the majority of Estonian school pupils in studying different subjects, it does not provide them with sufficient opportunities for personal development and instruction in the field of values.

The third troubling social aspect is the excessive differences between people's state of health and quality of life in general by region and ethnicity, which, for example, has brought about an accumulation of different social risks in North-Eastern Estonia. In a situation where the financial means of the country are dwindling, this may lead to an explosive rise in social tensions. At the same time, the Russian-speaking population has developed heightened expectations and a stronger reliance with regard to public security systems than Estonians, thus creating a favourable environment for manipulation with protest mentality. In addition to the Russian-speaking population, there also exist other social groups whose vulnerability is increased during the crisis due to their reliance on public policies. These vulnerable groups include pensioners and people with disabilities, whose growing fears and sense of helplessness may affect the entire society.

What dangers and opportunities does the critical economic situation generate with regard to human development?

Human development is affected most immediately by the situation in the labour market; this is especially true with regards to the unemployment rates which have already started to grow and will snowball in 2009. In relation to this, we need to find a quick solution for the reorganization of the training system due to the increasing need for in-service training and retraining. The developing situation is made even more volatile by the fact that many white-collar employees, younger and older specialists, i.e. people who have thus far belonged to the middle class will lose their jobs. This will be the first time when unemployment will affect the "winners" of the transition society, ambitious and consumption-prone young people whose social self-esteem and level of unconcern has hitherto been very high. The expectations of these groups regarding labour market measures, including their retraining needs, are completely different from those of unemployed weavers or miners. Meanwhile, their existing social resources are much greater. Due to this, the European Social Fund could be used to promote business activity on a much wider scale than usual. The upcoming situation is not reflected in the current labour market policy, where highly educated unemployed people are almost completely unaccounted for.

The high debt burden of young families (which was one of the reasons used to justify the adjustment of the parental benefits to the current level of salaries) can bring about a critical situation in many families when they stop receiving parental benefits but have no employment opportunities. Due to this, we should consider reducing the size of the parental benefits in favour of lengthening the period of time during which payments are made. Regardless of the economic crisis, we cannot abandon the development of the child care system. In the context of the economic crisis, we should adopt an especially cautious approach to families with children in general, particularly those with only one breadwinner and above all, those cases where the only breadwinner is in danger of becoming unemployed. This may have far-reaching social consequences when, as a result of their parents' unemployment, children lose the opportunity to obtain quality education, participate in hobby activities and play sports.

The economic downturn has a very dangerous influence on health, especially due to social stress, which serves to further increase Estonia's unprecedented high risk of cardiovascular diseases, alcoholism and drug addiction, depression, and suicide, as well as tendencies towards violence and aggressive behaviour, both inside families and in schools and public spaces.

Taking into account the differences among social and ethnic groups in terms of trust in the state as well as their ability to cope with difficulties, the amplification of social protest and conflict is likely if the media, the politicians, and the civil society are unable to create and maintain the society's readiness for and belief in overcoming the difficulties together.

What should be preserved and what should be changed in terms of economic and social policy in order for us to survive the crisis as painlessly as possible with regard to human development or even emerge from it in a better shape than before?

In our current situation, it is especially important to consider the social impact of all decisions related to economic and budgetary policy (on which social policy depends to a large degree) as well as the method of presenting the decisions to the public with the aim of

- avoiding or compensating for the deterioration in the quality of life of vulnerable target groups (the decisions made at the end of 2008, which worsened the quality of life of people with disabilities and pensioners are an example of what to avoid);
- avoiding an increase in health risks and continuing preventive activities aimed at improving public health;
- preventing the negative effects of the crisis on the quality of life of children by implementing special support measures in the case of their parents becoming unemployed;
- preventing negative demographic effects with regard to both the birth rate and emigration;
- preventing panic and the aggravation of ethnic and social tensions.

It is during the economic crisis that we should devote more attention to the non-material aspects of the quality of life, especially the psychological sense of security and trust in the fact that the social environment, including the authority of the state, is functioning in the public interest.

