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TÁRKI EUROPEAN SOCIAL REPORT

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 **TÁRKI**



 **UniCredit Bank**

Budapest, 2008

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EXECUTIVE SUMMARY

The intention of this study is to provide an overview of demographic, labour market, income and housing situation of households in Europe with a special emphasis on presenting Hungarian data in cross national comparisons. The basic data source we use is the 'Community Statistics on Income and Living Conditions' survey of the European Union (EU-SILC) of 2005.¹ This is the first time that survey data gathered using a standardized method have been available for the entire European Union, including the countries that joined in 2004 after EU expansion.

The 2005 survey has been fielded in 26 countries (n = 196,686 households). Alongside the 15 old EU member states, the database covers all but one of the 10 countries that joined in 2004 (the one exception being Malta), as well as Iceland and Norway. The latter two countries are excluded from this analysis to leave just the members of the European Union as the focus of our inquiry. Our working database therefore includes data on 24 EU countries, since Malta did not take part in the survey and Romania and Bulgaria were not at the time EU members. The data cover private households; people living in institutions are not included in the sample. With the exception of the Scandinavian countries and Slovenia, the survey was conducted at household level, and most of our analyses take the household as their unit of analysis. The weighted dataset represents almost 190 million European households. The analysis in some of the following sections (such as those in the third chapter on labour markets) are, however, based on individual-level data. In an effort to obtain results that are as balanced and evidence-based as possible, in addition to the EU-SILC database our research makes use of other available data sources relevant to each topic of investigation.

As was noted above, our study exploits the unique opportunity offered by the availability of data to build a truly comparative analysis of the countries under consideration. Furthermore, the individual chapters introduce several methodological innovations. Most importantly, wherever the data allow it, we attempt to describe the population of the countries of the EU as if they were a single unified society. Wherever possible, the analyses do not simply juxtapose the societies of the EU, but also attempts to locate the people living in the individual countries within the context of the EU as a whole. This method allows us, for instance, to determine not only the magnitude of inequality in one or another of the countries, but also the relative position of a given individual or household within the 'cross-European society'.

Secondly, our labour market analyses attempt to relate education inequalities within the individual countries to differences observed in employment levels. We are aware of no other such analysis that covers such a wide range of countries.

Thirdly – as data now allows – we combine demographic analyses with an examination of income distribution. This allows us to apply a uniform method in assessing the relative income positions of households that belong to different categories.

Finally, the chapter on people's financial position and their housing conditions introduces a new indicator – housing integration. This allows us to deepen our knowledge of the circumstances of households living in the different countries of the European Union to an extent that previous – sporadic – analyses could not hope to attain.

TÁRKI, with this report, launches a new series on social reporting, in addition to the Hungarian Social Reports, of which the 2008 edition is already 10th in a row since 1990.

¹ This report is research output from the Tarki research project 'Monitoring income distribution and poverty in an international context'. Data access was licensed to this project by the contract between TÁRKI Social Research Institute and Eurostat, signed on 31 January 2007 (Contract No. EU-SILC 2006/23). As stated in the above contract, the appropriateness of the statistical methods of analysis applied to the data and the conclusions drawn from the analyses are the sole responsibility of TÁRKI; Eurostat and the statistical authorities of individual member states cannot be held responsible. The analyses used the 27 June 2007 version of the EU-SILC 2005/2 database (European Commission, Eurostat, EU-SILC UDB 2005/2 version 2007/06/27). For some key indicators, the March 2008 update contains somewhat modified values: this is taken into account in chapter 3. Details of regulatory framework and methods of EU-SILC can be found at http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1913,47567825,1913_58814988&_dad=portal&_schema=PORTAL

Demographic processes

- European societies are facing a hitherto unseen demographic challenge, featuring population ageing and an expected decline in the population. The continent's share of the world's population is decreasing and is predicted to fall further in both absolute and relative terms within the foreseeable future. The proportion of active-age cohorts is on the decline relative to inactive groups, especially the elderly.
- These processes are primarily determined by fertility, life expectancy and migration. The countries of Europe are characterized by low or, in some places, exceptionally low fertility. This is accompanied by a high and steadily rising life expectancy, while the migration balance of the continent is positive. Demographic estimates forecast that childbearing propensity will converge at a total fertility rate of about 1.6, that we will see an increase in health and life expectancy, and that there will be a larger scale of immigration flow. These processes are expected to lead to population decline, population ageing and a decrease in the proportion of the economically active population.
- Hungary belongs in the group of countries with very low fertility and unfavourable mortality conditions; in addition, it was the first country in Europe to experience a population decline. Although we have little information on emigration, Hungary's migration balance is estimated to be positive, though the figures are low.
- The ageing and the expected decline of the population of Europe will inevitably have certain economic and political consequences. Demographic processes have an impact on economic progress, the labour market and major welfare programmes (pension system, health insurance programme, long-term care services). As well as national strategies, this calls for strategic thinking on intervention policies at the level of the European Union.
- The number of households generally increases at a greater rate than the size of the population; the average size of households is steadily decreasing. The EU-15 average household size of 3.2 individuals typical in 1960 had fallen to 2.4 by 2001. The average number of people living in a household continues to be higher in countries where fertility decline started relatively late (Ireland and the countries of Southern Europe). The typical age at which children leave the parental home varies from country to country, and there is variation in the living arrangements of elderly people left by themselves after the death of a spouse.
- The increase in the share of single-person households is a dominant trend throughout the European Union: the ratio of such households in the EU-15 had risen from 16 per cent in 1960 to 28 per cent in 2001. In 2004, single-person households made up 16–43 per cent of households in the various EU countries. In Denmark and Sweden, more than four households in ten consist of just one member. At the other end of the spectrum come Cyprus, Spain and Portugal, where only around 16 per cent of households belong in this category. Single-person households constitute 29 per cent (1,167,000 households) of all households in Hungary.
- The proportion of households with a single generation ranged from about 40 to 70 per cent in 2004. There are pronounced differences between the old and the new EU member states with regard to the likelihood of one or more generations living in a household. In the new EU countries, the proportions of single-generation households do not substantially exceed 50 per cent and the ratios of multi-generation households approach 10 per cent. In the countries of the EU-15, there tend to be higher proportions of single-generation households, although there is considerable variation. Households with three or more generations, however, constitute less than 1 per cent of all households in the Northern regions of the continent.
- Low fertility, the delayed age of childbearing and changes in cohabitation patterns bring about changes in the composition of households with children, and in their proportion of the population. Households with children occur with highest frequencies (40–45 per cent) in the new member states, in Portugal and Ireland, while the proportion of such households is lowest (25–30 per cent) in the United Kingdom, the countries of Northern Europe and Germany. Households with children have 1.5–2.0 children living in them on average.
- Due to population ageing in Europe, the relative income position of the increasingly frequent single-person household type is below average in each of the countries under consideration. Within this type, households with 2–4 members, i.e. those where at most two generations live with a small number of children, are in the best position.

- Men live in relatively better circumstances than women in every country. Among elderly people living alone, men are in a better income position than women almost everywhere. Women over the age of 65 clearly have the worst position within the group of single-person households.
- The EU-SILC data show that lone-parent households do not even approach the average income level in any of the 24 EU countries under consideration. Among nuclear family households, where children are raised by two parents, income position declines as the number of children increases.
- One-third of households in Hungary have children under 18 living in them. Their position is exceptional, in the sense that the income level of two adults living with one child still does not exceed the average. We also find, however, that there is very little difference between the relative positions of one- and two-child households. The educational attainment of the head of the household is a decisive factor in households with three or more children in Hungary as well, but this effect is not comparable to the effect observed among lone-parent households.

Employment, inactivity and the labour market

- Although economic activity and employment rates are on the increase in almost all the countries, the effects of regime change on the labour market can still be felt in the former socialist new member states. This is indicated by activity and employment rates that fall below the EU average in some of these countries, including Hungary. In terms of Europe overall, Hungary fares especially poorly: according to the Eurostat data, Hungary has the lowest activity rate (62 per cent) and the second lowest employment rate (57.3 per cent) – and has been left trailing by a dynamically developing Poland.
- The expansion of the workforce follows similar patterns throughout Europe: wherever the overall activity rate increases, this is thanks to a growing level of activity among women and people aged 55–64 years. This pattern holds for the new member states as well, where the development is driven by an increase in the statutory age of retirement on the one hand, and on the other by a gradual process whereby the human capital that was rendered obsolete following regime change is replaced by more active generations.
- Two of our findings may give pause for thought, however: the employment rate among men aged 25–54 (the most productive age) has declined in some of the countries, and rising unemployment among young people (15–24 years) is a serious concern in a number of countries.
- The aggregate indicators of household labour activity, which are indicative of labour supply, reveal that around 20 per cent of households in the European Union have no working members. This means that around 10 per cent of the population live in jobless households, most of which are households with elderly people and no children, or parents raising their children alone. In practice, barely 50 per cent of households devote their entire theoretical working months to work activities. Working-age people living in households with children work the longest hours. Two facts – that 50 per cent of households have some non-working members and that 20 per cent have no workers at all – suggest that there are labour reserves in the European economy.
- The question of how employability affects labour supply is captured by examining educational attainment. Our results indicate that higher average levels of education and greater proportions of people with higher education are positively correlated with the employment rate; the same correlation holds true for inequalities and lower levels of education. Nevertheless, we can identify regimes (several of the new EU member states, including Hungary) where, owing to the nature of the education system, a lower employment rate (relative to the EU-24 average) is coupled with lower education inequality. These countries need to avoid shifting towards a pattern of low employment with high education inequality (the Mediterranean scenario) and should tend, instead, towards the developed pattern of high employment with low education inequality.

Income distribution

- Our study compares the countries of the EU with regard to income inequality and poverty, and with respect to the individual elements that have the strongest effects on income differences: age, educational attainment and employment. Our analysis of income inequalities and poverty follows the methodology of the Laeken indicator system endorsed by the European Commission at its December 2001 meeting in Laeken.
- Our results unequivocally show that inequalities are highest in Portugal, which has a Gini index value of 38 per cent, but the Ginis of Lithuania, Latvia and Poland also reach 35–36 per cent. The countries of Southern Europe (Spain, Greece and Italy), the Anglo-Saxon countries (the United Kingdom and Ireland) and Estonia cluster into a third group, characterized by relatively high levels of inequality. At the other end of the scale ranked according to the Gini indicator come Sweden, Denmark and Slovenia, with Ginis of below 25 per cent.
- The highest rate of poverty in the EU is to be found in the countries of Eastern and Southern Europe. A fifth of the population of Poland, Lithuania, Spain, Portugal and Ireland live on an income of less than 60 per cent of the median. High poverty rates are to be found in other countries of Eastern and Southern Europe as well: 19 per cent of people live in poverty in Latvia, Greece and Italy, and 18 per cent in Estonia. At the other end of the scale we find the countries of Northern Europe with poverty rates of around 10 per cent. Countries characterized by relatively low rates of poverty further include the Czech Republic and the Netherlands, where a tenth of the population are poor. The remaining countries of Europe, including the majority of the Western European continental states, are classed as having moderate levels of poverty, with poverty rates of between 12 and 16 per cent.
- There are substantial income differences between the EU countries; income inequalities among citizens of the European Union are, to a considerable extent, attributable to income differences between the states. Among the EU countries, Lithuania has the lowest standard of living and the former socialist countries generally belong in the group of states with the lowest average incomes. The people in the top decile in terms of income distribution in the former socialist countries have an average standard of living that corresponds to the living standards of the middle classes in the developed states of Western Europe (France and Germany). The highest average income is observed in Luxembourg, where the average income is over five times that of the country with the lowest standard of living.
- Looking at the positions of households within the combined income distribution of the EU countries, we find that, with the exception of Slovenia and the Czech Republic, the majority of the inhabitants of the former socialist countries belong in the bottom quintile of the overall European income distribution. Around 70 per cent of the population of the Baltic states live on incomes of less than half the overall European median income; this also applies to 56 per cent of households in Hungary, for instance. In Luxembourg and Denmark, by contrast, the proportion of those with incomes of below half the overall European median is less than 2 per cent.
- Inequalities were broken down into individual factors to investigate the contribution of major personal traits to income inequality. Since labour income makes up the largest portion of household income, employment and the two most important determinants of earnings – education and age – were examined.
- Inequalities follow a similar pattern in the Anglo-Saxon and the Baltic states: educational attainment and employment status play a significant role in shaping inequalities, while age does not. The countries of Northern Europe form another clearly distinguishable group, where, in addition to education and employment status, age also contributes to inequality patterns. Each of the three factors accounts for around a tenth of inequalities. The countries of Western Europe, Central and Eastern Europe and the Mediterranean region are similar, in that education is the factor that has the strongest effect on inequalities, although this effect is somewhat weaker in the Western European countries than in the states of the other two regions. While inequalities are also highly sensitive to employment status in the countries of Western Europe and Central and Eastern Europe, this factor, like age, accounts for less than 5 per cent of inequalities in the Mediterranean countries.
- The greatest growth in inequality is observed in Italy and Ireland. In Italy, changes in income differences due to age and education had a significant effect on the development of inequality. The growth of income differentials

associated with level of education explains 28 per cent of the increase in inequality, while the widening gap between the incomes of different age groups accounts for 18 per cent of the increase in inequality. In Ireland, the factor where the development of income differences between population groups was found to have a significant effect was employment status: the increase in income differentials associated with employment status accounts for 49 per cent of the increase in inequality.

Housing and material conditions

- Compared to Europe as a whole, Hungary has a high proportion of households living in family houses and households living in apartment buildings with over 10 apartments. Also, a relatively high proportion of people live in owner-occupied accommodation.
- Approximately a quarter of families in Hungary report that the cost of keeping up their home constitutes a major challenge. This figure does not appear to be especially high.
- The quality of dwellings falls below the European average in several respects. There is a high proportion of buildings with structural defects and of dwellings that lack basic facilities.
- The average number of rooms in dwellings in Hungary is below the average for the old EU members, but the living density is comparable to that of countries that joined the EU in 2004. In other words, in terms of the number of rooms, people in Hungary live in smaller apartments, but in terms of the average number of rooms per person, the dwellings are neither more nor less crowded than they are in countries similar to Hungary.
- With respect to housing integration, overall Hungary does not fare well within Europe. This is due to the indicators of the quality of housing mentioned above, i.e. the higher than average incidence of housing with no basic facilities and of buildings in need of renovation.
- With respect to the availability of appliances in households, Hungarian households perform at about the level of the EU average in terms of the availability of colour televisions (97 per cent), telephones (92 per cent) and washing machines (96 per cent). This typically places Hungary at around the middle or upper middle of the range, in the vicinity of the former socialist new EU countries; and those do not lag substantially behind the older member states.
- Hungary's distance from the EU average and the relatively more affluent old member states is considerably greater when it comes to the penetration of computers and cars. Looking at the availability of PCs in the home, we find that, while over half of all European households are equipped with computers, in Hungary only four households in ten are in the same position, which puts Hungary towards the bottom of the European scale, in a group with Greece, Poland and Slovakia.
- Hungary's poor showing is even more marked with respect to cars, and this finding is reinforced by a number of indicators: the country brings up the rear in terms of the number of cars per thousand people (287), and only 46 per cent of households own a car (by contrast with an average of 73 per cent in the EU-24). The Hungarian population is the least likely to travel by car, and the share of train (and bus or coach) travel in the total number of passenger kilometres is highest in Hungary.

AT	Ausztria	Österreich
BE	Belgium	Belgique/België
CY	Cyprus	Cyprus
CZ	Czech Republic	Czech Republic
DE	Germany	Deutschland
DK	Denmark	Danmark
EE	Estonia	Estonia
ES	Spain	España
FI	Finland	Suomi
FR	France	France
GR	Greece	Ellada
HU	Hungary	Hungary
IE	Ireland	Ireland
IT	Italy	Italia
LT	Lithuania	Lithuania
LU	Luxembourg	Luxembourg
LV	Latvia	Latvia
NL	Netherlands	Nederland
PL	Poland	Poland
PT	Portugal	Portugal
SE	Sweden	Sverige
SI	Slovenia	Slovenia
SK	Slovakia	Slovak Republic
UK	United Kingdom	United Kingdom

List of names and abbreviations of countries analysed in the study

1. DEMOGRAPHIC PROCESSES

1.1. Introduction

WE SEEK TO REFINE
THE DEMOGRAPHIC PICTURE
DRAWN OF EUROPE ON THE BASIS
OF MACRO-LEVEL DATA, BY
INCLUDING INDIVIDUAL AND
HOUSEHOLD-LEVEL DATA
IN THE ANALYSIS.

This chapter reviews the relevant literature, the major indicators and the results of our empirical analyses concerning the demographic processes characteristic of the European Union. Three determinants of the demographic profile of Europe will be presented first: fertility, mortality and migration (Section 1.2). Next, the immediate and the more far-reaching consequences of these processes will be discussed and there will be a brief outline of some alternative options for social policy, aimed at alleviating or forestalling the negative consequences (Section 1.3). Demographic processes also have a bearing on the household structure of societies, the rearrangement of which may, in turn, affect – as a micro-level mediator – social, economic and political processes. Our next section, therefore, looks at the impact of macro-processes at the level of households, and compares the countries of the European Union from this perspective (Section 1.4). Finally, the relationship between household structure and income position will be investigated (Section 1.5). Our empirical analyses are based on the 2005 cross-section wave of the EU-SILC survey. Since cross-section data only allow a very limited analysis of the causes and consequences of demographic events, our efforts will be directed towards other goals. It is our aim to refine the demographic picture drawn of Europe on the basis of macro-level data, by including individual and household-level data in the analysis.

1.2. The demographic profile of the European Union – macro-processes and forecasts

1.2.1. Fertility

Trends and forecasts

THE POPULATION
OF THE EUROPEAN CONTINENT
WILL DECLINE IN THE NEAR
FUTURE, BOTH IN ABSOLUTE
AND RELATIVE TERMS.

At the same time as the world's population is steadily increasing, the population of the European continent is expected to decline – unless there is some radical change in immigration patterns – both in absolute and relative terms. The slowing in the rate of population growth can, to a large extent, be attributed to a recent fall in fertility rates over and above earlier predictions.

The **total fertility rate** is the average number of children that would be born to a woman who belongs to a given cohort if the members of that cohort gave birth at the rate observed for the given age group in the given year. The replacement level of the population would be ensured by a rate of around 2.1 to 2.2, depending on the age composition of the female population. It must be made clear, however, that the indicator characterizes the fertility of an imaginary cohort, rather than of an actual cohort, and it captures the fertility pattern of a given calendar year.

Total cohort fertility (final number of children) stands for the number of children born to a woman throughout her lifetime. It is typically applied to the period of childbearing – between the ages of 15 and 49 years.

The development of the total fertility rate (henceforth TFR) is shown in *Figure 1.1*, where we can clearly see that the decline in fertility reached a global scale in the 1970s, and that only on the North American continent was the trend reversed in the first half of the 1980s. In terms of the level of fertility and the rate of its decline, however, there is a considerable difference between developed and developing countries, and between the North and the South. The phenomenon is new to developing countries, while a sustained falling trend in fertility can be observed throughout the developed world, although the extent and the period of decline may differ from country to country.



Figure 1.1: Total fertility rate by continent, 1950–2050

Source: UN Population Division (2006)

Note: Predicted values for the period between 2000 and 2050, based on medium variant (see source). South America includes the Caribbean.

There are considerable regional and country-specific differences to be found lurking behind the general European trend (*Figure 1.2*).² The regions can be formed into two major groups, according to their present status: the regions of Western and

² The classification used by the UN (see the note to Figure 1.2) deviates somewhat from the one usually applied in sociological analyses concerned with Europe and the European Union.

THE COUNTRIES OF THE EU FORM TWO MAJOR CLUSTERS: A HIGHER-FERTILITY GROUP, COMPRISING THE COUNTRIES OF THE WESTERN AND NORTHERN EUROPEAN REGIONS, AND A LOWER-FERTILITY GROUP, COMPRISING THE COUNTRIES OF SOUTHERN AND EASTERN EUROPE. THIS HAS NOT ALWAYS BEEN SO.

Northern Europe form a cluster with relatively high fertility, while Southern and Eastern Europe form another cluster with comparatively low fertility.

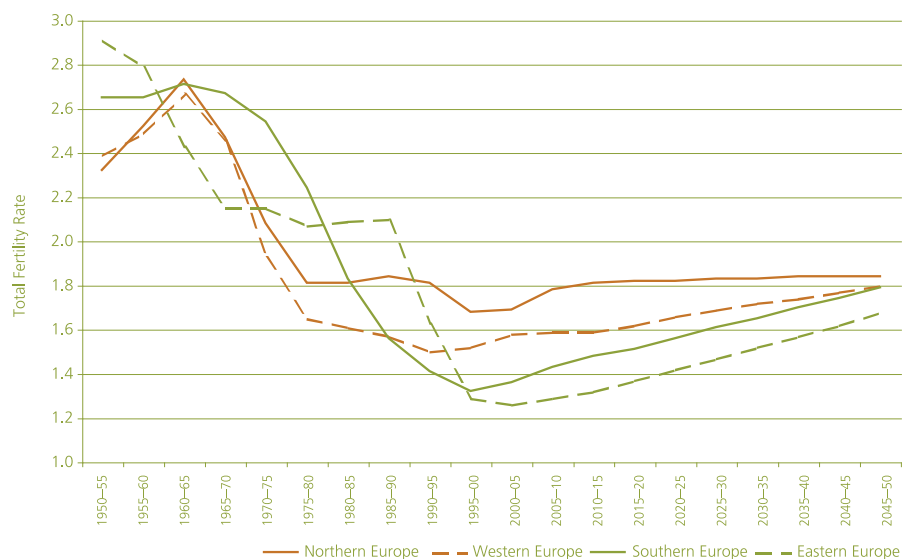
This current situation has arisen in a variety of ways, however. While the regions of Northern and Western Europe display very similar patterns, the curves that describe Southern and Eastern Europe differ both from those patterns and from one another. In the wake of the roller-coaster curve of the *baby boom* and the *baby bust* (the period of the *second demographic transition*³), the patterns describing the countries of Western and Northern Europe diverged: in Western Europe, the eighties were characterized by decline, while a period of general stagnation described Northern Europe at this time. In the countries of Western Europe, the fertility rate had stabilized by the mid-1990s, and this was followed by a period of increase up to 2005. The region of Northern Europe, by contrast, saw a slow decline throughout the nineties.

While, at the start of the period under analysis, the regions of Southern and Eastern Europe had higher fertility rates than the countries of Northern and Western Europe, by the end of the period the situation had been reversed. An effectively unbroken declining trend is to be observed for both groups of countries, but their curves only meet at the start and at the end of the period, while in between we see divergent trends. The countries of Eastern Europe, with their state-socialist regimes, displayed a relatively stable fertility pattern in the period from the late sixties to the late eighties, and this was followed by an exceptionally steep fall in the decade after the political and economic regime change. By contrast, the generally equivalent decline in fertility in the countries of Southern Europe was the result of a long steady trend.

Figure 1.2: Total fertility rate by region in Europe, 1950–2050

Source: UN Population Division (2006)

Regional grouping: Northern Europe – Denmark, Estonia, Finland, Iceland, Ireland, Latvia, Lithuania, Norway, Sweden, United Kingdom; Western Europe – Austria, Belgium, France, Germany, Luxembourg, the Netherlands, Switzerland; Southern Europe – Albania, Bosnia and Herzegovina, Croatia, Greece, Italy, Malta, Montenegro, Portugal, Serbia, Slovenia, Spain, Macedonia; Eastern Europe – Belarus, Bulgaria, Czech Republic, Hungary, Poland, Moldova, Romania, Russia, Slovakia, Ukraine.



³ Lesthaeghe (1983), van de Kaa (2001).

Eastern and Southern Europe have TFRs of around 1.3, while the TFRs of Northern and Western Europe hover around 1.6 (where TFR is expressed as the average of the countries of each region). Notwithstanding the observed differences, we may conclude that the simple replacement of the population is not ensured in any of the EU countries. The medium variant of the UN projections predicts a convergence in fertility trends in the countries of Europe by 2050, at a TFR of around 1.6. The average fertility of Eastern European countries is expected to fall somewhat below that level. The demographic forecasts estimated by Eurostat largely accord with the UN projections (EC, 2007a).

An examination of the country-level data behind the trends displayed in *Figure 1.2* reveals that, over the period from 1950 to 2005, the highest TFR is to be found in Ireland, with values that never fall below 1.9. High total fertility rates – with greater or lesser fluctuations – are also to be observed in France, Denmark and Sweden. The TFR there remained at over 1.6 throughout the period (with the exception of Denmark in the first half of the 1980s). Taking the average values of recent years, the lowest levels of fertility are experienced by the Czech Republic (1.18), Slovakia (1.22), Latvia (1.25), Greece (1.28), Italy and Spain (1.29 each).

In Hungary, the TFR was over 2.5 in the first half of the 1950s, thanks primarily to the surge in childbearing at the time of the Ratko population policy. The declining trend was halted by another rise in the mid-seventies. As in the other formerly state-socialist countries, the decline in fertility accelerated in the years following the regime change, and recently stabilized at around 1.3. This places Hungary among the countries of low fertility.

The determinants of fertility trends

Childbearing trends develop under the influence of a complex set of factors. The direct, typically demographic causes (such as cohabitation patterns and the timing of childbirth) essentially reflect the costs involved in having a child and raising a family. These costs – as suggested by theories of economic science (e.g. Willis, 1973, 1979; Becker, 1981; Easterlin, 1968) – are determined by the social and economic processes of recent decades, such as the development of welfare systems based on intergenerational solidarity, the considerable increase in the value of human capital and the rise in women's real wages, and, related to that, the increase in the number of working women. Since the scope of our study does not permit discussion of all these factors, we shall focus on the effects that the age of childbearing and women's labour supply have on fertility.⁴

The age of childbearing. In 2005, the European Union had an average TFR of around 1.5. This figure collapses together two groups of countries that differ in their yearly indicators, but the general conclusion that childbearing propensity falls below the threshold rate of 2.1 needed for population replacement holds for both groups. The first group comprises countries with TFRs of around 1.6 to 1.9 (predominantly the

EASTERN AND SOUTHERN EUROPE HAVE TOTAL FERTILITY RATES OF AROUND 1.3, WHILE THE TFRS OF NORTHERN AND WESTERN EUROPE HOVER AROUND 1.6. THE SIMPLE REPLACEMENT OF THE POPULATION IS NOT ENSURED IN ANY OF THE EU COUNTRIES. FORECASTS PREDICT A CONVERGENCE IN CHILDBEARING PROPENSITY BY 2050, AT A TFR OF AROUND 1.6.

THE TRENDS IN CHILDBEARING ARE PRIMARILY EXPLAINED BY THE INCREASING COSTS OF STARTING A FAMILY AND OF RAISING CHILDREN.

IT IS A REASONABLE CONJECTURE THAT THE RISE IN THE AGE OF CHILDBEARING MEANS A DELAY IN BIRTHS BUT DOES NOT AFFECT THE FINAL NUMBER OF CHILDREN...

⁴ A detailed analysis of these processes is given in comprehensive demographic studies, see RAND Europe (2004), SSO (2005), EC (2007a).

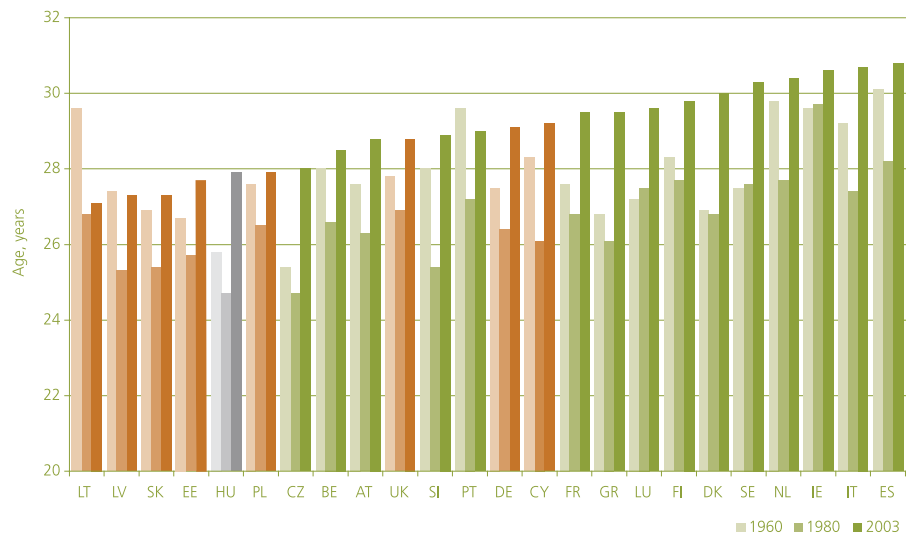
countries of Northern and Western Europe), while the value of the indicator remains below 1.5 in the countries of the other group (the Mediterranean region and the former state-socialist countries) (EC, 2007a). Some researchers believe that the actual situation with respect to fertility is better than might be suggested by the currently observed period fertility rates.⁵ The trend towards delaying the age of first childbirth began in 1980 and is with us to this day. The overall average age of childbearing is also on the increase (Figure 1.3). As well as affecting the mean age of childbearing (*tempo effect*), this has an impact on the number of births (*quantum effect*), and it may influence the period fertility rate in two opposing directions. With the delayed age of childbirth, a rapid decline in the period fertility rates does not necessarily mean a reduction in the total number of births. It could be that the delay only affects the timing of childbirth within the propagative period. This assumption is one of the factors justifying the increasing fertility trend used for the medium variant of population projections mentioned above.

... BUT IT IS MORE LIKELY THAT, AS THE BIRTH OF THE FIRST CHILD IS DELAYED, LESS TIME WILL BE LEFT FOR FURTHER BIRTHS.

We get the opposite result if the changes in the age of childbirth are expected to have an effect on the total number of births. It is easy to see that the longer the age of first childbirth is delayed, the less time will be left for further births. This assumption is supported by Frejka and Calot (2001), who compare the cohort fertility rates of women born in the 1930s and 1960s in countries with low fertility rates. Lutz, Skirbekk and Testa (2005) work with a similar hypothesis in formulating their theory of the low fertility trap. This theory states that there is more than one mechanism that can result in the currently observed low fertility rate leading to a further decline in childbearing propensity or to stagnation at this low level.

Figure 1.3: Average age at childbirth in the European Union, by country (years)

Source: EC, 2007a



⁵ The debate was started by Bongaarts and Feeney's (1998) study. Total fertility rate is considered to be a period fertility indicator in this context.

The issue can only be decided by examining total cohort fertility rates. The analysis, however, comes up against the problem that the total number of births is only known for women aged at least 40, and not, for obvious reasons, for younger women. We can therefore state that the EU-25 mean total cohort fertility rate of women born in the mid-1960s is substantially lower than that of women born shortly after World War II, but we have no knowledge of the average number of children born to younger generations by the end of their fertile years.

The indicators of total cohort fertility available in Hungary do not show the kind of variability observed for period fertility. The lowest currently available total cohort fertility rate is observed among women born in the 1940s (around 1.87); the equivalent indicators for women born later show a (very slowly) increasing trend. The analysis, however, cannot extend to the generation of women born later than the early 1960s, and it remains to be seen whether younger generations will have a similarly high number of children at the end of their fertile period.

Labour supply and childbearing. The most significant item in the costs of childbearing and child rearing is the loss of the mother's labour income (*opportunity cost*), the size of which is determined by the employment rate and the labour wages of women. In recent literature, however, there has been some debate as to whether the relationship between women's employment and fertility is positive or negative. Some researchers argue – on the basis of correlation analyses of cross-section and macro-level data – that since the late 1980s the negative relationship predicted by the theory has been reversed (Ahn and Mira, 2002; Rindfuss, Guzzo and Morgan, 2003; Billari et al., 2002; Del Boca et al., 2003; d'Addio and d'Ercole, 2005). This is often interpreted as evidence of a cause and effect relationship between the two factors. Other empirical studies come to the conclusion – through time-series analyses of aggregate data and analysis of individual-level data – that the relationship continues to be negative but has become weaker over the period in question (Engelhardt, Kögel and Prskawetz, 2001; Engelhardt and Prskawetz, 2002; Kögel, 2004, 2006). This phenomenon is largely attributed to public programmes, and especially to developments in the sphere of maternity leave, the expansion of childcare facilities outside the home and the flexibility of labour markets. An increase in the labour market participation of women, therefore, can hardly be expected in itself to lead to an increase in fertility; but the introduction of a third factor does appear to make it possible for them to grow concurrently. This factor would include the availability of childcare facilities outside the home – so long as the cost of such childcare remains lower than the real income gain attainable by women workers, or if public funds are used to reduce the cost.

THE MOST SIGNIFICANT ITEM IN THE COSTS OF CHILDBEARING AND CHILD REARING IS THE LOSS OF THE MOTHER'S LABOUR INCOME. THE NEGATIVE CORRELATION BETWEEN FERTILITY AND WOMEN'S LABOUR SUPPLY HAS NOT BEEN REVERSED, BUT IT HAS DECLINED IN STRENGTH.

The potential influence of public programmes on fertility

The countries of the European Union do not traditionally employ government measures to influence childbearing decisions. Some countries (e.g. France, Sweden and the former state-socialist countries) did exploit the potential of financial and non-financial incentives for a long time (and some continue to do so), but very few of these were targeted specifically at encouraging fertility (although almost all the

OPTIONS ARE BEING SOUGHT IN THE EU, WITH INCREASING OPENNESS, TO REVERSE OR SLOW THE NEGATIVE TREND IN FERTILITY.

countries maintain an institution system that can have this effect). In recent years, this attitude of non-intervention appears to have shifted, and even EU-wide options are being sought with increasing openness to reverse or slow the negative trend in fertility – in part as a form of public investment in human capital (EC, 2007a). The question that must be asked is whether public programmes are a suitable means by which to influence decisions of fertility and, if so, what combinations of policies are the most efficient.

The theoretical framework for investigating the effects of public programmes on fertility is provided by models of economics. In the economics literature, children typically appear in models of childbearing decisions in either of two ways: as consumption goods (Becker, 1960, 1981) or as capital goods (Willis, 1979; Cigno, 1993). While econometric studies investigating the effects of family support programmes on fertility use the consumption model, the capital model is typically used as the framework for analyses of the effects of the pension system on fertility.

The results of empirical studies using econometric models to investigate the fertility effects of public programmes related to child rearing indicate that approaches based on micro-level, rational decision processes appear to make the right predictions with regard to the positive effects. The variables capturing the cash provision programmes of family support systems invariably have a positive and statistically significant effect on the factors of fertility behaviour in most of the cases. The empirical literature is summarized in Gauthier and Hatzius (1997), Sleenbos (2003), Del Boca et al. (2003), d’Addio and d’Ercole (2005), and Björklund (2007). The results further indicate that the impact of cash benefits is not particularly strong. The redistribution of incomes – directly or indirectly – targeting families in the developed world is only one of several factors contributing to childbirth, and it offers governments only a relatively limited option in their efforts to influence fertility.

As we mentioned above, micro-economic theory projects a negative relationship between women’s labour market participation and fertility. Assuming that labour market participation affects childbearing decisions, the negative relationship is primarily attributed to the fact that the mother’s labour supply prior to childbirth substantially raises the costs of child rearing due to the loss of labour income and the decline in human capital caused by the mother’s subsequent absence from the labour market.

For this reason, a programme that helps resolve the work–family conflict and achieve a work–life balance is one of the main objectives of policy making. The most frequently recommended policy combinations in this context echo the practices of the Scandinavian countries: the development of childcare facilities outside the home, the encouragement of flexible working conditions and the development of a well-designed parental leave system (e.g. Del Boca et al., 2003).

An analysis of data from Hungary was carried out by Gábos, Gál and Kézdi (2005). The results reveal that over the past five decades the effect on fertility of cash benefits to support families in Hungary has been positive. Bálint and Köllő (2008) find that the elements of the Hungarian family support system that are related to maternity (childbirth leave, cash benefits to mothers) act as a major disincentive to mothers’ labour market participation. As a result, while the employment rate among Hungarian women roughly corresponds to the OECD average, the activity rate among mothers with young children is one of the lowest.

EMPIRICAL STUDIES REVEAL THAT FINANCIAL SUPPORT PROGRAMMES FOR FAMILIES INVARIABLY HAVE A POSITIVE EFFECT ON FERTILITY, AND THIS EFFECT GENERALLY REACHES STATISTICAL SIGNIFICANCE, BUT THE IMPACT OF SUCH PROGRAMMES IS LIMITED.

THE MOST FREQUENTLY RECOMMENDED POLICIES ARE: THE DEVELOPMENT OF CHILDCARE FACILITIES OUTSIDE THE HOME, THE ENCOURAGEMENT OF FLEXIBLE WORKING CONDITIONS, AND THE DEVELOPMENT OF A WELL-DESIGNED PARENTAL LEAVE SYSTEM

1.2.2. Mortality

Trends and forecasts

In the decades following the war, mortality trends diverged across the regions of Europe. There were pronounced differences in life expectancy at birth between the relatively highly developed countries of Northern Europe and the less highly developed countries of Southern and Eastern Europe, though the differences were substantially reduced in the course of the 1950s and 1960s. The improving trend in mortality came to a halt in the sixties, but resumed in the seventies. Some of the Western and Southern European countries closed the gap on Northern Europe in this period. Mortality trends in Eastern Europe, however, showed a different pattern. From the seventies onwards, life expectancy at birth stagnated or decreased in most of the countries with state-socialist regimes, including Hungary (Moslé, 1996).

In Hungary, the rise in life expectancy at birth experienced in the late 1960s came to a halt in the early 1970s, as was the case with most other state-socialist countries. The improving trend in mortality among the female population appeared to end, and mortality among men showed a clear deterioration. From then on, the gap between Hungary and the more highly developed countries (and countries with a developed health awareness) gradually widened with respect to life expectancy (Józan, 2002). The life prospects of the Hungarian population started improving again in the mid-1990s.

Across the EU countries, the average life expectancy at birth among men rose from 69.8 years in 1980 to 75.3 years in 2004 (*Figure 1.4*). The corresponding indicator for women shows an increase from 76.8 to 81.5 years over the same period (*Figure 1.5*). The difference between the average life expectancy of men and women fell somewhat in the same period (from 7 to 6.2 years). Life expectancy at birth continues to be substantially higher in the old member states of the EU (76.4 years for men and 82.2 years for women) than in the countries that joined in 2004. At the time of their birth, men can expect to live for 70.1 years and women for 78.3 years in the EU-10. The difference between the life expectancies of the two sexes is even more pronounced in this group than among the old EU members (8 years compared to 5.8 years).

In 2004, the population (men and women) of the Baltic states had the lowest average life expectancy at birth of all the EU countries. Among men, the figures for Latvia (64.9 years), Estonia (65.5 years) and Hungary (68.5 years) are the lowest, while the highest average life expectancies at birth are to be found in Sweden (78.1 years) and Spain (76.6 years). Women have the lowest life expectancies in Latvia (76.2 years), Hungary (76.8 years) and Estonia (76.9 years) and the highest life expectancies in Spain (83.4 years), France (83.4 years), Italy (83.2 years) and Sweden (82.4 years).

A further increase in life expectancy at birth is forecast until 2050. There is no agreement among demographers, however, as to the rate and extent of the increase. Some experts predict a continuing rate of two years' increase per decade in life expectancy at birth, while others argue that the improvement in life expectancy at birth will slow down when a biological limit has been reached (EC, 2007a).

LIFE EXPECTANCY AT BIRTH CONTINUES TO BE LOWER IN THE NEW MEMBER STATES OF THE EU THAN IN THE OLD MEMBER STATES.

THE INCREASING TREND IN LIFE EXPECTANCY AT BIRTH IS PROJECTED TO CONTINUE IN THE COUNTRIES OF THE EU; A GREATER IMPROVEMENT IS EXPECTED IN THE NEW MEMBER STATES, WHICH WILL RESULT IN A SLIGHT NARROWING OF THE GAP BETWEEN THEM AND THE OLD MEMBER STATES BY THE YEAR 2050.

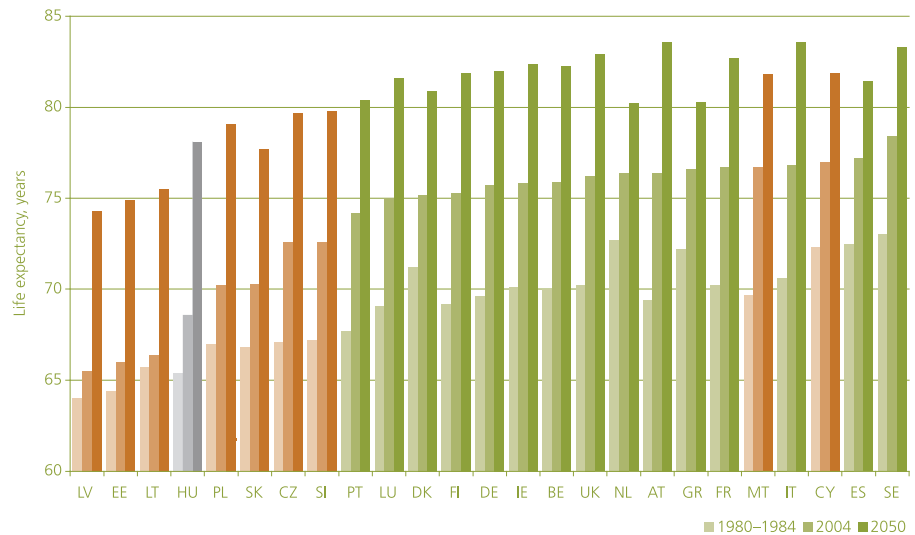
Nevertheless, the differences between the EU countries – as well as a comparison with non-EU countries – suggest that there is room for improvement. Past projections issued by official sources have tended to underestimate the increase in life expectancy, which is a risk that must be taken into consideration when interpreting current estimates (EC, 2006a).

Eurostat forecasts put men’s average life expectancy at birth 6.4 years higher, at 81.8 years in 2050; and the corresponding estimate for women sees an increase of 5.4 years to 86.9 years. However, significant differences are predicted between the various EU countries in terms of the expected improvement in longevity. Forecasts project that the greatest improvement will be in the new member states among both men and women. In the countries of the EU-15, men and women born in 2050 can expect to live respectively 5.9 and 5.2 years longer than those born in 2004. The corresponding figures are 8.6 and 5.9 years in the new EU countries. The greatest increase in men’s life expectancy is projected for Hungary (9.6 years) and the Baltic states (9–9.4 years), while women’s life expectancy is predicted to show the most improvement in Hungary (6.6 years). The gap between the new and the old EU countries is consequently expected to narrow by 2050, though it will not be completely closed.

Figure 1.4: Life expectancy at birth in the European Union by country, men (years)

Source: Eurostat

Note: The data projected for 2050 are provided by Eurostat 2004, Baseline. The abbreviation MT refers to Malta.



A SUBSTANTIAL SHARE OF THE FUTURE RISE IN LIFE EXPECTANCY AT BIRTH WILL BE DUE TO IMPROVEMENTS IN OLD-AGE MORTALITY.

From the point of view of economic policy, it is important to note that the projected increase in life expectancy up to 2050 is largely attributable to improving old-age mortality. This can be seen in the rising life expectancy in old age. In the countries of the EU-25, 65-year-old men can expect to live for a further 15.9 years, and women of the same age have a life expectancy of 19.5 years (data from 2004). The gap between the life expectancies of men and women is clearly greater at birth due to differences in mortality rates at a young age (infant mortality is well known to be higher among boys).