The effect of the crisis could be mitigated considerably by the more effective use of funds provided by the European Social Fund as well as other European sources with respect to human development (i.e. public health, natural increase, quality of life, employment, involvement, the socialization of youth, the protection of risk groups, etc.). It is important to monitor carefully whether the projects correspond in practice to the most urgent social needs (ministries along with local governments, scientists, and partners from the civil society should weigh the priorities once more

Table 7.2. Potential economic developments in the case of different courses of action taken by the government as well as either a shorter or longer recession in the external environment

Type of economic crisis scenario	1. Quickly stabilizing and improving external environment	2 External environment continues on a path of faster or slower decline
A. Postponing decisions	A1 – high risk of failure	A2 – certain catastrophe
B. Following social priorities	B1 – has a chance of success if additional resources are found	B2 – not sustainable in the case of a longer period of decline
C. Following business priorities	C1 – chance of success, requires a social contract	C2 – may succeed in the case of the sharper and faster decline but requires the common effort of business owners and employees; likely to fail in the case of a long downturn in the external environment

and formulate them as specific goals and criteria for carrying out project competitions). The greater empowerment of local and county-level agencies in deciding the uses for EU funds would facilitate the more flexible employment of EU funds in reacting to local needs and meeting the demands of important target groups. The needless waste of time related to bureaucracy, which hinders the movement of funds and the implementation of projects is especially inconvenient in the case of a crisis. The efficiency of the projects with regard to human development should be analyzed by scientists and representatives of civil society.

How can we use the crisis situation for the benefit of human development, for transforming values and increasing social capital?

The crisis situation is, among other things, a challenge for finding new solutions and for adopting new goals and values, not only for companies, but also for public officials, politicians, the civil society and every family. At the peak of the wave of civic activity at the end of the 1980s and the beginning of the 1990s, the Estonian society was able to devise and implement such social innovations as the nation-wide discussions regarding the IME (Self-Governing Estonia) project, the creation of Popular Front of Estonia as a bottom-up network of support groups, and the voluntary registration of the Estonian citizenry. It is not inevitable that social tensions created by the crisis be transformed into negative energy, unleashed by breaking windows and destroying the state. Guaranteeing a real outlet for the civil society's initiatives is the best way to prevent and avoid the negative social effects of the crisis. The crisis provides an incentive for the transformation of values, specifically the replacement of material success-oriented values with social and intellectual values. In a crisis situation that limits families' consumption opportunities it is easier to substitute the impulse to acquire new things with the habit of attributing a greater importance to health, spirituality, personal relations, the time spent in families on each other, especially on children and young people, attention towards the weaker members of society, and awareness of nature and other people. Investing into health, education, social capital, and the value-based upbringing of the youngest generation requires intellectual alertness and organizational initiative as opposed to expensive imported goods or costly infrastructure. We do need to recognize, however, that social capital does not grow on trees – it needs public space, information and communication, encouraging symbols as well as dedicated and selfless leaders. In this regard, cultural institutions and cultural events that energize the public intellectually play a very important role.

In order to recognize and use the new opportunities available to us in the crisis situation, it is necessary to have a public discussion regarding society's problems as well as to provide business owners, officials, heads of organizations and top specialists, politicians and leaders of civil societies with training that would allow them to disengage from routine thinking and inspire them to search for new goals and development paths.

What social resources produced by Estonia's human development can be used to recover from the crisis? Which factors favour and which ones hinder our recovery? (see Table 7.1.)

In what aspect should human development and the social resources of the Estonian society be taken into account when developing strategies for overcoming the crisis and setting budgetary priorities?

The process of developing crisis strategies has two aspects. First, the inevitable need for a rather sudden retrenchment focused on cutting the budgetary expenses of the public sector; and second, the implementation of an effective set of measures aimed at quickly readjusting the economy, creating new employment opportunities, finding investments, etc. A society's social resources as well as its attained level of human development affect both of these aspects.

Limiting budgetary spending requires us to find a compromise between the level of tolerance of various social strata, especially those that are less successful, and the ability to maintain our developmental potential. While cutting spending related to infrastructure or education can be easier than limiting social benefits that affect a wider segment of the society, it may not be a justified course of action in the long-term. At the same time, we cannot allow our social potential to deteriorate irreversibly. The successful handling of this type of complex situation is possible only if the society has faith in itself and trust in its leaders.

The latter depends considerably on the methods used and respect for people shown by politicians and officials in the difficult crisis situation. A complicating circumstance here is the lack of trust in the government and politicians. The absence of solidarity in our multi-ethnic society is an important risk factor, along with the weakness of long-term forethought both among the people and the elite.

The measures that stimulate economic growth can provide results only if the corresponding institutions have the capacity for the fast and carefully considered development and implementation of such measures. Furthermore, there needs to be sufficient human and social potential to utilise the measures. This includes business owners' initiative, flexibility, aptitude for cooperation, ability to function internationally as well as another very important factor – the level of education of the labour force. As a rule, labour force with a higher education is more flexible and better at reorientation, a resource which might prove important for Estonia.

In addition to threats, the international economic recession also presents certain opportunities. Estonia's wealthier neighbours are under more pressure to economize by moving their production or, in some cases, a certain part of their service industry (along with the customers) into cheaper but still trustworthy environments. The banks also have credit resources at their disposal in principle, but do not use them due to their lack of trust in the macroeconomic or social stability of the potential target countries as well as the level of quality of their institutions and business culture. If Estonia, a country that still has a cheaper operating environment, can show that it is able to act effectively even in a time of crisis and can retain social stability and overcome its economic problems, it may attain a significant advantage over other countries and emerge from this difficult stage of development as a winner.

Which economic development scenario is optimal with regard to human development?

The potential crisis scenarios can be differentiated on the basis of the focus of the government's set of measures as well as on the basis of the level of deterioration (if any) in the international economic environment after the implementation of the measures. However, it is practically impossible to predict with any certainty what will happen to the international economic background and how quickly it will occur.

The government can: A. delay implementing measures; B. prefer the set of more active measures that are aimed largely at the internal market and retaining employment; C. focus on implementing the active export-oriented measure package. The external environment may: 1) begin stabilizing gradually within this year (2009) and improving thereafter; 2) continue declining. In the latter case, we can differentiate between a further sharp decline and a less drastic worsening of the situation, which constitutes a crisis that drags on for a long time.

Using this method, we have a selection of at least 6 different scenarios: A1, A2, B1, B2, C1 and C2.

In the case of the type A policy, we will be unable to think of and/or carry out an approach with sufficient clarity and force. The costs will be limited to a certain degree, but not enough. Our reserves will be gradually depleted. There will be no attempts to take a loan. The country's leaders will not dare to develop any explicit stimulus programs and would not have the money to implement such programs in any case. In the case of the A1 scenario, this policy may even work out (although it is still very risky) if there is a favourable turn in the external environment. In the case of the A2 scenario, regardless of whether the sharp decline or dragging crisis sub-scenario occurs, this inability to decide will clearly lead to disaster. The government will then have to turn to the IMF for help and we will live through a repeat of what happened in Latvia if we are lucky and be subjected to an even worse experience if we are not.

The type B policy is characterized primarily by two goals: avoiding a high level of unemployment and guaranteeing the provision of large-scale national support to people and families in difficult circumstances. The first goal can be achieved by focusing on part-time work, the voluntary cutting of salaries at companies, retraining, and providing seed capital to help the employees of companies that have gone out of business to start their own companies. The second goal can be reached through unemployment benefits, maintaining the level of pensions, and timing housing loans, etc. Finding the financial backing for the necessary measures and benefits will prove to be a considerable problem in the case of this policy, even if we are successful in limiting the growth of unemployment. Moreover, it will be very difficult to make the necessary budget cuts in the case of this approach as such cuts will require us to limit expenditures on social services. A solution to this problem could be either the additional taxation of the wealthier segment of the society (progressive income tax, car tax) or the attempt to get a foreign loan at any price. It is unlikely that either method of acquiring the necessary resources will become operational and thus the depletion of the country's financial reserves will not be significantly slower than in the case of the type A policy. If the external environment begins to improve (scenario B1), this policy may be successful, but in the case of scenario B2, everything will depend on what version of the latter will take effect. If the decline is short and maybe even if it is sharp, the type B policy will help the society survive and avoid the degradation of human and social potential. In the case of a longer decline, however, the domestic demand of a country with a population that is becoming poor will be too low, and along with the deterioration of the macroeconomic environment, this will endanger the sustainability of the scenario.

The type C policy would require the provision of support (presumably selective) by the government to companies with export capacity, for example by having the state guarantee their credit applications. Furthermore, enhanced measures for bringing export-oriented foreign companies into Estonia will be devised. This will be accompanied by a relatively harsh budget cut, due to the fact that bringing order to the macroeconomic environment, including the adoption of the euro, is considered one of the main conditions for this strategy. Social benefits and pensions may suffer as a result of this policy. In the case of the C1 scenario, the policy may yield very good results as it helps to restructure the economy. At the same time, the degradation of human and social potential will not be far-reaching if the external environment improves quickly. If the policy is implemented effectively, it also has a chance of success in the case of the gradual version of the C2 scenario. Carrying out this policy promises to be a complete failure, however, if the deterioration of the external environment is strong and drags on for a long period of time. In this case, the funds devoted to the promotion of export business must simply be written off. Another problem in the case of the type C policy is gaining public support for it, since the initial base of beneficiaries is relatively small (also geographically). It would certainly be smaller than in the case of the type B policies. Compared to the other types of policies, the success of type C policies depends on the strength of our labour force potential and the level of our business owners.