Differences between the old and the new EU members can also be observed in life expectancy at the age of 65. In the new EU countries, 65-year-old men have an

average life expectancy of 13.5 years, and the corresponding figure is 17.2 years for women. In the EU-15, their life expectancies are 16.3 and 19.9 years, respectively. In 2004, men of this age could expect the shortest life spans in Latvia, Estonia, Slovakia and Hungary (13.1 years) and the longest life spans in France, Spain, Italy and Sweden. Women aged 65 years have the worst prospects in Slovakia, Latvia and Hungary (16.7 years) and the best prospects in France, Spain and Italy.

The forecasts for 2050 suggest an increase of 4.6 years in the average life expectancy of 65-year-old men and an increase of 4.4 years for 65-year-old women in the EU. This means that in 2050 men and women of this age can expect to live for a further 20.5 and 23.9 years, respectively. The gap between the two sexes is predicted to be smaller at this age, compared to life expectancies at birth. The expected rate of improvement in the longevity of the 65-year-old population varies from country to country. In the countries of the EU-10, men can expect a greater improvement (5 years) than in the countries of the EU-15 (4.4 years), while the reverse is predicted for women. Compared to 2004, an increase of 4.4 years is projected for women aged 65 in the EU-15 group, and a rise of 4.1 years in the EU-10.

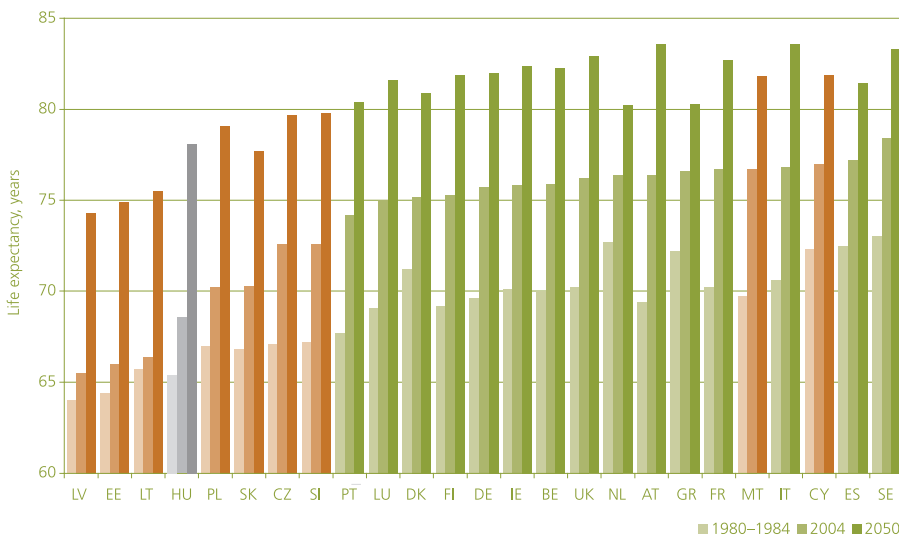


Figure 1.5: Life expectancy at birth in the European Union by country, women (years)

Source: Eurostat

Note: The data projected for 2050 are provided by EuroPop 2004, Baseline.

An important issue to consider is the portion of the expected life span that is spent in good health. The length of this period determines whether older populations have the capacity to remain active in the labour market. Depending on how 'good' health is defined, the measure of a healthy life span can be established in a variety of ways (Eurostat and the World Health Organization approach this issue in different ways). According to the Eurostat data for 2003, men in the old EU countries can expect to have 65 and women 66 healthy years of life.⁶ The longest period of good health among men is measured in Italy (71 years). Hungarian men, by contrast, can

THE NUMBER OF YEARS EXPECTED TO BE SPENT IN GOOD HEALTH IS AN IMPORTANT INDICATOR OF QUALITY OF LIFE. MEN CAN EXPECT 65 AND WOMEN 66 HEALTHY YEARS OF LIFE IN THE OLD EU MEMBER STATES.

⁶ The figures represent the values of the HLY (Healthy Life Expectancy) structural indicator, which are based on the measurement of health-related limitations in everyday activities.

only expect to have 54 healthy years.⁷ The indicators for women show the best quality of life in Italy (74 years), Spain, Cyprus and Austria (70 years), and the worst in Finland (57 years), Hungary (58 years) and the Netherlands (59 years).⁸

The determinants of mortality trends

LIFE EXPECTANCY AT BIRTH SHOWS VARIATION BETWEEN SOCIAL GROUPS WITH DIFFERENT EDUCATIONAL ATTAINMENTS, AS WELL AS BETWEEN THE SEXES. EDUCATION IS A GOOD PREDICTOR OF INDIVIDUAL (AND HOUSEHOLD) MORTALITY IN THE DEVELOPED COUNTRIES.

We have shown that a wide gap can be observed between the old and the new EU member states in terms of life expectancy at birth. As is noted in a report by the European Commission, a substantial part of this difference is attributable to preventable or treatable mortality. The report labels as preventable mortality those causes of death that can be avoided by effective intervention (e.g. lifestyle factors and accidents), while treatable mortality covers cases for which effective medical treatments are available (EC, 2007a).

There are considerable differences between the various socio-demographic groups with respect to life expectancy. As is indicated by the data presented above, the difference between the life expectancies of men and women is striking. The male population born in 2004 can expect to live for 6 years less than the female population, but it is predicted that the gap between the sexes will have narrowed by 2050. The lower mortality risk for women is, however, accompanied by a higher risk of old-age disability (EC, 2007a).

Life expectancy at birth is also related to educational attainment. The UN reports that, in the developed world, educational attainment is a good predictor of the morbidity and mortality figures that apply to individuals (and their households) (UN, 2003). The data further indicate that, in the countries of Europe, the number of years of schooling does not affect the mortality figures for the two sexes to the same extent as in the United States of America. The returns to education measured in years of life are higher for men than for women. The gains – in years of life – to staying at school longer show significant differences between the sexes in Denmark, Hungary and Sweden (SSO, 2005).

Klinger's (2001) study reveals that differences in mortality attributed to educational attainment have increased over the past 30 years among the population of Hungary. The excess mortality among people with less than 8 years of schooling has displayed an especially strong increase, while the relative position of people with higher education has improved significantly. Both trends have been observed for both sexes, but the effect is substantially stronger for men.

⁷ Note that Hungary is the only former socialist country for which data are available.

⁸ www.euphix.org/object_class/euph_health_expectancy.html

1.2.3. Migration

The third important determinant of demographic change is international migration. A number of European countries that were formerly sources of migration became host countries in the second half of the 20th century. The exact number of migrants in Europe is unknown, in part because the statistical records of several countries register nationality rather than the place of birth (country), thus making it impossible to identify first-generation immigrants once they have obtained citizenship (EC, 2007a).

For the year 2005, the UN has estimated that there are approximately 40 million migrants in the EU-27 member states.⁹ Around 3 per cent of migrants are estimated to be refugees. Migrants make up 8.3 per cent of the total population of the European Union. In 10 of the member states, the proportion of people born abroad exceeds 10 per cent. The highest concentrations are found in Luxembourg (37.4 per cent), Latvia (19.5 per cent), Estonia (15.2 per cent), Austria (15.1 per cent) and Ireland (14.1 per cent) (EC, 2007a).

Most of the international migration flow to the European Union targets the countries of the EU-15. All of the 15 old EU member states have now become host countries, including Greece, Ireland, Italy and Spain, which were typically the origins of migration flows before (Monnier, 2004). The new member states attract considerably fewer migrants. The EU-10, therefore, is overall characterized as a source region. Among the new member states, Latvia, Lithuania, Poland and Slovakia had a negative annual migration balance in 2004.

The EU is expected to remain a significant target for migration over the next few decades. Eurostat forecasts¹⁰ estimate the cumulative rate of net migration to be around 40 million people over the period between 2004 and 2050 (EC, 2006a). It should be noted, however, that migration forecasts are to be treated with some caution.

The number of immigrants living in Hungary was estimated to be 316,000 in 2005. These immigrants typically come from the Hungarian-populated regions of neighbouring countries, and the great majority of them are of Hungarian ethnicity. Annual net migration amounted to around 15,000 in 2005 (EC, 2006a). Assuming a similar migration rate projected up to the year 2030, and a net positive migration balance of around 20,000 after 2030, the cumulative net immigration figure will reach 800,000 in the period between 2004 and 2050 (EC, 2006a).

DUE TO CONSTRAINTS REGARDING STATISTICAL DATA COLLECTION, THE DATA ON MIGRATION PHENOMENA ARE UNRELIABLE. THE SHARE OF MIGRANTS IN THE TOTAL POPULATION OF THE EU IS 8.3 PER CENT.

WITH REGARD TO MIGRATION, THE EU IS CONSIDERED TO BE A 'HOST' OVERALL. WITHIN THE EU, THE OLD MEMBER STATES HAVE A POSITIVE IMMIGRATION BALANCE, AND THE EU-10 A NEGATIVE ONE.

⁹ The number of immigrants is insignificant in Romania and Bulgaria.

¹⁰ According to the scenario put forward by the Ageing Working Group (AWG) working with the European Policy Committee of the European Commission.

1.3. The socio-economic consequences of demographic processes

1.3.1. Population decline and population ageing

As a result of the trends detailed above (sustained low, sub-replacement fertility, increasing life expectancy), the population of the EU is expected to decline and become significantly older. That is, the share of relatively old cohorts in the population is predicted to grow, and the average age to rise. As well as presenting the trends of population decline and ageing, we will discuss the constraints and the options available to migration policy in its efforts to alleviate the negative effects.

The population of the EU (formerly EEC) has increased in the 50 years since its foundation. This population growth is primarily a result of successive expansions (the admittance of new member states), while demographic processes (fertility, mortality and migration) have had a substantially weaker contribution (Monnier, 2004). In the past, population growth was mainly driven by natural growth (the difference between the number of births and deaths), while nowadays the main cause is immigration (Monnier, 2004). Several EU countries (Germany, Greece, Italy) experienced an increase in their population in 2004 purely due to immigration (net immigration flow was greater than natural decline). Among member states, only France, the Netherlands, Finland and Ireland have natural growth rates that exceed net migration rates (SSO, 2005).

The population of the EU is expected to grow from 457 million people in 2004 to 470 million in 2025, and this is then expected to be followed by a decreasing trend, leading to a population of 454 million people in 2050, which amounts to a decline of 1 per cent over the whole of the period. The Eurostat forecast predicts population growth in some member states and significant decline in others. The greatest increase is projected for Luxembourg (42 per cent) and Ireland (36 per cent). A less marked growth (8–13 per cent) is expected in Sweden, the United Kingdom, France and the Netherlands. The projections indicate a substantial decline in the population of Germany, Greece, Italy and Portugal among the old member states. While the population of the countries of the EU-15 is expected to have grown by 1 per cent by 2050, that of the new member states is predicted to decrease by 12 per cent (EC, 2006a). Each of the former socialist countries is expected to experience a significant decline in population.

In Hungary, a greater number of deaths than births have been registered in every year since 1981. The natural decline amounted to 31,700 people in 2006. However, owing to the country's positive migration balance, the overall decline in population was smaller than that. Eurostat projects a 12 per cent decline in the population of Hungary over the period between 2004 and 2050, with an anticipated population of 8.9 million people at the end of the period. A similar rate of population decline is predicted for some other former socialist countries, including Slovakia, Poland and the Czech Republic.

WHILE, IN THE PAST, POPULATION GROWTH WAS MAINLY DRIVEN BY NATURAL GROWTH, IMMIGRATION IS THE MOST IMPORTANT FACTOR AT PRESENT.

A SLIGHT DECLINE IS PROJECTED IN THE POPULATION OF THE EU BY 2050. WHILE THE POPULATION OF THE EU-15 COUNTRIES IS PREDICTED TO REMAIN STATIC, THAT OF THE NEW MEMBER STATES IS EXPECTED TO DECLINE BY 12 PER CENT BY THE YEAR 2050.

Trends in population ageing

The expected shift in the age composition of the population will have a significantly greater effect on the economy than will population decline. The decreasing trend in fertility and the continuing rise in average life expectancy at birth result in population ageing. This trend is a feature of every member state, although there are differences in degree.

Let us start by looking at the age pyramids of the EU population. The pyramids reveal the development of demographic processes over time, as well as the composition of the population by sex and age. The pyramids of both old and new member states characteristically taper towards the bottom, i.e. the size of the youngest cohorts is strikingly small. This is a consequence of the fall in fertility. The age structure of the old and the new member states differs in that, while the age pyramid of the old member states widens at a single age group (specifically the group of people born at the time of the *baby boom* following World War II), where a large cohort is to be found, the age pyramid of the new member states bulges in two places – for people born in the periods from 1946 to 1955 and from 1972 to 1990 (SSO, 2005). Demographic projections suggest that the age structure of the EU in 2050 will most resemble an upside-down pyramid, reflecting the *baby boom* generation entering retirement age, the rise in life expectancy and the persistently low fertility rate.

The new member states have a considerably younger population than the EU-15 countries. The median age is 40.3 years in the old EU countries – i.e. half of the population is aged over 40.3 years – as opposed to 37.4 years in the new member states. The ‘oldest’ countries in the European Union are Italy and Germany, while Ireland, Cyprus, Slovakia and Poland are among the ‘youngest’ states. Across the whole of the EU, the median age is expected to rise from 39 years in 2004 to 49 years in 2050. The current age advantage of the new member states is expected to persist until 2035 (SSO, 2005).

The dependency ratio of the old-age population – the ratio of the inactive population aged 65 and over to the working-age (15–64-year-old) population – stood at 24.5 per cent for the EU in 2004. This means that there are currently four active-age people to every person of 65 years and over. The highest old-age dependency ratios are observed in Italy (28.9 per cent), Germany (26.8 per cent), Sweden (26.4 per cent) and Belgium (26.1 per cent), while the lowest ratios are found in Slovakia (16.3 per cent), Ireland (16.4 per cent) and Cyprus (17.5 per cent). This indicator also reveals a significant difference between the EU-15 (25.5 per cent) and the EU-10 (19.6 per cent) countries.

The old-age dependency ratio in the EU is projected¹¹ to have doubled to 51.4 per cent by 2050, meaning that there will be only two active-age people, rather than the current four, to every individual aged 65 and over. The forecasts predict a deterioration in the dependency ratio of each of the member states, although differences are expected in the degree of change. Spain and Ireland are expected to experience the highest rate of increase in the ratio between 2004 and 2050, and Sweden and Luxembourg the lowest rate. The gap that is currently to be observed between the

POPULATION AGEING IS A FEATURE OF EVERY EU MEMBER STATE, ALTHOUGH THERE ARE DIFFERENCES OF SCALE.

THE POPULATIONS OF THE NEW MEMBER STATES ARE YOUNGER THAN THOSE OF THE OLD MEMBER STATES, AND THIS AGE ADVANTAGE IS PREDICTED TO REMAIN UNTIL 2035.

THE CURRENT OLD-AGE DEPENDENCY RATIO OF 24.5 PER CENT IS EXPECTED TO HAVE DOUBLED BY 2050 IN THE EU.

¹¹ AWG scenario.

THE SIZE OF THE YOUNG POPULATION (AGED UNDER 14) OF THE EU IS PREDICTED TO HAVE FALLEN BY 18 PER CENT BY THE YEAR 2050, WHILE THE NUMBER OF OLD PEOPLE (AGED 65 AND OVER) IS EXPECTED TO HAVE RISEN BY 77 PER CENT.

countries of the EU-15 and those of the EU-10 is predicted to have effectively disappeared by 2050: the former group can expect an old-age dependency ratio of 51.6 per cent, and the corresponding figure is predicted to be 50.4 per cent for the latter group (EC, 2005).

Let us take a closer look at the development of the size of major age cohorts. The forecasts predict a decline in the young (0–14-year-old) population and a significant increase in the population of an advanced age (65 years and over). The size of the working-age population (aged 15–64 years) will increase up to 2010, and this will be followed by a downwards trend.

The young population (14 years and under) of the whole of the EU is expected to decline by 18 per cent from 2004 to 2050. A decrease of 15 per cent is projected for the old member states, compared to a decrease of 30 per cent for the new member states. The dependency ratio of young people – the ratio of the young population to the working-age population – is predicted to rise slightly from the current 24 per cent to 26 per cent in the countries of the EU-25. The child dependency ratios are expected to show greater variation among the new member states than among the EU-15 countries, but the figures for the former will remain lower than those for the latter through to 2050.

The predicted declining trend in the working-age (15–64 years) population is expected to start around 2010. The extent of the decline between 2004 and 2050 is estimated to amount to 16 per cent. Those countries that have recently joined the EU can expect a greater decline (27 per cent) than the old member states (13 per cent). According to the forecasts, the population of working-age people will have fallen by a quarter by 2050.

A dramatic spike is expected in the number of people aged 65 and over in the period to 2050. The size of this age cohort will increase by 77 per cent in the EU-25, 75 per cent in the EU-15 and 88 per cent in the EU-10 from 2004 to the middle of the century. The population of people aged 80 and over will display the steepest rise: the size of this group will be 174 per cent greater than it is at present. The growth is expected to reach 172 per cent in the old member states of the EU and 193 per cent in the new member states.

In Hungary, the old-age dependency ratio has been on the increase since the 1990s, i.e. the ratio of the population aged 65 and over to the working-age population is steadily rising. The old-age dependency ratio was 22.6 per cent in 2004 and is projected to reach 48.3 per cent by the middle of the century.

The options for migration policy in mitigating negative effects

MIGRATION ORIGINATING OUTSIDE THE EU IS THOUGHT TO SLOW DOWN THE PROCESS OF POPULATION AGEING AND DAMPEN ITS ADVERSE EFFECTS.

The negative trends presented above may be counteracted by migration to the member states from outside the European Union. Since immigrants are generally assumed to be younger than the population of the host country, immigration flows can have a favourable impact on the age structure of the population: an increase in the number of working-age people improves the dependency ratio. In fact, as long as the retirement age remains unchanged, immigration flow may be the only means

of improving the dependency ratio in the short to medium term. Also, immigration may have an impact on the future dynamics of population growth, as it is a feature of migrants that they have different (typically higher) fertility rates than the population of the host country (RAND Europe, 2004).

There is some disagreement among experts, however, on the supposed positive effects of migration. Some researchers argue that an unprecedented degree of migration flow would be needed to counterbalance the ageing of the population (Lesthaeghe, Page and Surkyn, 1988). And ours is an age when immigration policies are typically aimed at curtailing the number of new immigrants into Europe. A number of studies have further shown that immigration flows only have a minor effect on the age composition of the host country (see e.g. Mitra, 1990; Le Bras, 1991). Immigrant populations have lower rates of employment than are typical of the host country. Economically active immigrants eventually grow old and gain pension entitlement (EC, 2006a). Thus, even if the large-scale migration of working-age groups was viable, it is debatable whether this would not simply defer the problem of population ageing to a later time (RAND Europe, 2004). Migration from outside the EU is likely to be a partial – and temporary – solution to the problem of counterbalancing the effects of low fertility and rising life expectancy on the age structure of the population. The effectiveness of migration as a strategy against population ageing is, nevertheless, highly dependent on the success of national governments in delivering appropriate immigration policies (RAND Europe, 2004).

Polónyi and Timár (2002) estimate that the current positive migration balance of 14–15,000 people would need to increase to about 20,000 from the year 2000 to 2050 in order to satisfy the labour demand of the Hungarian labour market. With a positive migration balance of this size, the ratio of the economically active population would increase by around 6 to 7 percentage points (approximately 600,000 people) by the end of the next decade.

A GREAT VOLUME OF MIGRATION FLOWS WOULD BE NEEDED TO COUNTERBALANCE POPULATION AGEING, AND EVEN THAT COULD ONLY CONSTITUTE A PARTIAL – AND TEMPORARY – SOLUTION TO THE PROBLEM OF POPULATION AGEING.

1.3.2. Social and economic consequences

Consequences for the labour market

The adverse effects of population ageing on the labour market are expected by the European Commission and the Economic Policy Committee to surface in the countries of the EU in 2018. The decline in the working-age population is expected to start earlier (from about 2010), when the *baby boom* generation enters retirement. The effects of the decline will be delayed, however, by the expected increase in employment rates. The employment rate in the EU-25 is projected to rise from 63 per cent in 2004 to 67 per cent in 2010 and 70 per cent in 2020. The EU will thus achieve the Lisbon target for the employment rate in 2020. The projected overall increase in employment is attributable to two major factors: the trend towards having more women in the workplace is the primary cause, and the trend towards having more elderly people in employment is the secondary cause.

THE NEGATIVE LABOUR MARKET EFFECTS OF POPULATION AGEING ARE PREDICTED TO BE TEMPORARILY COUNTERACTED BY AN EXPECTED EXPANSION IN EMPLOYMENT, WHICH WILL RESULT FROM AN INCREASE IN WOMEN'S EMPLOYMENT AND IN EMPLOYMENT AMONG OLDER PEOPLE.

The employment rate among women is expected to rise from 55 per cent in 2004 to 65 per cent in 2025, due to a tendency for the population of older women with a low rate of employment to be gradually replaced by a more highly educated generation of younger women. The trend is expected to mean that the Lisbon target of an employment rate of 60 per cent among women by 2010 will be met.

The second factor that will contribute to the projected overall increase in employment is that the employment rate among the elderly is predicted to increase from the 40 per cent measured in 2004 to 47 per cent in 2010 and then 59 per cent in 2025. (If the projection is correct, the Lisbon target of 50 per cent will be achieved in 2013.) The rising trend in employment among older people (aged 55–64) – which started in 2000 – signals a reversal of the decades-long trend of early retirement from the labour market. Older workers are currently responsible for three-quarters of the increase in the employment rate of the EU. About half of the projected growth in employment can be attributed to the positive effects of the pension system reforms introduced thus far, which have tightened up on early retirement and provided incentives for old-age workers to remain in the labour market (EC, 2007a).

Three phases of future development can be distinguished with regard to the effects of population ageing on the labour market. First, in the period up to 2011, the size of the working-age population is expected to grow and employment rates are expected to rise, which is good for economic growth. This favourable period opens up the way to structural reforms. The expansion of employment can counterbalance the decline in the working-age population brought about by the retirement of the *baby boom* generation, which will be replaced by the much smaller population of the next generations. Thus second, the total number of people in employment will continue to increase, albeit at a slower rate. An increase of about 20 million is projected in the number of people in employment over the period from 2004 to 2017. Third, this is expected to be followed by a phase when the ageing of the population is the dominant factor. The overall employment rate will start falling. It is predicted that the total number of people in employment will have fallen by about 30 million by the end of the period from 2017 to 2050 (EC, 2007a).

THE TOTAL NUMBER OF PEOPLE IN EMPLOYMENT IS EXPECTED TO START DECLINING AROUND 2017.

Productivity and economic growth

The fact that older workers make up an increasingly large share of the labour force does not necessarily give rise to lower productivity. The available data do not support the hypothesis that older workers are less productive or less innovative. Physical and mental capacities do not start declining until a more advanced age, and anyway the decline is gradual, shows considerable variation across individuals, and can be slowed with the help of preventive health programmes. The general improvement in educational attainment has a major impact on productivity, which can, in the long term, compensate for reduced productivity due to ageing (EC, 2007a).

An improvement of 1.3 per cent is expected in labour productivity between 2004 and 2010, 1.8 per cent between 2011 and 2030, and 1.7 per cent between 2031 and 2050 in the countries of the EU-15. In the EU-10, the level of improvement is predicted

IMPROVEMENTS IN EDUCATIONAL ATTAINMENT CAN COMPENSATE FOR THE PRODUCTIVITY-REDUCING EFFECTS OF POPULATION AGEING IN THE LONG TERM.

to be higher: 3.6 per cent on average for the period between 2004 and 2010, 3.1 per cent for the years between 2011 and 2030, and 1.9 per cent between 2031 and 2050.

Taking account of the above trends in employment and the assumptions concerning productivity, a decline is to be expected in the potential GDP growth rate. Forecasts by the Economic Policy Committee and the European Commission predict that the annual average potential GDP growth rate of 2.4 per cent over the period between 2004 and 2010 will drop to 1.2 per cent between 2031 and 2050, assuming no changes in current trends and policies. In the old member states, the annual average potential GDP growth rate of 2.2 per cent in the period from 2004 to 2010 is projected to decrease to 1.3 per cent for the period between 2031 and 2050. A considerably steeper drop – from 4.3 to 0.9 per cent – is expected in the EU-10 countries, partly on account of their less favourable demographic prospects.

The sources of economic growth will be drastically restructured. As the increase in the level of employment stops, the enhancement of productivity will become the primary source of GDP growth. If the future development of productivity and the employment rate fail to correspond to the forecasts, the potential GDP growth rate may plunge to a level even lower than predicted (EC, 2006a).

The effects of future demographic changes on economic growth have recently been estimated in growth models, too (Prskawetz et al., 2006). The researchers investigated the following five separate scenarios: 1) the baseline scenario; 2) the baseline scenario focusing on the effects of migration, with zero migration assumed; 3) the scenario analysing high fertility; 4) the scenario with a maximized number of young people, assuming low life expectancy; 5) the scenario with a maximized number of old people, assuming low fertility and high life expectancy. The outcome of the model estimations can be summarized briefly as follows. The general long-term trend shows a decrease in growth rates, primarily due to the ageing of the population. The high fertility variant (Scenario 3) indicates a growth rate after 2030 that is 0.2 per cent greater than that of the baseline scenario. The scenario with the maximum number of young people (Scenario 4) results in a growth rate that is 0.3 per cent higher. The variant of zero migration (Scenario 2) leads to 0.4 per cent lower growth rate. Finally, Scenario 5, with the maximum number of old people, effects a reduction of 0.5 per cent in the growth rate compared to the baseline. In general, the negative effects of ageing and/or of less migration on GDP growth are greater than the positive effects of higher fertility and younger age structure (EC, 2007a).

THE NEGATIVE EFFECTS OF POPULATION AGEING AND/OR REDUCED MIGRATION FLOWS ON GDP GROWTH ARE GREATER THAN THE POSITIVE EFFECTS OF HIGHER FERTILITY AND A YOUNGER AGE STRUCTURE.

Welfare spending

Long-term forecasts suggest that population ageing – with current policies left as they are – will lead to a substantial increase in public expenditure by 2050 in most EU countries. A large proportion of the expected increase is made up of pensions, health and long-term care costs. The effects of ageing on public expenditure will be clearly felt in most member states from 2010 onwards. The most significant increase in public spending is projected to occur in the period between 2020 and 2040.

There may be considerable variation from country to country in terms of the costs of population ageing. Public expenditure is expected to rise by about 4

POPULATION AGEING RESULTS IN A SUBSTANTIAL INCREASE IN PUBLIC COSTS. THIS IS EXPECTED TO HAVE THE GREATEST IMPACT BETWEEN 2020 AND 2040.

POPULATION AGEING IS
MANIFESTED IN THE RISING COSTS
OF PENSIONS, HEALTHCARE AND
LONG-TERM CARE.

percentage points between 2004 and 2050 in the EU-15 countries and in the entire Eurozone. A smaller, 1.5 percentage-point, increase is projected for the states of the EU-10, but this is primarily because a drastic reduction is expected in the pension expenditure of Poland, following pension reform. With Poland excluded, the public costs of population ageing will increase by more than 5 percentage points of GDP in the EU-10.

Public pension expenditure is predicted to rise in each of the EU-15 countries – with the exception of Austria, where a reform process was initiated in 2000. Italy and Sweden can expect a slight increase in the cost of pensions; the majority of EU member states are likely to experience a relatively modest rise (1.5 to 3.5 percentage points); while Ireland, Spain, Luxembourg and Portugal are predicted to see a much greater increase – of 6.4 to 9.7 percentage points.

In the EU-10 countries, public spending on pensions is expected to fall by 1 per cent of GDP between 2004 and 2030. This will be followed by an increase of 1.3 percentage points, resulting in a total average increase of 0.3 percentage points from 2004 to 2050. The various countries, however, are expected to display fairly divergent trends. While Poland is likely to experience a decrease of 5.9 percentage points of GDP, an increase of 6.7 percentage points is projected for Hungary, 7.3 percentage points for Slovenia and 12.9 percentage points for Cyprus. These figures class Cyprus, Slovenia and Hungary with the EU countries expected to face the greatest challenge (EC, 2006a).

It is a highly complex task to project the healthcare expenditure of the central budget in the long term, partly because it is difficult to predict the development of major demographic and non-demographic factors with reasonable confidence. It seems clear, however, that the advancing age of the population will put more pressure on the healthcare budget and will increase costs. The forecasts¹² suggest that healthcare expenditure will increase by 1 to 2 per cent of GDP by 2050 in most member states. The estimates further indicate that the health of the elderly will have a major impact on the development of costs. If the rise in age-specific life expectancy is accompanied by a corresponding increase in the number of healthy years individuals enjoy, the increase in age-related spending could be reduced by as much as 50 per cent. It must also be noted that the estimates of healthcare expenditure are highly sensitive to the income elasticity of demand and to assumptions regarding the development of unit costs (EC, 2006a).

Similarly, an increase is expected in the public costs of long-term care following the steep rise in the size of the population over 80 years of age. Assuming no changes in current policies, the forecasts project an increase of 0.1 to 1.8 percentage points of GDP in public spending by 2050. Public costs are highly sensitive to the incidence of disability among the elderly (EC, 2006a).

¹² AWG scenario.

1.4. The mediators of demographic changes: household structure

Processes of population mobility (fertility, mortality and migration), changes in age structure and other demographic processes, such as marriage, cohabitation or divorce all have an impact on household size and household structure (RAND Europe, 2004). In the following sections, micro-level data will be presented in an effort to explore the major features of households of various sizes in the countries of the EU-24. Then we look at households with different generation structures, and finally we examine families with children.

1.4.1. Household size

The total number of households in the EU-15 countries had increased from just over 100 million in 1960 to 190 million in 2001, which clearly shows that the rise in household number (90 per cent) was much faster than the growth in the population (30 per cent). The figures thus indicate that the average size of households follows a declining trend. The average household size of 3.2 people measured in 1960 in the EU-15 had dropped to 2.4 people by 2001 (SSO, 2005).

The falling trend in the number of households is characteristic of each of the EU-15 countries, though significant differences do remain between individual member states in terms of household size. The average number of people living in a household continues to be higher in the countries where the decline in fertility started later, including in Ireland, Portugal, Spain and, to a lesser extent, Greece and Italy. Differences in household size suggest that young people leave the family home at different ages in the various member states, and that there is variation in the living arrangements of old people left by themselves after the loss of a spouse (SSO, 2005).

Single-person households are on the rise. An increasing number of people live alone, although some of them for only a relatively brief period. Young people often live by themselves after leaving the parental home until they start a cohabiting relationship. When a cohabiting relationship or marriage breaks up, the result is single-person households – or lone-parent households if there are children. Since women typically live longer than men and typically marry older partners, the majority of single-person households are composed of lone women.

The proportion of single-person households in the EU-15 countries rose from 16 per cent in 1960 to 28 per cent in 2001. This household type constituted 15 to 40 per cent of all households in 2001. The highest proportion was observed in Sweden, followed by Denmark and Finland, while the lowest proportions were measured in Portugal and Spain. The rising number of people living by themselves, together with the decline in the average household size, means that the average size of households with two persons or more will also decrease. This trend can be seen right across the

THE AVERAGE HOUSEHOLD SIZE OF 3.2 PEOPLE MEASURED IN 1960 IN THE EU-15 COUNTRIES HAD FALLEN TO 2.4 BY 2001.

THE DECLINING TREND IN HOUSEHOLD SIZE IS OBSERVED IN EACH OF THE COUNTRIES, BUT SIGNIFICANT DIFFERENCES REMAIN BETWEEN THEM.

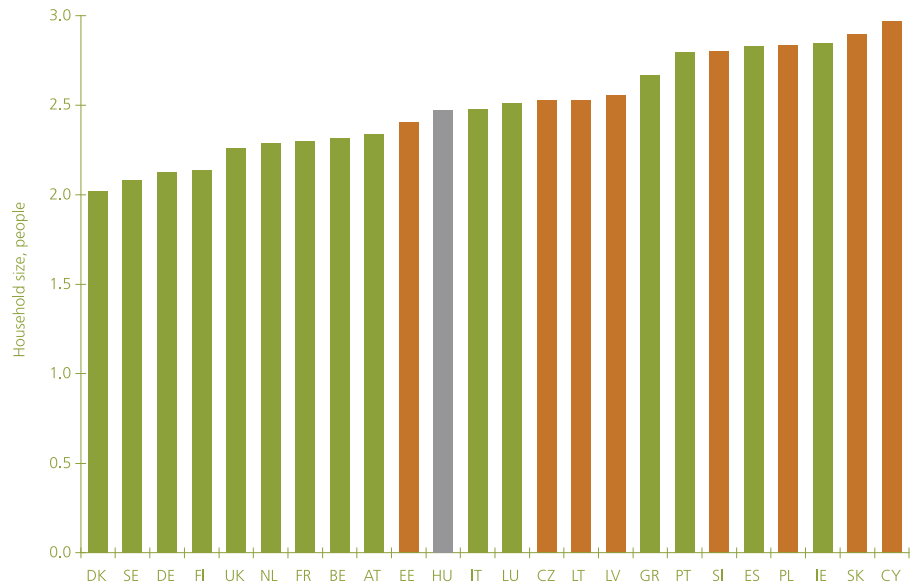
THE SHARE OF SINGLE-PERSON HOUSEHOLDS IN THE EU-15 COUNTRIES GREW FROM 16 PER CENT IN 1960 TO 28 PER CENT IN 2001. AT THE SAME TIME, THE PROPORTION OF HOUSEHOLDS WITH FIVE OR MORE MEMBERS IS ON THE WANE.

THE AGE OF MARRIAGE AND CHILDBIRTH SHOWS DIFFERENT PATTERNS AMONG THE EU MEMBER STATES. WHILE IN THE MAJORITY OF THE EU-15 COUNTRIES, LATE MARRIAGE IS THE DOMINANT PATTERN, IN SOME OF THE FORMER SOCIALIST COUNTRIES, EARLY MARRIAGE CONTINUES BE PREVALENT.

THE AVERAGE HOUSEHOLD SIZE WAS 2.4 PEOPLE IN 2004 IN THE EU.

Figure 1.6: Average household size in the European Union, by country (people)

Source: Authors' computations based on the EU-SILC (2005) data



THE PROPORTION OF SINGLE-PERSON HOUSEHOLDS RANGES FROM 16 TO 43 PER CENT IN THE EU.

The EU-SILC data reveal that the average proportion of single-person households stands at 30 per cent in the European Union. This average figure, however, conceals considerable cross-country variation. Somewhat over four households in ten have one member in Denmark and Sweden. At the other end of the spectrum come Cyprus, Spain and Portugal, where the figure is only about 16 per cent (see Figure 1.7).

EU-15: the share of households with five or more people is shrinking in almost every member state.

Household structure is greatly dependent on marriage and childbearing trends. While, in the past, marriage was a precondition of having children, the recent rise in the number of children being born outside marriage indicates that the relationship between marriage and childbearing is looser than it used to be. There is nothing exceptional today about a couple choosing not to marry when they have children – or even later. This is especially true of Austria, Denmark, Estonia, Finland, France, Sweden and the United Kingdom, where the average age of women is in fact lower at their first childbirth than at their first marriage. Relatively late first marriages (at the age of 27 or over) are frequent in Austria, Denmark, Finland, Luxembourg, the Netherlands, Slovenia and Sweden. By contrast, relatively early marriage (at the age of 24 or younger) is the standard in Latvia, Lithuania and Poland (SSO, 2005).

The results of the EU-SILC survey show an average household size of 2.4 people for the year 2004. The highest sizes were observed in Cyprus, Slovakia, Poland, Slovenia and, among the old member states, in Ireland and Spain (2.8–3 people) (see Figure 1.6). At the other end of the scale we find Denmark, Sweden, Germany and Finland (with average household sizes of 2–2.2 people).

Large households with at least five members make up less than 7 per cent of all households in the European Union. This type of household is to be found in Poland and Slovakia with far higher than average frequency (14–15 per cent). The likelihood of one, two or more generations living together in large households is discussed in the next section.

Hungary had an average household size of 3.1 people in 1960 and 2.6 in 1990. The EU-SILC data put the household size at only 2.5 people in 2004. Single-person households amount to 29 per cent of all households (1,167,000 households). Barely 8 per cent (approximately 315,000) of households have five members or more.

THE PROPORTION OF HOUSEHOLDS WITH AT LEAST FIVE MEMBERS IS UNDER 7 PER CENT IN THE EU.

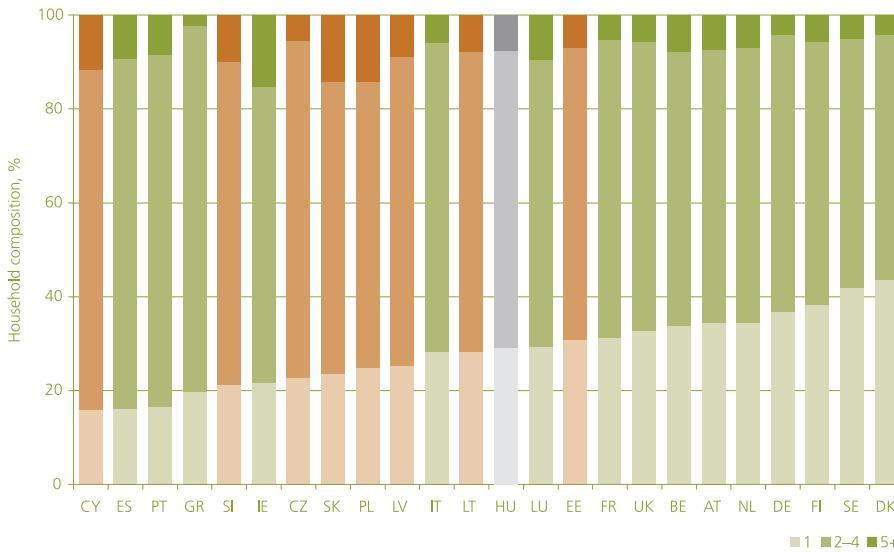


Figure 1.7: Household size composition in the European Union, by country (%)

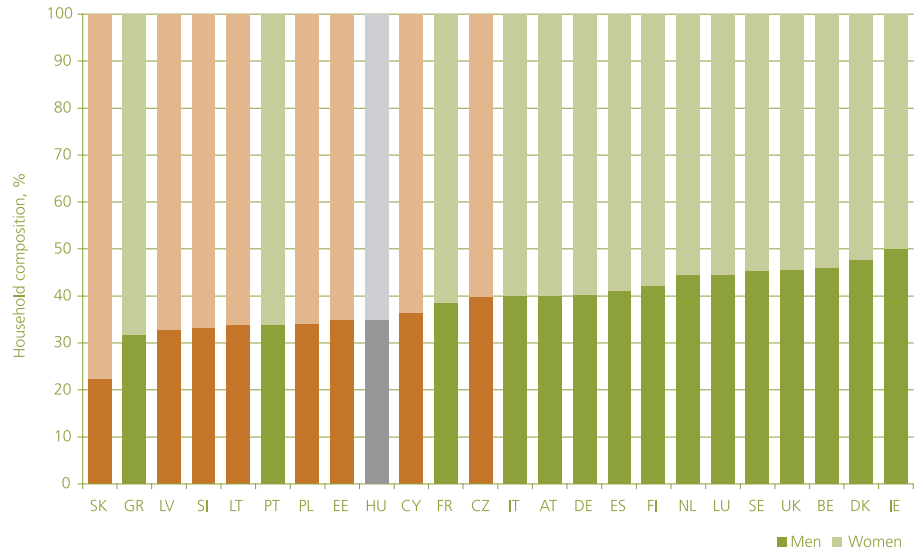
Source: Authors' computations based on EU-SILC (2005) data

As the survey results show, 59 per cent of all single-person households in the EU are made up of women. The figures for individual countries vary from 50 per cent (Ireland) to 78 per cent (Slovakia). The new members of the EU have higher than average proportions of women in single-person households (Figure 1.8). One explanation is that the gap between the average life expectancy at birth of men and of women is greater here than in the old member states (8 years as opposed to 5.8 years).

SOME 59 PER CENT OF ALL SINGLE-PERSON HOUSEHOLDS IN THE EU ARE MADE UP OF WOMEN.

Figure 1.8: The gender composition of single-person households in the European Union, by country (%)

Source: Authors' computations based on EU-SILC (2005) data



THE ELDERLY ACCOUNT FOR BETWEEN 33 AND 67 PER CENT OF SINGLE-PERSON HOUSEHOLDS IN THE EU.

The elderly (aged 65 and over) account for the largest proportion (about 43 per cent) of single-person households. Once again, there are considerable differences between the countries: the figures for the member states vary between 33 and 67 per cent. We can see that, in some countries, it is not the older cohorts that form the greatest proportion of single-person households: in Denmark, Luxembourg and the Netherlands we find more 25–49-year-olds living in a single-person household than people aged 65 and over (*Figure 1.9*). Portugal is at the other extreme, with elderly people making up two-thirds of single-person households. There is a higher than average proportion of elderly people among single-person households in each of the new member states.

The age distribution of single-person households is, of course, correlated with their labour market status. On average, 40 per cent of lone people are employed in the EU. Not surprisingly, this figure is higher in Denmark, Luxembourg and the Netherlands, where the majority of lone people are of an active age. The proportion of lone people in employment is, in contrast, very low in Slovakia and Slovenia. In these countries, the majority of single-person households are composed of pensioners or people in early retirement (77 per cent in Slovakia and 71 per cent in Slovenia). There is a markedly high proportion of other inactive people in the Netherlands and Ireland (39 and 37 per cent, respectively, compared to the EU average of 13 per cent).

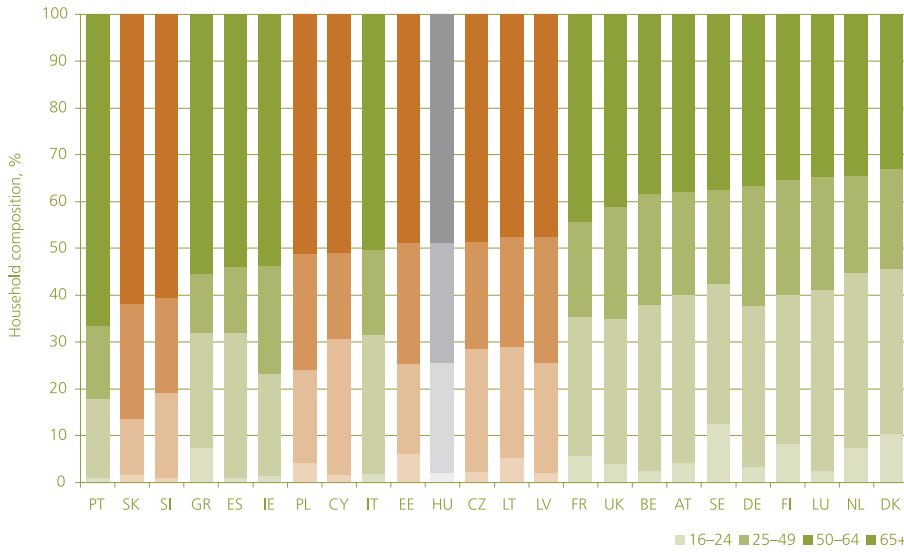


Figure 1.9: Age composition of single-person households in the European Union, by country (%)

Source: Authors' computations based on EU-SILC (2005) data

The distribution of people living in single-person households in terms of their marital status is very varied in the individual member states (Figure 1.10). Two main groups of countries emerge from the data. In one group, singles (those who have never been married) constitute the largest share of the population of people living alone. This group comprises Austria, Belgium, Germany, Denmark, Finland, France, Ireland, Luxembourg, the Netherlands and Sweden. In the countries belonging to the second group, widows and widowers make up the largest share of people living alone. This class comprises the new member states, Greece, Portugal and, to a lesser extent, Spain and Italy as well. The United Kingdom is in the unique position of having as many divorced or separated people¹³ represented in the figures as single people. The divorced and the separated also form a higher than average share of single-person households in Germany and Latvia.