As the analysis of the different scenarios shows, it is extremely difficult to give unequivocal advice on policies for handling the crisis as the changes in the external environment may prove to be different from those predicted. However, it is possible to identify some measures that fit multiple scenarios and function in the case of different external environment dynamics. Such measures primarily include investments, the creation of employment opportunities through building modern infrastructures, and education.

Authors

Chapter 1

ENE-MARGIT TIIT, Professor Emeritus of Mathematical Statistics, has worked at the University of Tartu since 1964; her fields of research include mathematical and applied statistics; she has also published papers in the fields of population and social studies. She is Dr. honoris causa of the University of Helsinki, an elected member of ISI (International Statistical Institute), as well as the founding member of the Estonian Statistical Society (she served as the president of the latter in 1991–1997). She is currently employed as Senior Methodologist at Statistics Estonia and is President of the Scientific Council of the 2011 Population and Housing Census. (1.1., 1.2., 1.3., 1.4., 1.5.)

MARE VÄHI (MSc) is a lecturer at the Institute of Mathematical Statistics of the University of Tartu, where she teaches data analysis and population statistics and performs research in the field of mathematical models of population processes. (1.2.)

HELERIN RANNALA (MSc) (University of Tartu, specialized in mathematical statistics) works as Head Statistician at the Population and Social Statistics Department of Statistics Estonia and performs research in the field of migration. (1.2.)

ALIS TAMMUR (MSc) works as Population Analyst at Statistics Estonia and has been involved in republishing migration statistics. She is a doctoral student at the Department of Geography of the University of Tartu, where she studies migration, focusing on ethnic differences in migration. (1.2)

KARMEN TRASBERG (MA, pedagogy) is a lecturer at the Department of General Education of the University of Tartu. Her main fields of research include comparative education, education in a multicultural society, and the history of schooling and education. (1.3.)

TÕNU MERTSINA Employed as Head of the National Accounts Service of Statistics Estonia. One of the most important results of the work of the National Accounts Service is the calculation of the gross national product, which enables the measurement of economic growth. (1.4.)

Chapter 2

AIN AAVIKSOO (MD MPH) is Head of the Health Policy Programme and Chairman of the Board at PRAXIS Center for Policy Studies. His fields of research include the operation of health systems and the use of e-health applications in health care. (2.1., 2.2., 2.3., 2.4., 2.5., 2.6., 2.7., 2.8., 2.9., 2.10.)

GERLI PAAT (MA) is an Analyst at PRAXIS Center for Policy Studies. Her fields of research include conducting public health programs and developing health services in Estonia. (2.4., 2.5., 2.7.)

LUULE SAKKEUS (PhD) is a Senior Research Fellow at the National Institute for Health Development and the Institute of Estonian Demography. Her fields of research include the potential for recovery of inter-generational population groups and population groups of different origins as well as population development in Estonia after the restoration of independence. (2.4.)

ANDRES VÕRK (MA) is a Senior Analyst at PRAXIS Center for Policy Studies and a lecturer at the Institute of Economics of the University of Tartu. His fields of research include the relationship between social insurance, taxes and employment, and the evaluation of the effects of social and health policy. (2.8.)

JARNO HABICHT (MA) is the Head of the World Health Organization Country Office in Estonia. His fields of research include the availability of health services, inequality in health, and government practices related to health care. (2.9.)

Chapter 3

DAGMAR KUTSAR (PhD) is an Associate Professor at the Institute of Sociology and Social Policy of the University of Tartu, where her fields of research include children and families and the social problems (poverty, exclusion) and policies related to them. (3.5.)

KAI SAKS (PhD) is an Associate Professor at the Faculty of Medicine of the University of Tartu and the Chairman of the Board of the Estonian Association of Gerontology and Geriatrics. Her research is focused on studying the well-being and health of elderly people. Ms Saks is a cardiologist and geriatrician. (3.6.)

AVO TRUMM (MA) is a lecturer of sociology at the Institute of Sociology and Social Policy of the University of Tartu. His main research interests include the economic situation and coping of households and the social problems related thereto (poverty, social exclusion), as well as the socio-political analysis of the measures aimed at alleviating these problems. (3.1., 3.2, 3.4, 3.7.)

ANU REALO (PhD) is a Senior Research Fellow of Personality Psychology at the Institute of Psychology of the University of Tartu. She has published more than 40 articles in internationally distributed journals and books. Her primary research interests include personality traits and stereotypes related to ethnic characters, emotions, subjective well-being, and comparative cultural studies. (3.3.)