The socio-demographic features of single-person households were also analysed separately for men and women. While the greatest share of lone men (45 per cent) belong to the age group of 25–49 years, most lone women (54 per cent) are 65 and over. These figures of course reflect the difference between the sexes in terms of life expectancy at birth. In line with the age differences, women living alone are far less likely to be employed than are lone men. As regards marital status, most men living alone (55 per cent) have never been married, while lone women are more likely to be widowed (42 per cent) than single (31 per cent).

In Hungary, women make up 65 per cent of single-person households. As with the other former socialist countries, 65 and over is the most common age group (49 per cent) among people living in single-person households. As regards marital status, the largest proportion of those living alone (49 per cent) are widowed.

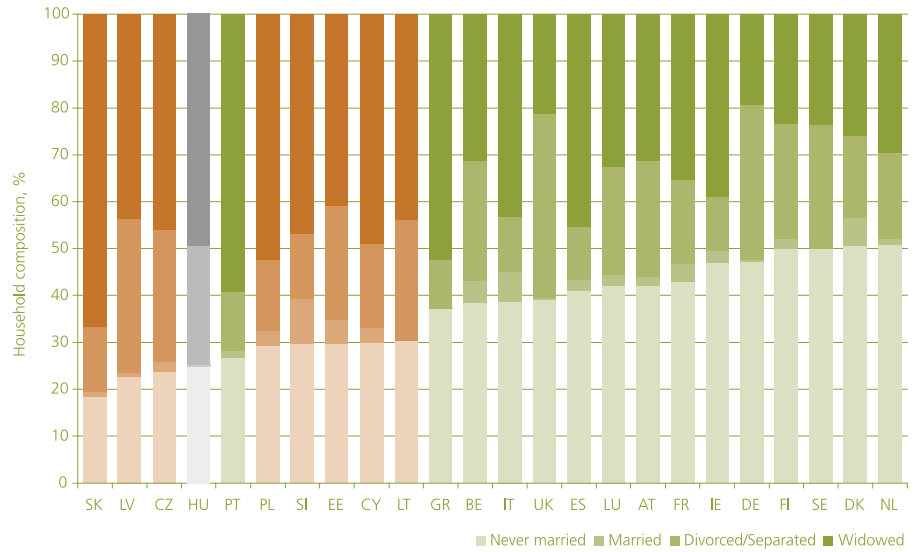
THE DISTRIBUTION OF SINGLE-PERSON HOUSEHOLDS BY MARITAL STATUS APPEARS TO DIVIDE THE COUNTRIES INTO TWO GROUPS. SINGLE PEOPLE DOMINATE IN ONE GROUP, WHILE WIDOWED PEOPLE FORM THE LARGEST SHARE IN THE OTHER.

THE LARGEST SHARE OF LONE MEN BELONG IN THE AGE GROUP 25–49 YEARS AND HAVE NEVER BEEN MARRIED, WHILE THE LARGEST SHARE OF LONE WOMEN ARE OLD (65 AND OVER) AND WIDOWED.

¹³ The survey offered the categories of 'divorced' and 'separated' as separate response options. However, as none of the respondents chose 'separated' in some of the member states, the two categories are collapsed together in our analysis.

Figure 1.10: The marital status of people in one-person households in the European Union, by country (%)

Source: Authors' computations based on EU-SILC (2005) data



1.4.2. Generations (not) living together

THE TRANSITION BETWEEN TRADITIONAL AND MODERN SOCIETIES IS ACCOMPANIED BY A PROCESS WHEREBY THE LARGE FAMILY MODEL, I.E. HOUSEHOLDS WITH SEVERAL GENERATIONS LIVING TOGETHER, IS REPLACED BY (NUCLEAR) FAMILIES OF ONE OR TWO GENERATIONS.

THE SHARE OF ONE-GENERATION HOUSEHOLDS RANGED FROM 40 TO 70 PER CENT...

The transition between traditional and modern societies is accompanied by a process whereby the large family model, i.e. households with several generations living together, is replaced by (nuclear) families of one or two generations. This process is driven by young adults typically leaving the parental home early, even before embarking on a cohabiting relationship. They thus create an independent household either on their own or in a formal or informal cohabiting relationship. The result will be, as was noted in Section 1.3.1, an increase in the overall number of households, and specifically, a higher incidence of single-person and two-person households. A further factor leading to an increased proportion of one-generation households is population ageing, the growing share of old and very old people and their households. The countries of Europe, and the EU member states within them, however, display – at times substantial – differences with respect to the number of generations sharing a household.

Our analysis makes use of a variable (formed using the labels identifying the father and the mother of each household member)¹⁴ which shows whether one, two or more generations live in a given household. As can be seen in *Figure 1.11*, one-generation households account for between 40 and 70 per cent of all households across the 24 EU countries under analysis in 2004. There is a marked difference between the new and the old member states: in the former group, the share of one-

¹⁴ The variable classifies a household as having one generation if none of its members share the household with their parents. Two-generation households are those where one parent or a parent couple live with children, and a household has more than two generations if at least two hierarchical levels of parents live together.

generation households does not significantly go above 50 per cent; it is lowest in Slovenia and Slovakia (40 per cent) and highest in the Czech Republic, Estonia (50 per cent each) and Hungary (51 per cent). Among the EU-15 countries, the share of this household type remains below 50 per cent in the Southern European countries and Ireland only, while the figure is well above 60 per cent in Germany, Finland, Sweden and Denmark. Two-generation households are in the majority in Slovenia, Slovakia, Portugal, Cyprus, Ireland and Greece.

Multi-generation households do not exceed 10 per cent likelihood in any of the countries: they account for around 10 per cent in Latvia, 9 per cent in Poland and 6 per cent in Slovenia and Slovakia. The frequency with which this type of household occurs varies greatly between the old and the new member states. Households with three or more generations make up less than 1 per cent of all households in France, Belgium, the Netherlands, Germany and the Northern states.

... WHILE THE SHARE OF HOUSEHOLDS WITH THREE OR MORE GENERATIONS WAS ABOUT 10 PER CENT OR LESS IN THE EU COUNTRIES IN 2004.

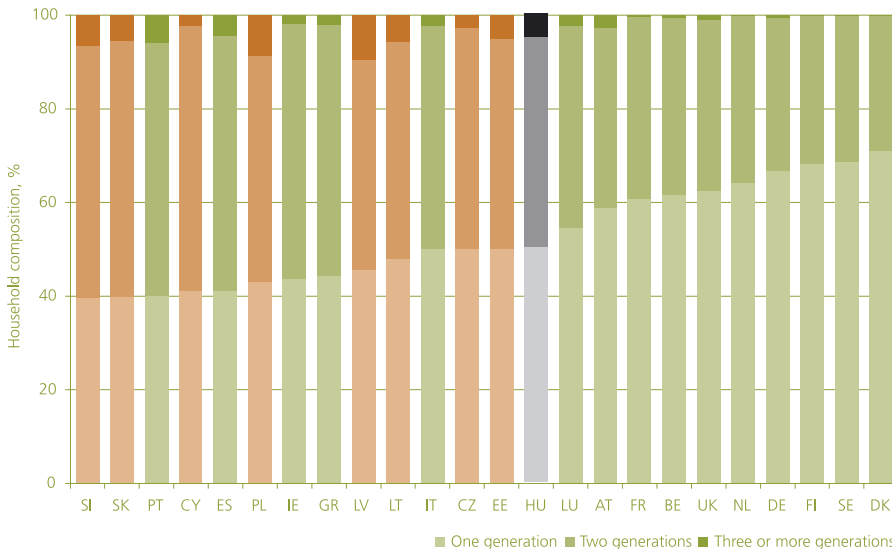


Figure 1.11: Household composition as a function of number of generations in the European Union, by country (%)

Source: Authors' computations based on EU-SILC (2005) data

There are differences in the age composition of households with different numbers of generations. Our analysis reveals a median age of about 60 years for the members of one-generation households, with relatively little variation across member states (Tárki–UniCredit, 2008, Figure F1.1). The highest median age is estimated for Greece, Portugal and Slovenia (65 years) and the lowest for Denmark, Finland and the Netherlands (57 years). The lower median value of age is explained by the relatively large share of young one-generation households in the latter group of countries. The data show greater variation for households with two or more generations. In two-generation households, the median age ranges from 24 years (Sweden) to 35 years (Italy, Spain and Greece). The corresponding indicator is even more extended for multi-generation households: 24 years in Denmark but 43 years in Spain.

PEOPLE LIVING IN ONE-GENERATION HOUSEHOLDS ARE SIGNIFICANTLY OLDER THAN THOSE LIVING IN HOUSEHOLDS WITH MORE GENERATIONS.

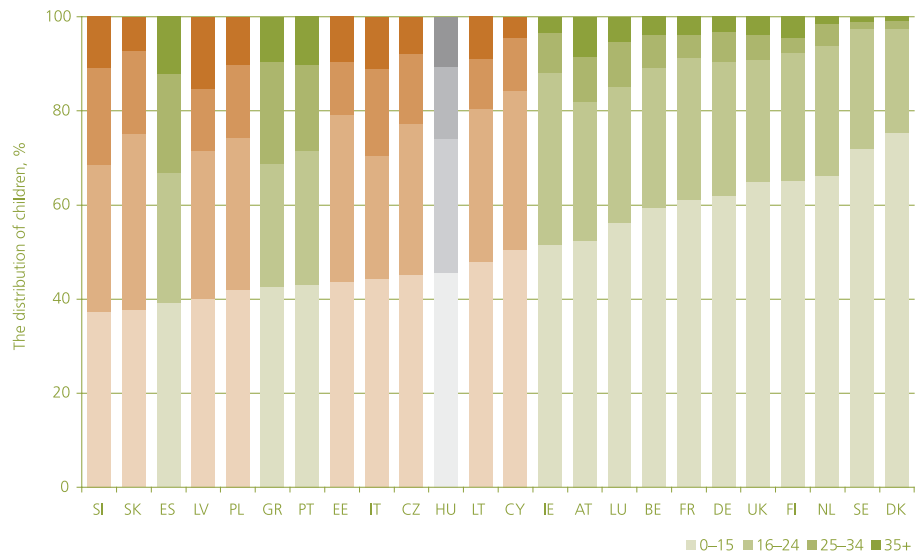
THE SHARE OF CHILDREN OVER THE AGE OF 16 LIVING WITH THEIR PARENTS IS HIGHEST IN THE NEW MEMBER STATES AND THE MEDITERRANEAN COUNTRIES.

Figure 1.12 displays the age distribution of children living with their parents in the countries of the EU.¹⁵ Children of an active age, i.e. over 16 years, are most likely to live with their parents in the new member states and in the Mediterranean countries, where they account for over half of all households with two or more generations. This ratio is highest in Slovenia, Slovakia, Spain and Latvia (60–63 per cent), and lowest in Denmark and Sweden (24 per cent and 28 per cent, respectively).

In Hungary, one generation lives in about half of all households (51 per cent), two generations share a further 45 per cent of households, and only the remaining 4 per cent of households have members of three or more generations. People living in one-generation households in Hungary have a median age of 61 years, those in two-generation households have a median age of 32 years, and the figure is 34 years for multi-generation households. The age distribution of children living with their parents is similar to the pattern observed in Eastern and Southern Europe.

Figure 1.12: Age distribution of children living with their parents in the European Union, by country (%)

Source: Authors' computations based on EU-SILC (2005) data



1.4.3. Households with children

THE SHARE OF HOUSEHOLDS WITH CHILDREN IS TYPICALLY HIGHEST IN COUNTRIES WITH A LARGE PROPORTION OF MULTI-GENERATION HOUSEHOLDS...

The highest frequencies of households with children (40–45 per cent) are to be found in the new member states (Cyprus, Slovakia, Poland, Latvia), Portugal and Ireland, which typically coincide with high frequencies of multi-generation households (Figure 1.13). Correspondingly, the lowest indicators (25–30 per cent) are observed in the United Kingdom, the Scandinavian countries (Denmark, Sweden), Finland and

¹⁵ In this analysis, the definition of child is, for obvious reasons, based on family relationships rather than age. It also follows that only two- and multi-generation households are included in the analysis here.

Germany, where one-generation households have the largest share. In Hungary, a third of all households have members under the age of 18.

Figure 1.13 reveals a U-shaped relationship: the average number of children is highest in the countries where the ratio of households with children is either very small or very large. In Cyprus, Ireland, Slovakia and Poland, a high or relatively high number of children is coupled with a large proportion of households with children, while in the United Kingdom, Denmark, the Netherlands, Belgium and Sweden, it is coupled with a small proportion of this household type.

...WHILE THE AVERAGE NUMBER OF CHILDREN IS HIGHEST IN COUNTRIES WITH EITHER A VERY SMALL OR A VERY LARGE SHARE OF HOUSEHOLDS WITH CHILDREN.

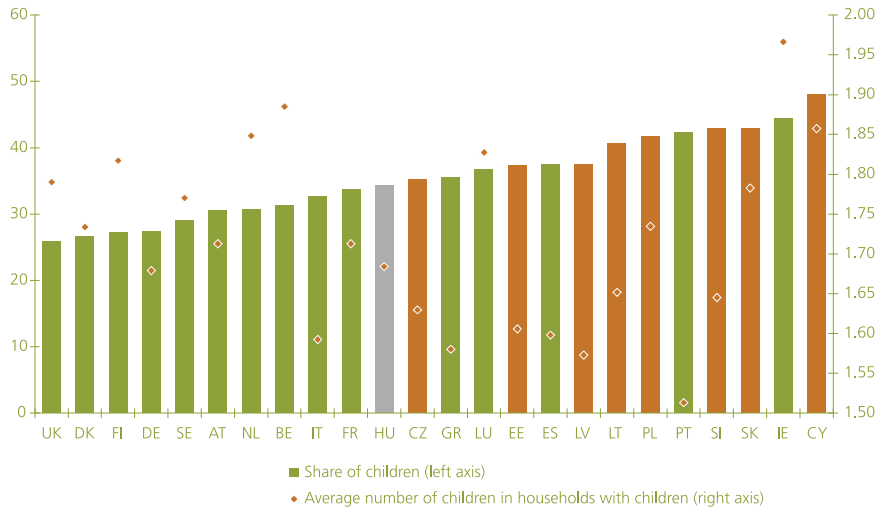


Figure 1.13: Proportion of households with children (%) and average number of children in the European Union, by country (%)

Source: Authors' computations based on EU-SILC (2005) data

Households with children have an average number of 1.5 to 2.0 children. The highest average numbers of children are observed in Ireland (1.97 children per household), Belgium (1.89), the Netherlands (1.85), Cyprus (1.86), Luxembourg (1.83) and Finland (1.82); and the lowest for Portugal (1.51), Latvia (1.57) and Greece (1.58). The EU-SILC data put the average number of children in households with children in Hungary at 1.68.

THE AVERAGE NUMBER OF CHILDREN IN HOUSEHOLDS WITH CHILDREN RANGES FROM 1.5 TO 2.0.

Looking at household composition by household type in the EU member states (Table 1.1) we can see that the categories of 'two adults with one child' and 'two adults with two children' dominate within the one-third of all households that have children: on average, the two types together account for 62 per cent of all households with children. Lone-parent households represent a further 13 per cent, families with three or more children 10 per cent, and other household types with dependent children 15 per cent.

THE MOST FREQUENT TYPES OF HOUSEHOLD WITH CHILDREN ARE 'TWO ADULTS WITH ONE CHILD' AND 'TWO ADULTS WITH TWO CHILDREN': THE TWO TYPES TOGETHER MAKE UP ON AVERAGE 62 PER CENT OF ALL HOUSEHOLDS WITH CHILDREN.

Table 1.1: Distribution of households with children by household type in each country in the European Union (%)

Source: Authors' computations based on EU-SILC (2005) data

Country	Lone-parent household	2 adults with 1 dependent child	2 adults with 2 dependent children	2 adults with 3+ dependent children	Other household type with dependent child(ren)	Total
AT	11.5	29.3	29.9	11.8	17.5	100.0
BE	17.3	27.2	27.8	17.5	10.2	100.0
CY	6.3	20.2	41.3	12.5	19.6	100.0
CZ	12.0	28.3	37.6	6.5	15.4	100.0
DE	17.0	32.2	32.6	11.0	7.2	100.0
DK	19.7	27.1	35.7	14.0	3.5	100.0
EE	19.4	31.9	22.4	8.3	18.1	100.0
ES	5.1	31.2	32.6	6.8	24.3	100.0
FI	15.3	30.5	31.8	17.1	5.4	100.0
FR	15.2	29.4	36.6	11.8	7.0	100.0
GR	4.9	28.2	48.2	2.7	16.0	100.0
HU	14.4	28.1	26.1	10.7	20.8	100.0
IE	17.5	19.8	25.7	18.1	18.8	100.0
IT	7.6	31.5	34.3	7.5	19.2	100.0
LT	14.4	32.1	27.3	8.1	18.0	100.0
LU	8.6	27.9	32.5	16.5	14.4	100.0
LV	16.1	30.2	20.4	5.8	27.5	100.0
NL	10.3	26.3	37.2	17.8	8.4	100.0
PL	6.8	27.5	24.8	10.3	30.6	100.0
PT	7.2	37.0	25.9	5.5	24.5	100.0
SE	21.7	24.7	33.5	15.1	5.0	100.0
SI	9.4	24.4	32.8	7.7	25.7	100.0
SK	6.9	22.0	31.0	11.7	28.4	100.0
UK	25.8	25.7	28.2	10.6	9.6	100.0
<i>Overall</i>	<i>13.3</i>	<i>29.4</i>	<i>32.2</i>	<i>10.3</i>	<i>14.8</i>	<i>100.0</i>

Looking at the composition of households with children by country, the following observations can be made.

- The share of lone-parent households ranges from 5 per cent to 22 per cent. The highest share is measured in the United Kingdom (26 per cent), Sweden (22 per cent), Denmark (20 per cent), Estonia (19 per cent), Ireland (18 per cent) and Belgium (17 per cent). In Greece and Spain, by contrast, the frequency is around 5 per cent, and it still remains under 7 per cent in Cyprus, Poland and Slovakia.
- Households with two adults and a child are represented in a proportion that is significantly higher than average in Portugal (37 per cent). This category is also above the average of the 24 states under consideration in Germany, Lithuania and Estonia (32 per cent each). In Ireland, Cyprus and Slovakia, by contrast, it makes up only 20–22 per cent of households with children.
- Households with two adults and two children are represented in higher than average proportions in Greece (48 per cent), Cyprus (41 per cent), the Czech Republic (38 per cent), France and the Netherlands (37 per cent each) and Denmark (36 per cent). The share of such households is substantially below average in Lithuania (20 per cent) and Estonia (22 per cent).

- Across all the countries under consideration, at most one household in five has three or more children. The share of such households approaches 20 per cent in Ireland, the Netherlands, Belgium (18 per cent each), Finland and Luxembourg, while they account for less than 3 per cent of households with children in Greece and less than 6 per cent in Portugal.

In addition to the share of households with children in the population and their internal structure, our analysis also extends to a more specific subject – that of the youngest group of children (*Figure 1.14*). The overall figures for the 24 countries included in our study reveal that a third of all women caring for children aged 0–2 years have at least a higher education degree. This ratio is 15 per cent higher than the corresponding figure for *all* women aged 25–49 years. Taking this difference as our baseline for a comparison of the EU countries, we find that the indicator value is significantly above 15 per cent in Slovenia (69 per cent), the Czech Republic (51 per cent), Luxembourg (29 per cent), Italy (24 per cent) and France (23 per cent). This contrasts with countries where the proportion of women with higher education among women caring for children aged 0–2 is lower than or equal to the proportion among all women aged 25–49 years: Latvia (84 per cent of the figure for all women aged 25–49 years), the United Kingdom (96 per cent), Estonia (98 per cent), Lithuania, Slovakia and Finland (100 per cent each).

We also find that, in the first few years of the 21st century, women typically gave birth at the age of 28–33 years; taking all the countries into consideration, the median age was 32 years. The age range was not especially wide across the countries. The lowest median age was observed in Latvia and Lithuania (28 years each) and the highest in Germany, Spain, Ireland, Italy and the Netherlands (33 years).

In Hungary, one-third of households have members under the age of 18. Lone-parent households and those that fall into the category of ‘other type of household with dependent children’ occur more frequently than the average for the EU, and households with two adults and one or two children occur less frequently than the average. The share of families with three or more children corresponds to the average for the 24 countries under analysis. The ratio of women with higher education among mothers caring for children aged 0–2 years is 5 per cent higher than the corresponding figure for women aged 25–49 years. Women caring for infants have a median age of 30 years in Hungary.

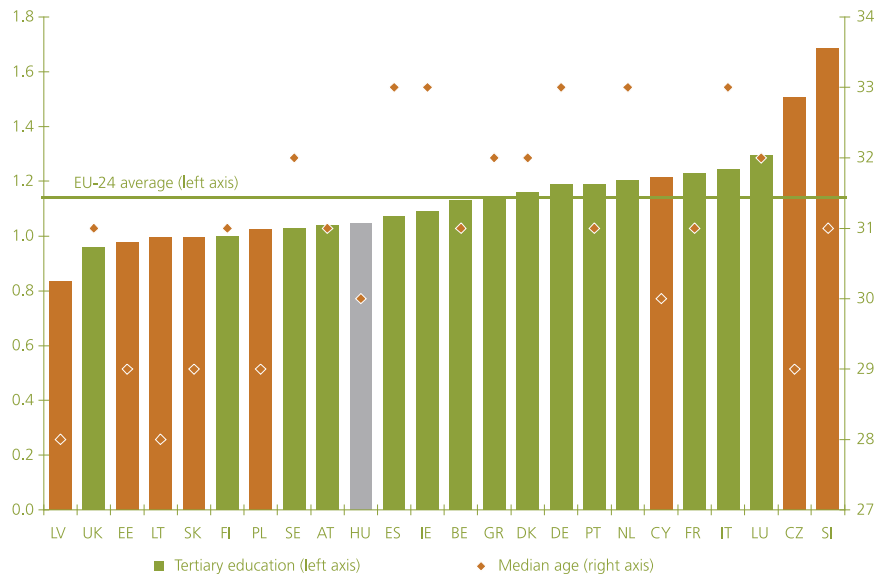
TAKING THE AVERAGE OF THE COUNTRIES STUDIED, THOSE MOTHERS WITH CHILDREN AGED 0–2 YEARS ARE TWICE AS LIKELY TO HAVE A HIGHER EDUCATION DEGREE AS ARE ALL WOMEN AGED 25–49.

NO SIGNIFICANT DIFFERENCES ARE OBSERVED BETWEEN THE COUNTRIES IN THE AVERAGE AGE OF MOTHERS WITH YOUNG CHILDREN.

Figure 1.14: Some features of children aged 0–2 years by country: mother's level of education (proportion of mothers with higher education relative to the average of the 24 countries) and median age

Source: Authors' computations based on EU-SILC (2005) data

Note: The columns (left axis) represent the number of mothers with higher education caring for children aged 0–2 in proportion to the female population aged 25–49 years in the given country.



1.5. Household composition and income

In this section, we seek to present a descriptive analysis of the income positions of individual age cohorts and of a selection of household types. The analysis involves households of different sizes; single-person households of different sexes and ages, lone-parent households and households with a couple and children are examined separately.

The indicator of income position. The relative income positions of household types are captured by the following indicator. The equivalent household incomes calculated on the basis of OECD Scale II are grouped into five categories:

1. less than half the median income
2. 50–80 per cent of the median income
3. 80–120 per cent of the median income
4. 120–200 per cent of the median income
5. more than twice the median income.

For each household type, its distribution across the five income categories was observed in each of the countries. To allow us to determine the position of a given household type in the income structure by means of a single indicator, the next step was to calculate the ratio of households in the top two and the bottom two categories. This step was also carried out for all households combined, in each individual country. Finally, for each country, the figure for the position of a given household type was divided by the figure calculated for all households combined. The resulting indicator is used in every figure in Section 1.5 to describe the relative income positions of individual household types. The mean value – a value of 1.0 by definition – is always marked.

Household size. Analysis of the relative income positions of households of different sizes in the countries that were studied reveals the following (Figure 1.15).

- The relative income position of single-person households, which are becoming increasingly frequent due to population ageing, is below average in each of the member states under consideration. Households with two to four members, i.e. those with at most two generations, caring for a small number of children, have the best standing.
- In most of the countries, households with three members are in the best position in terms of income. In some countries (France, Hungary, Luxembourg, the Netherlands), two-member households enjoy the best income position relative to all households, while in others (Cyprus, Estonia, Ireland, Latvia), this is true of four-member households. In Sweden, both two-member and four-member households have better positions than do households with three members.
- In none of the member states do one- and six-person households enjoy a position that is better than average, and five-member households are positioned slightly above the average only in Estonia, Latvia and Slovenia.

THE RELATIVE INCOME POSITION OF SINGLE-PERSON HOUSEHOLDS IS WORSE THAN AVERAGE IN EVERY COUNTRY. HOUSEHOLDS WITH TWO TO FOUR MEMBERS HAVE THE BEST STANDING.

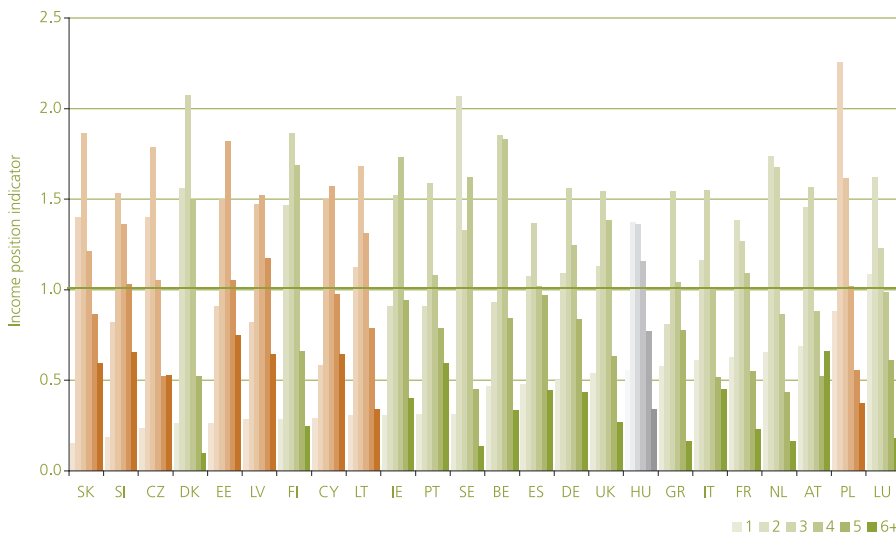


Figure 1.15: Household size (people) and income position in the European Union, by country

Source: Authors' computations based on EU-SILC (2005) data

Single-person households by age and gender. As we saw in our analysis of household size, single-person households overall are in a disadvantaged position. It was shown in Section 1.3.1 that there is great variation among these households, and we therefore resolved to look more closely at the relative income positions of the different age groups and sexes that go to make up single-person households (Figure 1.16).

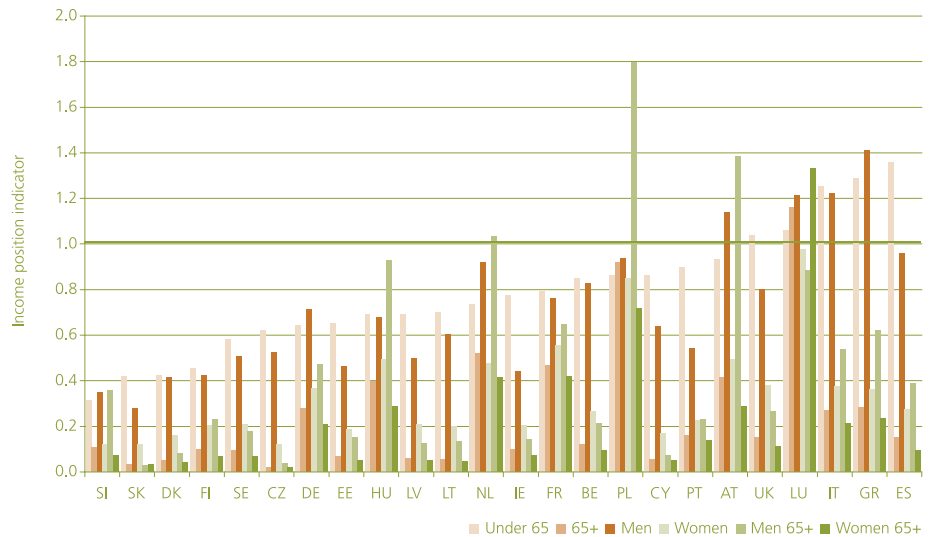
- Only in a handful of countries do single-person households (of whatever type) occupy a position that is above average. They include Mediterranean countries (Spain, Greece, Italy), Luxembourg, the Netherlands and the United Kingdom. In Luxembourg, every type of single-person household we looked at is ranked close to the average. People living alone do not have an above-average standard of living in terms of income in any of the new member states, excepting men aged over 65 in Poland.

AMONG SINGLE-PERSON HOUSEHOLDS, WOMEN AGED 65 AND OVER ARE IN THE WORST POSITION IN TERMS OF INCOME.

- Women aged 65 and over clearly rank worst: only in Luxembourg does their income reach the average level, and the only other country where the indicator that captures their relative income position has a value of more than half the average is Poland.
- People under the age of 65 are typically in a better position than are the elderly; only Luxembourg and Poland deviate from this pattern. The position of the younger group is above average in Spain, Greece, Italy and Luxembourg, while Luxembourg is the only country where this holds for people aged 65 and over.
- Looking at the figures for men and women irrespective of age, we can see that everywhere men are in a better position than women. The size of the gap between men and women living alone is smallest in Poland.
- Men are in a better income position than women within the group of elderly lone people in each of the countries, with the exception of Luxembourg. This is clearly attributable to pension differences that reflect the length of labour-market career and the level of life-course income.
- In Hungary, the income position of every type of single-person household is below the average. The overall gap between men and women is not particularly large, but the difference does become significant if we look at people aged 65 and over: the indicator value for old men is three times that for old women.

Figure 1.16: Single-person household income positions in the European Union, by country

Source: Authors' computations based on EU-SILC (2005) data



LONE-PARENT HOUSEHOLDS DO NOT EVEN APPROACH THE AVERAGE INCOME POSITION; THE INCOME POSITION OF A CHILD LIVING WITH A HIGHLY EDUCATED PARENT IS, HOWEVER, AT OR ABOVE THE AVERAGE LEVEL IN SOME COUNTRIES.

Lone-parent households. The results of the relevant empirical literature largely concur in classing lone-parent households as that part of the population that is most disadvantaged in terms of income and thus at greatest risk of poverty. In such households, the presence of children and the fact that there is a lone parent who is typically female combine to produce at least the possibility that there is a relatively disadvantaged labour-market and labour wage position. The following paragraphs summarize our observations concerning the income positions of various types of lone-parent households (Figure 1.17).

- The EU-SILC data reveal that lone-parent households do not even approach the average income position in any of the 24 EU countries under consideration. Only

in Portugal does the indicator used here reach half the average value. The overall indicator values for all types of lone-parent household are lowest in the Czech Republic, Germany, Ireland and the Netherlands (under 0.1) and highest in Portugal (0.67), Poland (0.44), Latvia (0.41) and Luxembourg (0.39).

- If we consider the sex of the parent, those children who live with their fathers are in a better position than those who live with their mothers in every country, with the exception of Poland.
- The parent’s educational attainment¹⁶ has a major impact on the income position of households of this type (as well). The income position of children living with a relatively well-educated parent is better than or equal to the average level in a number of countries, including Poland, Slovenia, Greece, Hungary, Spain, Luxembourg, Italy, Latvia and Lithuania.
- Hungary appears in the mid-range of the country ranking with respect to the position of lone-parent households, with an indicator value of only one-third of the average for all households. Whether the parent is a man or a woman does have a slight impact on the position of these households. As was mentioned in the previous paragraph, in Hungary the figures differ greatly depending on the parent’s level of education: the indicator value is almost 18 times higher for well-educated parents than for less well-educated parents.

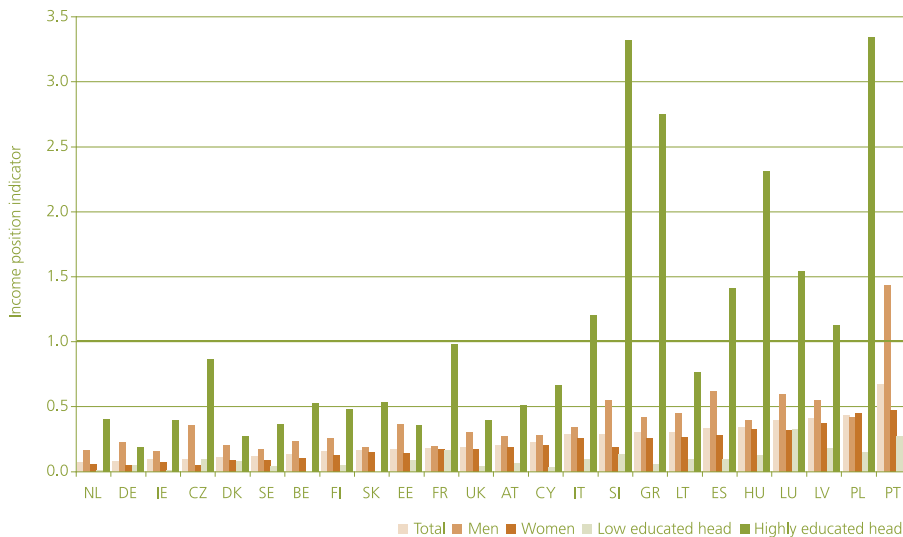


Figure 1.17: Lone-parent household income positions in the European Union, by country

Source: Authors’ computations based on EU-SILC (2005) data

Households with two adults and children. Although the definition of this category covers all households with two adults and children, the vast majority are composed of parents plus their children. The paragraphs below describe the income positions of couples with one, two and three or more children, and the last of these groups will

THE RELATIVE INCOME POSITION OF HOUSEHOLDS COMPRISING TWO ADULTS AND CHILDREN DECLINES AS THE NUMBER OF CHILDREN GROWS.

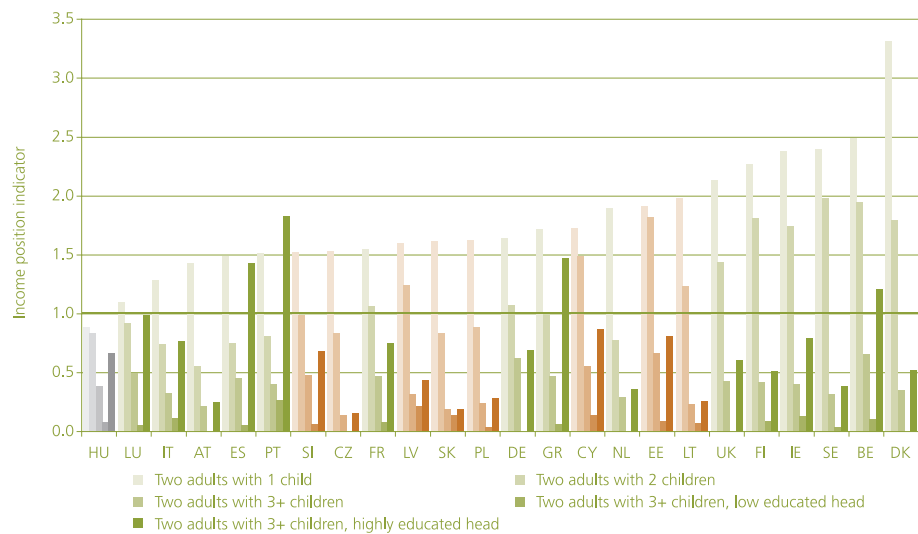
¹⁶ Two categories of education level are used in this part of the analysis: the lower category comprises those with eight years of elementary education or vocational secondary schooling, while the higher category comprises people with upper secondary education or higher education.

be further broken down according to the educational attainment of the head of the household (Figure 1.18).

- Among nuclear families of two parents plus their children, households with a single child are in the best position in each of the 24 EU countries under consideration. The income standing of families with one child is better than average in every country, with the exception of Hungary. The indicator shows a value of above 2.0 in Belgium, Denmark, Finland, Ireland, Sweden and the United Kingdom.
- Within the household type under examination, income position declines as the number of children grows. Families with two children still occupy an above-average relative position in half the countries, while households with three or more children do not reach the average in any of the states; in fact, they are positioned far below. The values of the indicator show very little variation across the countries within this group.
- Those families with three or more children in which the head of the household is relatively well educated are in a significantly better position than are those with a less well-educated household head. Households of the former type have an even better than average income position in Belgium, Spain, Greece and Portugal.
- The position of Hungary is unusual, in that two adults living with one child do not have an above-average income position. We also find, however, that households with one child and those with two children show barely any difference in terms of relative income positions. The educational level of the household head is decisive with regard to the position of households with three or more children in Hungary as well, but the size of the effect does not compare to that observed among lone-parent households.

Figure 1.18: 'Two adults with children' household income positions in the European Union, by country

Source: Authors' computations based on EU-SILC (2005) data



2. AN OVERVIEW OF THE LABOUR MARKET

2.1. Introduction

THE LISBON STRATEGY FOR
GROWTH AND JOBS, DEVELOPED
BY THE EUROPEAN COMMISSION,
AIMS FOR 70 PER CENT
EMPLOYMENT BY THE YEAR 2010.

Globalization and demographic and environmental changes present Europe with a challenge in terms of competitiveness, flexibility and sustainability. While the economies of the countries of the European Union are independent of each other in several respects, they do remain in close contact. If, therefore, the response to the challenges requires political intervention, it is expedient for the individual member states to harmonize their policies. The European Commission developed the so-called Lisbon Strategy for growth and jobs in March 2000 in this spirit. Although the objectives of the strategy were too complex and wide-ranging in themselves to succeed, their importance is undeniable. Thus the 2005 revision of the programme set only two main targets to be attained by 2010: an employment rate of 70 per cent; and 3 per cent of Europe's GDP to be invested in research and development. To encourage implementation of the programme, operational targets and methods are specified individually for each member state at every review stage (EC, 2007b).

This chapter discusses questions related to the objective of improved employment. The growth of employment is of paramount importance – both with respect to the standard of living and in connection with matters of social insurance for the ageing population of Europe. Closely related to this is the cost of labour, which is one of the fundamental determinants of competitiveness. The latter subject will receive relatively little attention in our study, as our focus will be on labour supply (activity) and on the population favoured by the labour demand for employment. The Lisbon Strategy emphasizes the need – with special reference to Hungary – to encourage the growth of labour supply, i.e. to develop policies that involve more people in the labour market. Policies of this kind, aimed at expanding the employable population, include education and training, as well as other active labour market programmes.¹⁷ Only a limited improvement in employability can be achieved without them, since lower labour taxes or an increased number of job opportunities offered by companies are of little use if there is no trained labour force to employ. For this reason, in Hungary and elsewhere, expansion of activity among the employable population is an essential condition for any increase in the level of employment. The EU-SILC population survey provides a good opportunity to draw conclusions concerning the factors determining activity: the willingness and ability to work (or, in other words, employability) and, closely related to it, education.

TO MEET THE LISBON TARGET,
BOTH THE FACTORS OF
EMPLOYMENT AND EMPLOYABILITY
NEED TO BE IN THE FOCUS
OF ATTENTION.

The level of employment (and work intensity, i.e. the amount of work people and households do) cannot, of course, be disregarded. Although this equilibrium aggregate is influenced by demand (business and market trend) factors as well, the friction-prone nature of the labour market is evidenced by the observation that, given a satisfactory level of activity but a low level of employment, the unemployment rate will be high. This is a situation where people want to work but there is insufficient labour demand, or the demand is for a different kind of workforce (e.g. better trained or with different skills). Frictions of this kind can thus

¹⁷ A different means to this goal (one that does not target employability) is, of course, to raise the age of retirement and tighten the conditions on other welfare and social insurance services (e.g. family support systems, disability pension).

be revealing when it comes to issues of employability. If the labour force has the wrong level or type of training, the result will often be an under-supply and an over-supply of labour at one and the same time. This is a characteristic problem in transitional economies such as Hungary's.

Our overview of the labour market starts in Section 2.2 with a discussion of the basic processes of economic activity and employment, based on the data of the Eurostat European Labour Force Survey and keeping the Lisbon objective in mind. Next, the effects of gender, age, education and labour market experience on the probability of activity and employment are investigated for each of the countries, based on individual-level data from the EU-SILC survey. Section 2.3 looks at the work intensity of households and the hours worked by individuals, also based on EU-SILC data. While in Section 2.4, educational attainment and education inequalities between the countries are investigated. We look into the relationship between labour market factors (activity and employment rates) and educational differences, and we describe the groups of countries that emerge from the relationship analysis.

THIS LABOUR MARKET OVERVIEW INVESTIGATES THE LABOUR MARKET OF THE EUROPEAN UNION AT THE LEVEL OF HOUSEHOLDS, INDIVIDUALS, COUNTRIES AND COUNTRY GROUPS.

2.2. Activity, employment and unemployment

2.2.1. Labour market trends

The main indicators used in this section are the International Labour Organization (ILO) definitions of labour market status.

The recommendations of the International Labour Organization (ILO) define labour market status among the population aged 15–74 years and available to work. The definitions state that:

- economically active people are those who are present on the labour market as workers or job seekers, i.e. the employed and the unemployed;
- employed people are those who did at least one hour of work for wages in the reference week (one-hour criterion) or were only temporarily absent from their regular employment;
- finally, unemployed people are those who did not work in the reference week and do not have a job from which they could be temporarily absent; were actively seeking employment over the four weeks preceding the interview; could start work within two weeks if they found an appropriate job (availability).

The Hungarian Statistical Office (KSH) adopts these definitions in its publications of the Hungarian data of the standardized Labour Force Survey (LFS), used to collect data in several countries of the world. The EU's Eurostat, however, publishes data for the population aged 15–64 years. To allow a comparison to be made between these data and the results of the EU-SILC survey, this study uses the definitions given above but applied to a narrower age band of the population: people aged 15–64 years. Our chapter discusses long-term unemployment as well. Based on a similar ILO recommendation, the long-term unemployed are those who are classed as actively seeking employment for the past 12 months or longer (and meet the other two criteria of unemployment).

SLOWLY MOVING TOWARDS
THE LISBON TARGET: MODERATELY
EXPANDING PARTICIPATION AND
EMPLOYMENT IN BOTH THE NEW
AND THE OLD MEMBER STATES.

In light of the definitions, and as revealed in *Figures 2.1–2.3*, both the level of activity and the level of employment show an overall upwards trend in the European Union: the activity rate rose by 1 per cent and the employment rate by 1.3 per cent in 2006. It is also evident, however, that the old (more developed) member states experienced a somewhat faster rate of increase than did the new members, and thus the gap between the EU-15 and the EU-25 figures has widened slightly over the past few years. The unemployment rate has hovered around 8 per cent for the past 6–8 years, and now remains consistently below the magic 10 per cent figure typical of the mid-1990s. This indicator shows a smaller difference between the old and the new member states (roughly half a per cent in 2006) and the gap appears to be shrinking. These results suggest that, although the 70 per cent employment target set by the Lisbon Strategy is not unrealistic, the employment level in the EU-25 would need to increase by over 5 per cent in three years if the target is to be hit. Considering what has happened over the past 10 years, it seems unlikely that the objective will be met. The average employment level in the EU-15, however, may well approach the target of 70 per cent, although no substantial decrease in unemployment can be projected for the future. That is, labour reserves appear to be available in the European economy as a whole, and this could be the starting point for growth. The rise in employment, however, only slightly surpasses the increase in activity, i.e. at an aggregate level, newly active people appear to enter employment immediately, while the unemployment rate remains constant. This suggests that the friction characterizing the labour market has not reduced with the increase in employment.¹⁸

THE HOMOGENEOUS PICTURE HIDES
SIGNIFICANT DIFFERENCES BETWEEN
THE COUNTRIES.