KAIRI KASEARU (MA) is a doctoral student at the Institute of Sociology and Social Policy of the University of Tartu. Her main fields of research comprise changing family models, inter-generational relations, and social cohesion. (3.1., 3.2, 3.4, 3.7.)

Chapter 4

TRIIN VIHALEMM (PhD) is an Associate Professor at the Institute of Journalism and Communication of the University of Tartu. Her primary fields of research include ethnic relations in Estonia, especially problems related to the development of identities and language relations, values, and transition culture. (4.1., 4.6.)

MARJU LAURISTIN (PhD) is the Professor of Social Communication at the University of Tartu. Her main fields of research include social changes in transitional Estonia, problems related to the knowledge and information society, and the Russian minority in Estonia. (4.1., 4.6.,7.)

ANU MASSO (PhD) is a lecturer at the Institute of Journalism and Communication of the University of Tartu. Her primary fields of research include personal social space, geo-cultural mobility, and collective identities in transitional societies. (4.2.)

PEETER VIHALEMM (PhD) is the Professor of Media Studies at the University of Tartu. His main fields of research include cultural and political processes in transitional societies, especially changes in media systems and media use, as well as cultural and political processes in the international social space. (4.3.)

PIRET EHIN (PhD) is a Senior Research Fellow at the Institute of Government and Politics of the University of Tartu. Her main fields of research are political support and legitimacy at the level of both the nation state and the European Union, and the relationship between the Baltic countries and Russia in the context of European integration. (4.4.)

KRISTINA LINDEMANN is a doctoral student at the University of Tallinn Institute of International and Social Studies. Her fields of research include social stratification, differences in education and the labour market based on ethnic differences, and the entry of young people into the labour market. (4.5.)

ELLU SAAR (PhD) is a Professor at Tallinn University. Her main areas of research include social stratification, education, and the labour market. (4.5.)

Chapter 5

VERONIKA KALMUS (PhD) is an Associate Professor at the Institute of Journalism and Communication of the University of Tartu. Her areas of research include children and young people in the developing information and consumer society, and the values in the cultural context of the Estonian transitional society. (5.1., 5.4., 5.5., 5.6.)

MARGIT KELLER (PhD) is a Senior Research Fellow at the Institute of Journalism and Communication of the University of Tartu. Her fields of research include the development of consumer society in Estonia, with a current focus on the consumption practices of children and young people. (5.1., 5.2., 5.4., 5.6.)

MAIE KIISEL (MA) is an assistant at the Institute of Journalism and Communication of the University of Tartu. Her fields of research include the development of environmental consciousness, environmentally conscious consumer behaviour, and participation in decisions related to environmental policy. (5.2.)

PILLE PRUULMANN-VENGERFELDT (PhD) is a Research Fellow at the Institute of Journalism and Communication of the University of Tartu. Her research interests are connected to the development of the information society in Estonia, including the inclusion of people in politics and the operation of cultural and memory institutions through means available to us through the Internet. (5.1., 5.3., 5.4., 5.6.)

KRISTINA REINSALU (PhD) is the Local Government Program Director at e-Governance Academy and a Research Fellow at the Institute of Journalism and Communication of the University of Tartu. Her fields of research include the e-state and e-democracy at a local level as well as the use of information technology in the communication of public sector organizations. (5.3.)

Chapter 6

ERIK TERK (PhD) is Director of the Estonian Institute for Future Studies (Estonian Institute for Future Studies of Tallinn University as of 2009). His main areas of research include future studies, connections between economic development and social and political developments, development planning at a national and regional level. (6.6., 6.5., 7.)

REELIKA LEETMAA (MSc, Master of Science in Economics) is a Programme Director at PRAXIS Center for Policy Studies. Her fields of research include labour and social policy (active and passive labour policy, flexibility of the labour market, social insurance). (6.4.)

SILJA LASSUR (BA in Sociology, currently a doctoral student) is a Research Fellow/Project Manager at the Estonian Institute for Future Studies; Research Fellow at the Estonian Institute for Future Studies of Tallinn University as of 2009. Her main areas of research involve innovation policy, international innovation-related cooperation, and creative economy policies. (6.5.)

KÜLLIKI TAFEL-VIIA (MSc, Master of Social Sciences, currently a doctoral student) is a Research Fellow/Project Manager at the Estonian Institute for Future Studies; Research Fellow at the Estonian Institute for Future Studies of Tallinn University as of 2009. Her main areas of research include creative economy and social innovation. (6.5.)

HELJE KALDARU (PhD) is the Professor of Microeconomics at the University of Tartu. Her main areas of research involve social capital, economic development. (6.2.)