The small differences between the EU-15 and the EU-25 and the smooth curves of the individual indicators, however, conceal significant differences between the countries, even in the trends they display. It is clear from the figures that there is substantial heterogeneity among both the old and the new member states. The countries that are important reference points for a comparison with Hungary are represented in *Figures 2.1–2.3*, where we seek to keep the diversity of possible courses clearly visible.

¹⁸ It may be that unemployment reflects the tightness/slackness of the labour market rather than friction. If this was a significant factor, a wage decline would be expected until unemployment is resolved according to the textbook scenario. We do not see a decrease in (real) wages, however. The phenomenon could, of course, also be the result of other inflexibilities displayed by labour market institutions.

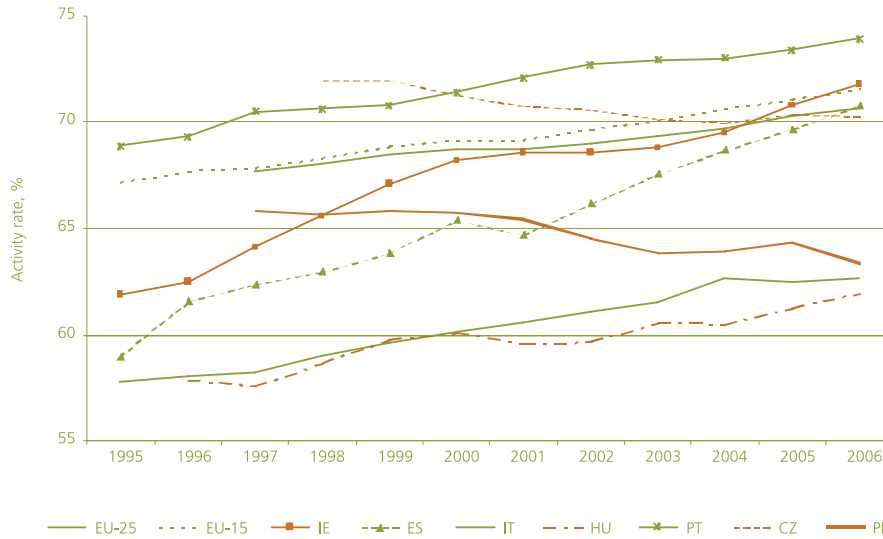


Figure 2.1: Activity rate among people aged 15–64 years in the European Union, 1995–2006 (%)

Source: Eurostat

As regards the labour market aggregates, various clusters of welfare states are clearly distinguishable. The highest activity and employment rates (as well as the lowest unemployment rates) are to be observed in the Scandinavian countries and the United Kingdom (with an activity rate of about 75–80 per cent and an employment rate of about 70 per cent). These are followed by one group of continental states (the Netherlands, Germany and Austria) plus a group of new member states (Cyprus, Slovenia, the Czech Republic and the Baltic states); some of the countries of Southern Europe are at a similar level to another group of continental countries (France, Belgium and Luxembourg), while the remaining Southern countries are at the level of Poland, Hungary and Slovakia.¹⁹

For reference, *Figures 2.1* and *2.2* reveal that Spain and Ireland started out at about the same level as Hungary and Italy, but all three of their indicators have caught up with the EU average over the past 10 years. That is why, when the Hungarian indicators showed a spectacular improvement in the second half of the 1990s, the Irish model was held up for the Hungarian labour market as a possible scenario for progress. However, a more negative scenario has also reared its head recently: the example of Portugal. At the outset, Portugal had an activity and an employment rate above the EU average, and it achieved a further increase up to 2000/01. At this point, however, the rising trend in employment was reversed, while both unemployment and activity increased.²⁰

VARIOUS CLUSTERS OF WELFARE STATES ARE CLEARLY DISTINGUISHABLE IN TERMS OF THE LABOUR MARKET AGGREGATES.

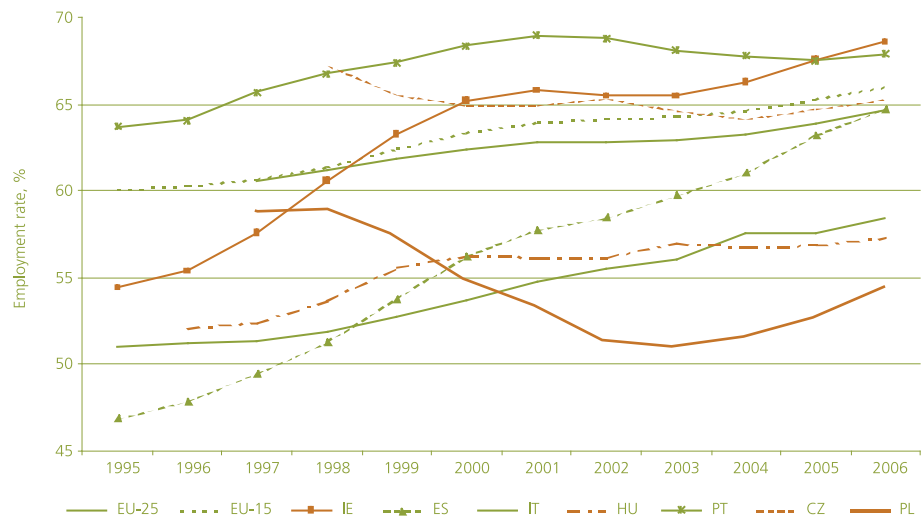
HOW WILL HUNGARY CLOSE THE GAP: THE IRISH OR THE PORTUGUESE EXAMPLE?

¹⁹ Although Slovakia has shown a robust increase since 2004.

²⁰ The example of Portugal is even more relevant to Hungary in that it faces great economic challenges that are comparable to those characteristic of the Hungarian economy (slow growth, rising unemployment, current balance of payment and budget deficit); for more details, see Blanchard (2007).

Figure 2.2: Employment rate among people aged 15–64 years in the European Union, 1995–2006 (%)

Source: Eurostat



THE EFFECTS OF THE REGIME CHANGE ARE STILL BEING FELT IN THE VISEGRAD COUNTRIES.

The differences between the Visegrad countries are usually attributed to differences in the privatization processes during the transition period and in the subsequent intervention policies. One still discernible consequence is that, while the level of employment and activity did not decline dramatically with privatization in the Czech Republic, Poland did experience a rapid fall in the second half of the 1990s, which it allowed to be absorbed into unemployment (recovery did not start until the next decade, and activity continues to follow a declining trend, albeit at a slower rate). In Hungary, roughly every fourth person lost his or her job as early as the start of the 1990s as a result of the abrupt rationalization and privatization process. The easy availability of early retirement and the slack conditions on disability pension meant that a great number of those who were left without work chose to become inactive rather than unemployed, and kept their inactive status on a permanent basis. The recovery of activity and employment began soon after, around 1997–98, but to this day Hungary continues to have the lowest activity rate in Europe.²¹

THE INCREASE IN THE LEVEL OF ACTIVITY CAN BE ATTRIBUTED TO WOMEN AND OLDER PEOPLE.

Overall, we may conclude that the level of activity shows a gentle upwards trend in the working-age (15–64 years) population. With the data broken down into age groups and sex, we can also reveal which are the groups that enhance growth and which are those that impede it. In less developed countries (in most of the Visegrad states and the countries of Southern Europe – with the exception of Spain), it is only now that the expansion in education is really starting to build up to sizeable proportions. We can see that there has been a much bigger decrease in activity among young people since 1995 in these countries than in others. Nevertheless, the

²¹ As the inactive population with its devalued human capital grows old and its place is taken by more active and better educated cohorts with modern skills, the level of activity may steadily increase. As long as the eligibility conditions on (especially early and disability) pensions fail to be tightened, however, the desired rate of increase will not be achieved. A decomposition of the growth trend of activity is published in MNB (2006) for the period between 1993 and 2004, where the incentive effects of certain social transfers (e.g. family support programmes and pension systems) are clearly demonstrated.

observable growth can be attributed to women, on the one hand, and to the oldest age group (55–64 years), on the other. Interestingly, while the increase tends to be strongest among older women in the new member states, it is women aged 25–54 years who dominate growth in the continental states and the countries of Southern Europe. A labour force expansion is also to be observed among men in the 55–64 year age group both in those continental welfare states that have been forced to cut back on welfare provision (Germany, Austria, France, Belgium) and in some of the new member states (e.g. Hungary), where this is probably on account of the increased age of retirement. Whatever the reason, the fact that, in the above-mentioned old member states, the dominant increase is among women aged 25–54 years, while in the new member states it is an increase among older people that is decisive suggests that, in Hungary, positive changes are primarily to be expected from tightened regulations on retirement, rather than from intervention policies aimed at enhancing employability.²²

The overall level of employment shows a gently increasing trend, somewhat slower than the rise in activity. The barely rising employment curve that characterizes Hungary is the second lowest in Europe (after Poland) and has shown an increase of about 4 per cent over the past three or four years. The most successful new member state in this respect – as in the activity rate – is Cyprus. Decomposition of the data into age groups and sex reveals similar trends to those observed for activity: the employment level is raised by the participation of women (in the new and the continental member states) and particularly by the participation of older people. Among young people, by contrast, a marked decline can be observed in the new member states and stagnation elsewhere. What is surprising, and a bad omen, is that the employment rate among men aged 25–54 years, those in their prime, at an age that is assumed to be the most productive, is on the decrease in every new member state (with the exception of the Baltic states), as well as in the continental countries, Sweden, Finland and Ireland, while it remains stagnant everywhere else. It would be an interesting research topic to explore the causes of this emerging trend.

We have mentioned before that the overall unemployment rate (*Figure 2.3*) is static; falling trends can only be observed in the Baltic states, Poland and Slovakia (the last of which had an exceptionally high starting point), and to a lesser extent in the countries of Southern Europe, with the exception of Portugal (Tárki–UniCredit, 2008, *Figure F2.3*). No gender differences can be seen here. Looking at the age groups, however, we find an interesting and troubling process. Although unemployment among the population aged 15–24 years is static across the countries, there are significant country-specific differences: where unemployment falls, it falls steeply and drags the indicator for the total population downwards (see the countries mentioned before). In Sweden, the continental countries, Portugal and Hungary, by contrast, the past few years have seen a substantial increase, which implies unsettling processes: a growing share of the economically active (i.e. typically moderately educated)

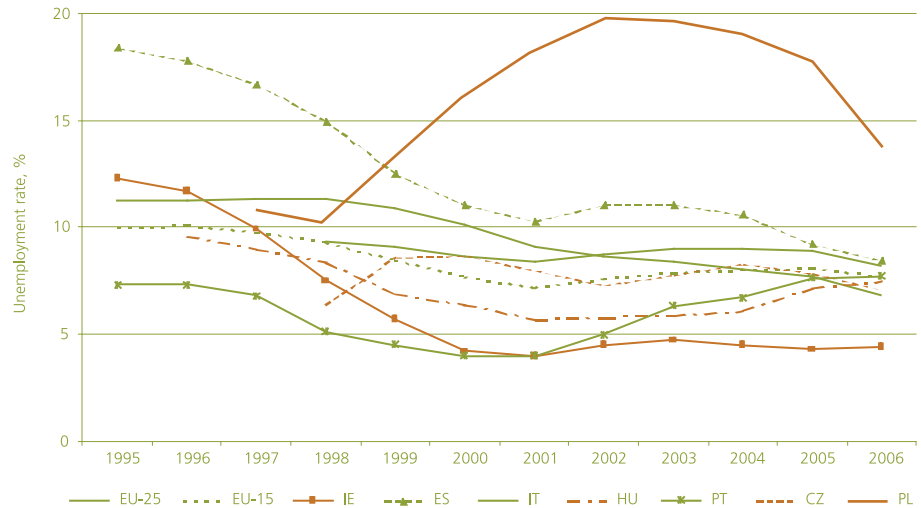
THE LEVEL OF EMPLOYMENT AMONG MEN AGED 25–54 YEARS HAS REMAINED STATIC FOR THE PAST FEW YEARS.

RISING UNEMPLOYMENT RATES ARE OBSERVED AMONG YOUNG PEOPLE IN AN INCREASING NUMBER OF COUNTRIES.

²² The example of the continental countries may imply the decline of the welfare state rather than the success of policies, i.e. the pruned-back welfare system may have led to a shift from a family model of one earner towards one or two earners, and thus to more labour supply among women.

Figure 2.3: Unemployment rate among people aged 15–64 years in the European Union, 1995–2006 (%)

Source: Eurostat



LONG-TERM UNEMPLOYMENT IS STATIC, BUT IT SHOWS A DECLINE AMONG YOUNG PEOPLE

Macro-level labour market processes are characterized by another important indicator: long-term unemployment. Looking at the size of the population classed as unemployed for 12 months or more, the aggregate curve for all (age and gender) groups shows stagnation, with only slight differences between countries and no systematic patterns dividing countries into groups (*Figure 2.4*). An examination of the individual age groups is, however, revealing: the indicator has followed a decreasing trend among young people for quite some time, while the figures for older people have increased by about 5 per cent over the past three or four years, in both the old and the new member states.²³

²³ This finding could suggest a faster rate of skill devaluation, i.e. that older people who have lost their jobs in recent years are statistically more likely to remain unemployed for longer, since their skills are less usable and less renewable. If this is the case, we have found an additional priority for public policy: the need to provide further training and retraining for older working-age populations.

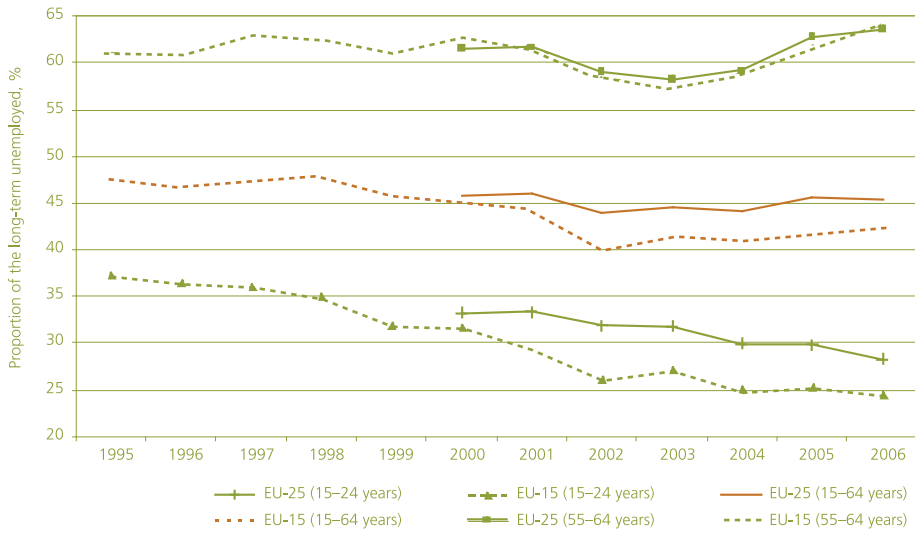


Figure 2.4: Long-term (12 months or more) unemployment among people aged 15–64 years in the European Union, 1995–2006 (%)

Source: Eurostat

2.2.2. Activity and employment probability

We now leave the Eurostat aggregates and turn to individual-level data from the EU-SILC survey of 2005 to investigate – in line with the ILO definitions given above – the effects of gender, educational attainment and labour market experience on the activity and employment probabilities among the population aged 15–64 years in the various countries. Differences between the old and the new member states will also be examined in terms of the effects of these factors.²⁴ A cross-sectional non-linear probability model (probit) is built with a binary variable as our dependent variable, which takes a value of 1 if the given individual is active (employed) and a value of 0 if he or she is not. It must be noted that we use the term ‘effect’ for the sake of easier interpretation, but strictly speaking we can only reveal correlations rather than cause and effect relationships due to endogeneity problems caused by measurement errors and omitted variables.²⁵

A PROBABILITY MODEL WAS BUILT TO ESTIMATE ACTIVITY AND EMPLOYMENT PROBABILITIES.

²⁴ Our results must be consistent with the aggregate Eurostat data discussed in Section 2.1, since the activity, employment and unemployment aggregates reconstructed from the EU-SILC database roughly concur with the Eurostat results. For comparative graphs of the two databases, see Tárki–UniCredit, 2008, Figures F2.1–F2.3.

²⁵ These are variables omitted from the model which also affect the dependent variables but correlate with other explanatory variables in the model – this means that the effects of an explanatory variable involved in the model include the effects of any omitted variables correlating with it. Omitted variables of this kind may include, in our case, the number of children (which may distort the effects of gender, since women with young children are less likely to be active), place of residence (which may be negatively related to both educational attainment and labour market status) and up-to-date skills (which may be correlated with age).

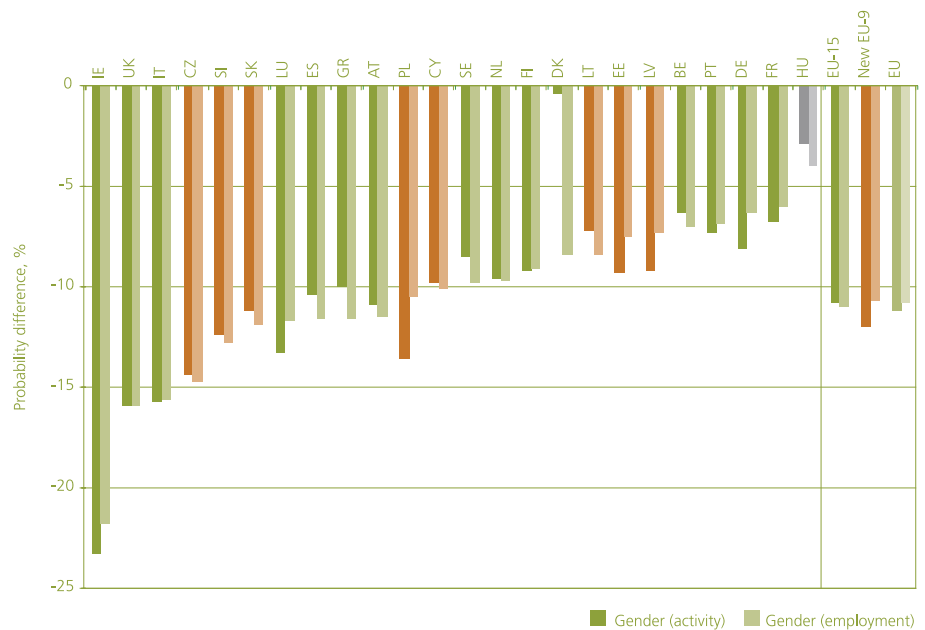
THE RESULTS ARE PRESENTED USING HUNGARY AS AN EXAMPLE.

As is shown in *Figures 2.5a–e*, the explanatory variables selected tend to have a significant effect on activity and employment probabilities. These effects almost invariably shift the two dependent variables in the same direction, and the two outcomes are very closely related in the case of gender and labour market experience (correlation coefficients: 91.6 per cent and 81.9 per cent, respectively).

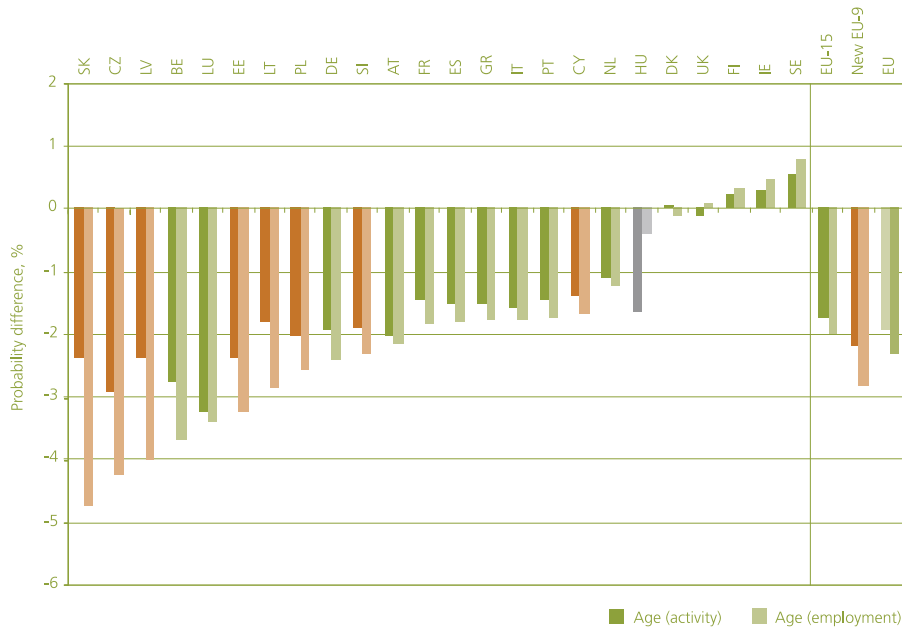
We take Hungary as our example in presenting the results of the model. With all other explanatory variables held constant, women in Hungary are significantly – about 4 per cent – less likely to be active or employed than are men. Similarly, with the other explanatory variables held constant, a Hungarian individual one year older than the average age (about 40 years) is roughly 1.7 per cent less likely to be active and 0.4 per cent less likely to be employed than someone of average age (about 40 years), but otherwise the two individuals have the same parameters (in terms of education and labour market experience). Those with close to 27 years of labour market experience are about half a per cent more likely to be active than those who have close to 26 years of labour market experience, but are similar in every other respect.²⁶ Looking at educational attainment, we find that those with upper secondary education are 7 per cent more likely to be active and 35 per cent more likely to be employed than other people with the same status in terms of all other explanatory variables, while those with higher education are 12 per cent and 42 per cent, respectively, more likely to be active and employed.