ANNELI KAASA (PhD) is an Associate Professor of Economic Theory at the University of Tartu. Her main areas of research include social capital, economic development. (6.2.)

RAUL EAMETS (PhD) is the Professor of Macroeconomics and the Head of the Institute of Economics of the University of Tartu. His main areas of research involve flexibility of the labour market, labour relations, the connections between education and employment. (6.4.)

ALARI PURJU (PhD) is the Professor of Economic Theory and the Director of the Institute of Social Sciences at the Estonian Business School. His main fields of research include institutional economics, foreign trade theory, and public sector economics. (6.1., 6.3.)

Creative work competition *My Estonia*

The following is a selection of creative works by Estonians depicting both important and memorable personal moments as well as a vision of Estonian life today and in the future.

The competition entitled *My Estonia* invited Estonians to take a creative approach to recording what is important to our people. The goal of the competition was to place greater value on Estonia as a living environment, to notice our wonderful compatriots, and to record good thoughts and memories in pictures.

The topics for the competition fell into five different categories: *Estonia is My Home*; *Moments I Would Like to Take with Me into the Future*; *My Family and My People*; *This Is Important to Me*; *My Estonia in 2018*. Hundreds of authors participated, ranging from preschoolers to citizens of an advanced age. The panel received almost five hundred creative works for evaluation.

The panel of judges included: Chairperson Marika Valk, artist Andres Tolts, journalist Pekka Erelt; Anu Purre, curator and methodologist at the Kumu Educational Centre; Maarja Nurm, member of the AIESEC Estonia management board; and Birgit Pihelgas, representative of the Estonian Association of Student Bodies.

As the winner of the competition, the panel of judges unanimously chose Ann Kärner, an 8-year-old second-grade student from Orissaare Upper Secondary School, whose work was entitled *This is Important to Me: Ann Plays the Scale.*

Winning entry

Ann Kärner (8). Orissaare Upper Secondary School, 2nd grade. *This is Important to Me: Ann Plays the Scale*

Special prizes

Dima Bojarintsev (6). Kohtla-Järve Kindergarten Pääsuke. *Estonia is My Home*

Marko Pikkat (21). *This Is Important to Me – My Family, My Wife and My Child, Everything Else Revolves Around Us*

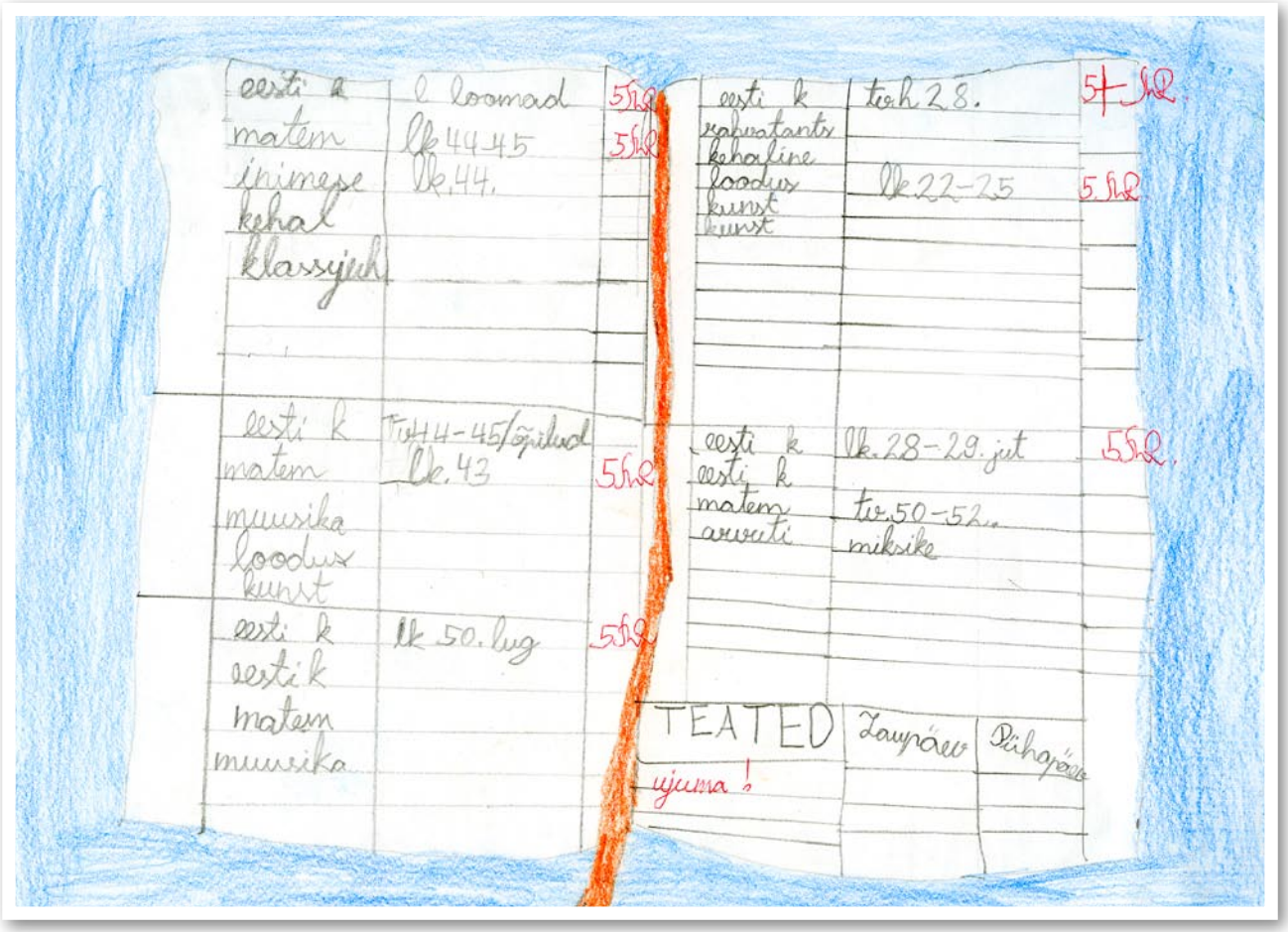
Helmi Truman (21). *Estonia is My Home*

Teele Annus (18). *My Estonia*

Mehirt Emmus (14). Päinurme Boarding School. *This Is Important to Me*

Hanna Loore Ney (6). Kindergarten Pääsupesa. *My Family and My People*

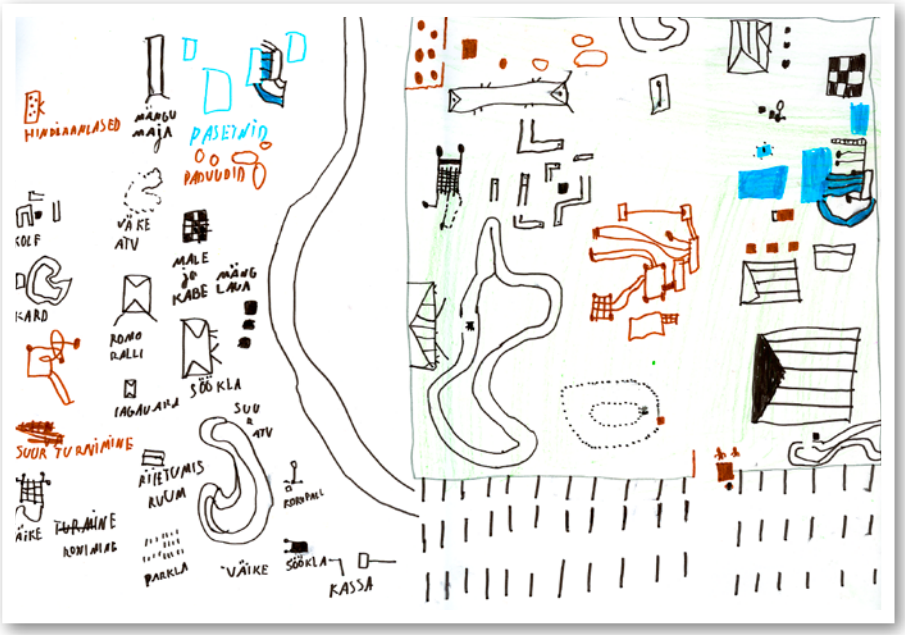
Pille Kose (20). *Moments I Would Like to Take with Me into the Future – Festive Herrings*



Haldi Välimäe (8). *Moments I Would Like to Take with Me into the Future*

Tiina Georg (15). Pärnu House of Art. *Estonia is My Home*

Nele Rubis (31). *My Family and My People – Family by a Body of Water*

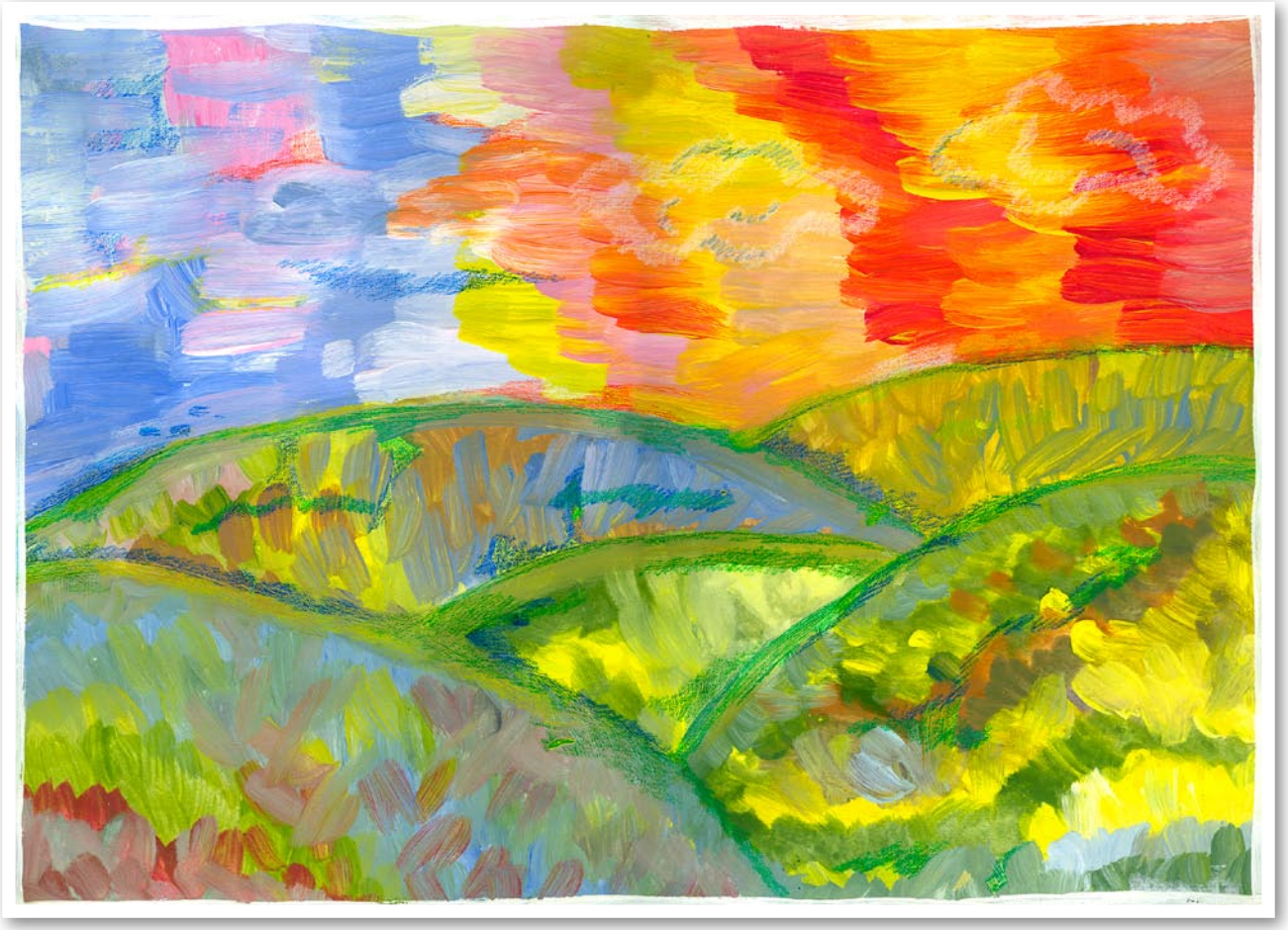


Kervin Lukas. Türi Upper Secondary School, grade 3b. *Vembu-Tembumaa*

Jane Kalnapenkis (16). Vastseliina Upper Secondary School. *This Is Important to Me. A Memory I Will Always Carry with Me – the Memory of My Homeland*

Kewin Orion (7). Laeva Primary School. *Moments I Would Like to Take with Me into the Future*

Piret Viljamaa (38). *This Is Important to Me*



Greete Härma (14). Saverna Primary School. *Moments I Would Like to Take with Me into the Future*

Maiu Kunnberg (16). Väike-Maarja Upper Secondary School. *Estonia in 2018*

My Estonia stays with me,
the clover scent of her fields.
My Estonia stays with me,
her speech and familiar feel.

Annabel Teevet (8). Orissaare Upper Secondary School. *Moments I Would Like to Take with Me into the Future. Annabel Builds a Snowman*

Anna Goldrin (12). Tallinn 21st School. *Estonia is My Home*

Enelin Treffner (11). Esku-Kamari School.

Triin Kruusimäe (10). Tallinn 21st School. *My People*

2008 Estonian Human Development Report

ISSN 1406-5401