Figure 2.5: The effects of gender, age, labour market experience, upper secondary education and higher education on activity and employment probabilities in the European Union (%)

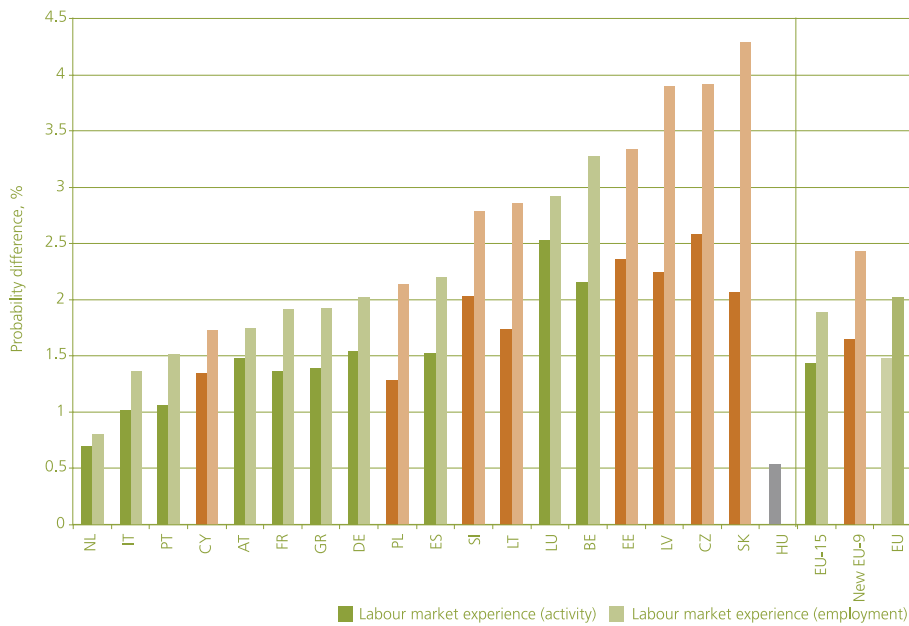
a) Gender differences



²⁶ As no data on labour market experience are available for any of the respondents in employment, the correlation between this explanatory variable and employment cannot be analysed.

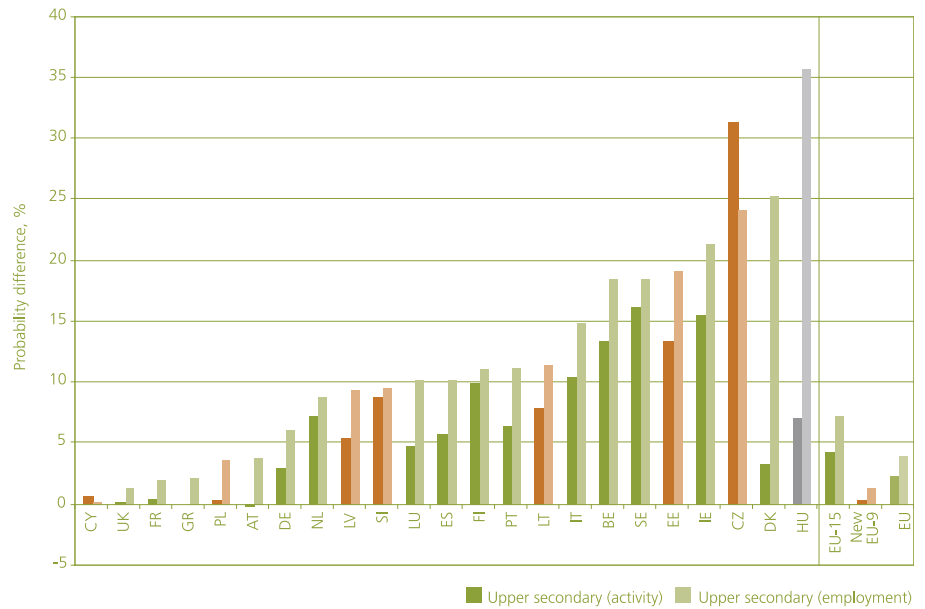


b) The effects of age



c) The effects of labour market experience

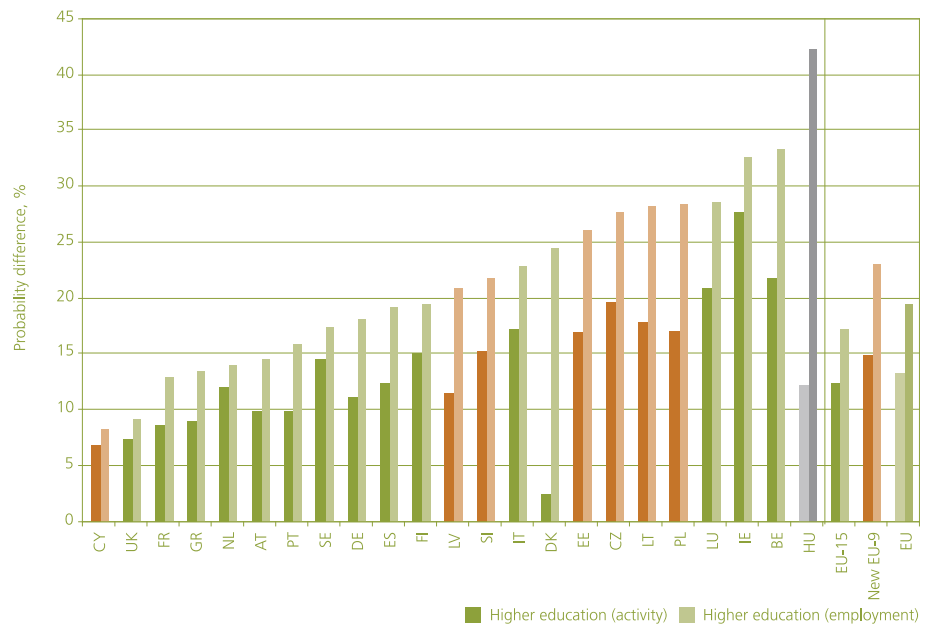
d) The effects of upper secondary education



e) The effects of higher education

Source: Authors' computations based on EU-SILC (2005)

Notes: The figures show the results of unweighted probit models estimated with robust standard errors. The effects of gender and age are not statistically significant for Denmark, and the effects of upper secondary education are not statistically significant for Austria, Cyprus, Germany, France, Greece or the United Kingdom. In the estimations of activity probability, the effects of upper secondary education are not significant for Denmark, Poland and for the total of new EU member states. Labour market experience is not available for Denmark, Finland, Ireland, Sweden or the United Kingdom. None of the respondents stating their labour market experience are employed in Hungary, thus the effects of labour market experience on employment cannot be estimated here.



Looking at the effects of gender (*Figure 2.5a*), we find that there are relatively small differences between men and women both in activity and in employment. In this respect, women in the two Anglo-Saxon countries are most disadvantaged and, surprisingly, the countries do not pattern into groups (even though we would expect there to be smaller differences between the Scandinavian countries and greater differences between the continental countries).

Age (*Figure 2.5b*) has a weaker effect in the Anglo-Saxon and the Scandinavian countries (the effects are in fact positive, although not to any significant extent), while the results appear to reflect the empirical fact observed several times in the context of wage levels that, in the former socialist countries, age has a negative effect (at the average age, which is about 40 years) and its absolute value is generally large in international terms. That is, those older than the average age are significantly less likely to be active or employed, which could be related to the fact that their human capital is more likely to be regarded as obsolete in transitional economies. Compared to the other new member states, in Hungary the difference is small in terms of employment probability, but is of average size in terms of activity probability – i.e. at the average age, the obsolescence of human capital has no consequences (either with respect to an individual's life course, or presumably in an aggregate time series) in Hungary. Labour market experience (at the average level), by contrast, appears to have the greatest (positive) benefits for employment in the former socialist countries (*Figure 2.5c*).

The positive effects of upper secondary and higher education – relative to the category of those with less than upper secondary education – on employment probability prove to be strongest in Hungary (*Figures 2.5d* and *2.5e*).²⁷ While the return to secondary education in employment probability is admittedly rather small in the new member states compared to the old member states (barely exceeds 0.28) the benefits of higher education surpass those observed in the Western countries. Education brings especially great benefits in Ireland, for instance, and typically little advantage in Cyprus among the new member states, and in some of the old member states such as the United Kingdom, France and Greece.

HUNGARY HAS THE SMALLEST GENDER DIFFERENCES IN EMPLOYMENT PROBABILITY IN EUROPE.

IN THE NEW MEMBER STATES, AN INCREASE IN AGE IS ACCOMPANIED BY A SIGNIFICANT DECREASE IN EMPLOYMENT PROBABILITY.

THE RETURNS TO UPPER SECONDARY EDUCATION AND HIGHER EDUCATION IN TERMS OF EMPLOYMENT PROBABILITY ARE EXCEPTIONALLY HIGH IN HUNGARY; THE RETURNS TO HIGHER EDUCATION ARE SIMILARLY HIGH IN THE MAJORITY OF THE NEW MEMBER STATES.

²⁷ They are even stronger in Slovakia, where the value of the increase in probability is over 90 per cent. Slovakia is thus not represented in the figures for expository reasons and because of some doubt as to the data.

²⁸ This result could be an indication of the troubling hypothesis investigated in Hungary by Kertesi and Köllő (2006), whose results showed no support for it, that people with higher education leave no jobs for those with only secondary education (see also Footnote 40).

2.3. The work intensity of households and individuals

THE WORK INTENSITY INDICATOR REPRESENTS THE READINESS OF THE HOUSEHOLD TO WORK.

After estimating activity and employment probability with the help of binary variables, we now turn to a more continuous variable, reflecting the balance between labour demand and labour supply: work intensity. Two indicators of work intensity are used here. One is the household-level Laeken indicator. The total number of months actually worked by the members of a given household is divided by the total number of months the working-age members of the household could work in principle (the number of working-age people multiplied by 12) and the results are sorted to gain a categorical variable. We use this categorical variable to reveal what proportion of the population live in households where no one works (jobless households); next, the Laeken indicator of work intensity is examined. Although work intensity – like employment rate – reflects some kind of labour market demand and supply equilibrium, this household-level indicator is well suited to approximating the labour supply decisions and labour readiness of households. This is because people sharing a household may share labour market work and household work among them, and thus the amount of work falling to each person may be less than that of an individual in a one-person household. This, however, may not hold for the regression model based on individual-level data, where the average number of hours actually worked each week is analysed relative to the statutory full-time hours of work, although the decisions of an individual sharing a household with others are probably not entirely autonomous, individual decisions (we will return to this issue later).

2.3.1. Jobless households

ABOUT 10 PER CENT OF THE POPULATION IN EUROPE LIVE IN JOBLESS HOUSEHOLDS.

Our analysis of the EU-SILC data of 2005, which cover all members of a household (not only the working-age members), finds that 10.33 per cent of the total population of the 24 countries under consideration live in households where none of the working-age members work (*Figure 2.6*). The average value of the indicator is about one percentage point higher than this for the new member states and somewhat lower for the old member states. Hungary falls in the mid-range, irrespective of whether we consider all the countries studied or only the countries of its region (9.8 per cent of the population of Hungary live in jobless households).

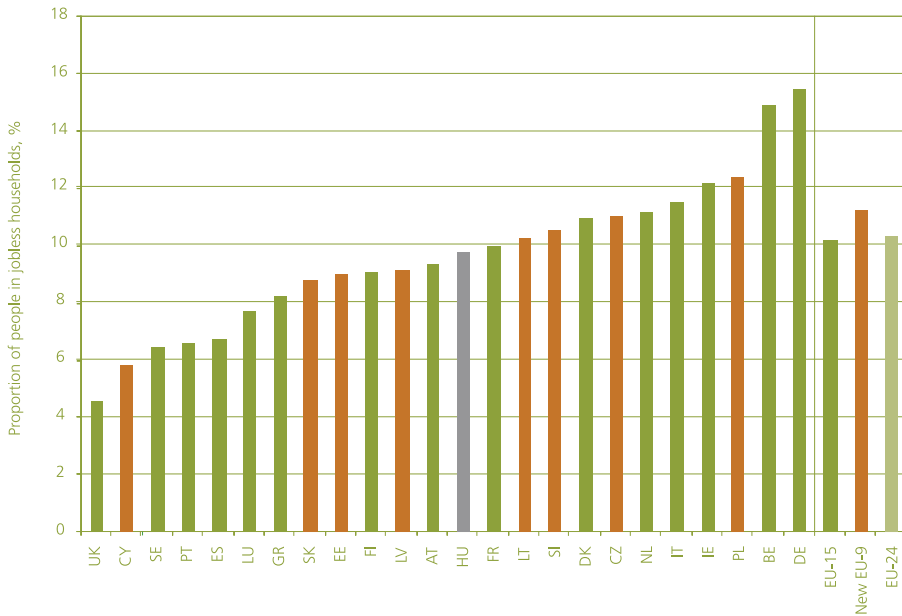


Figure 2.6: Proportion of people living in jobless households by country in the European Union (%)

Source: Authors' computations based on EU-SILC (2005)

Breaking down the data into individual household types, we find that the proportion of people living in jobless households is only exceptionally high among old people with no children, while it is lower than the average of either the new member states or the EU-15 in families with children (Figure 2.7). Nevertheless, in the whole of the European Union, parents raising their children alone are the most likely to live in jobless households, and they are followed by a series of different childless household types. The same pattern can be observed for the new member states as a group.

THE PROPORTION OF PEOPLE LIVING IN JOBLESS HOUSEHOLDS IS HIGHEST AMONG LONE PARENTS WITH CHILDREN AND AMONG HOUSEHOLDS WITH ELDERLY PEOPLE, ESPECIALLY IN THE NEW MEMBER STATES.

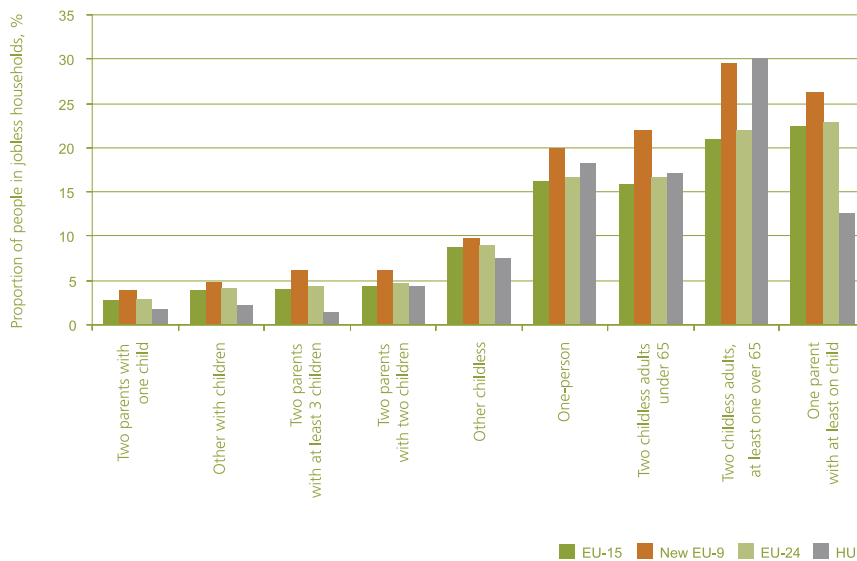


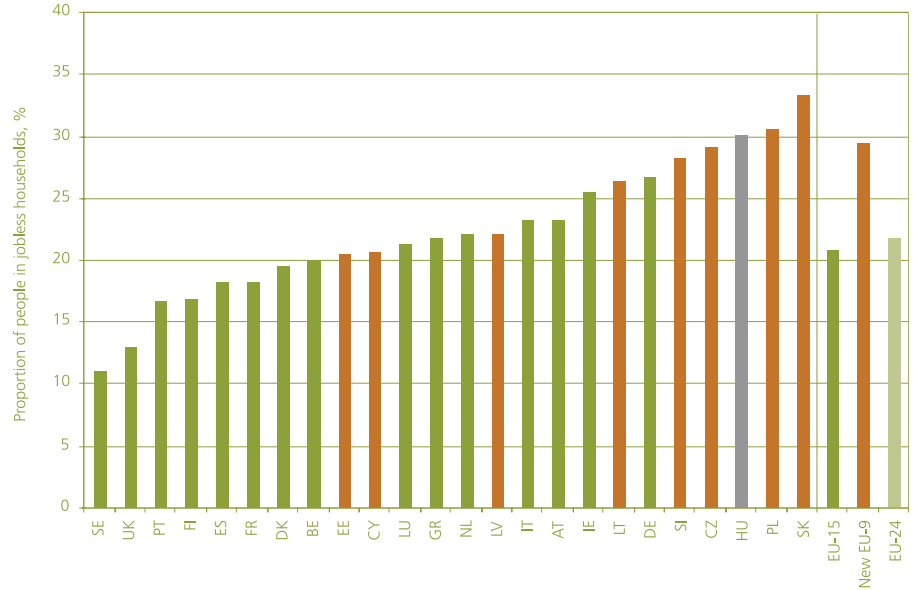
Figure 2.7: Proportion of people living in jobless households in the European Union, by household type (%)

Source: Authors' computations based on EU-SILC (2005)

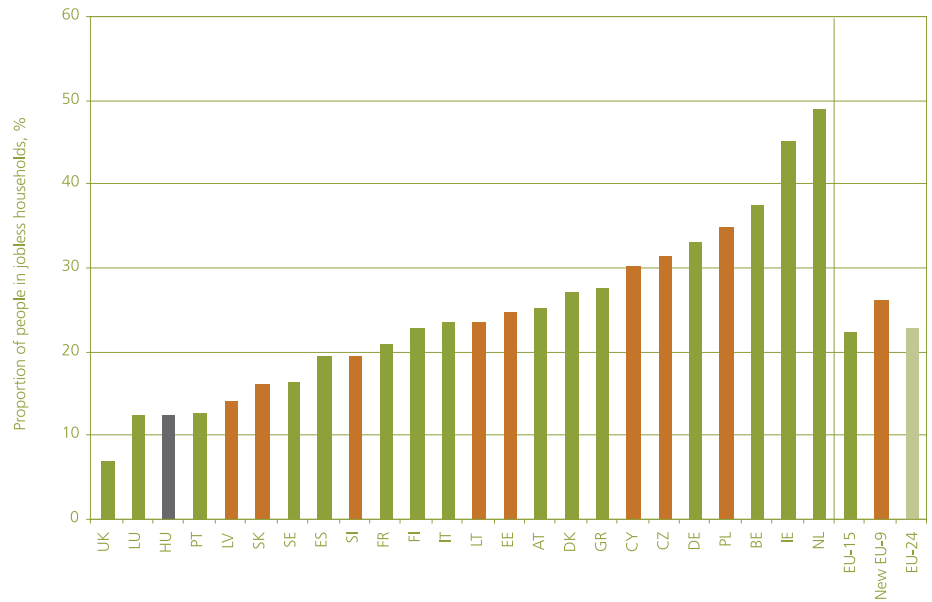
Household types especially susceptible to poverty²⁹ are examined by country in *Figures 2.8a, b and c.*

Figure 2.8: Number of people in each of three household types living in jobless households in proportion to the population of the given household type in the European Union, by country (%)

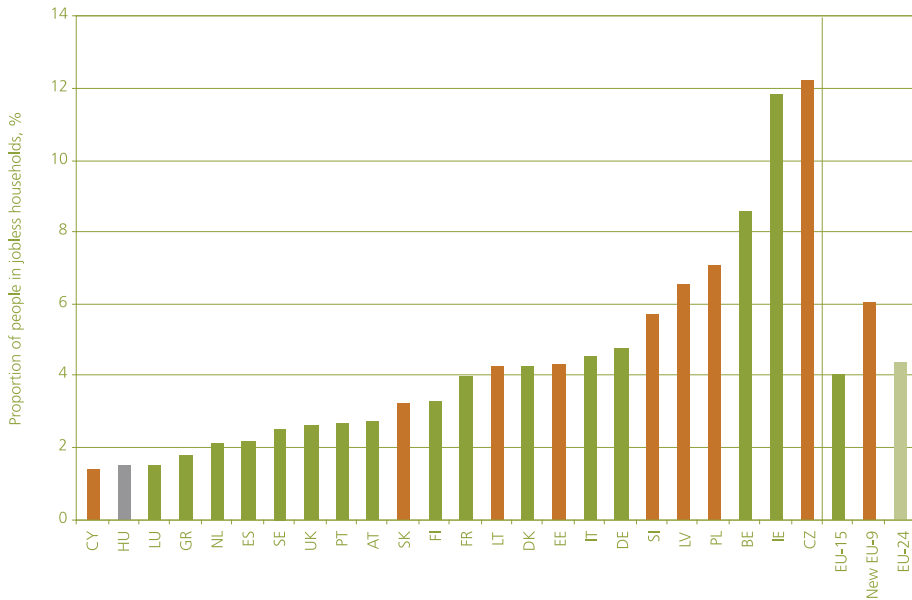
a) Two childless adults, at least one aged 65 and over



b) Parent raising children alone



²⁹ Although the results of the indicator shown in Figure 2.7 do not suggest that families with several children are highly susceptible to poverty.



c) Two parents with at least three children

Source: Authors' computations based on EU-SILC (2005)

Looking at *Figures 2.7* and *2.8a–c*, it is clear that the average for the new member states is strikingly high for households with some older members and for those with several children. While no other patterns can be observed among the countries, there are enormous differences between them. In some cases, people in the highest ranking country are six or seven times more likely to live in jobless households than are people in the lowest ranking country (e.g. the Netherlands versus the United Kingdom in *Figure 2.8b* or the Czech Republic versus Cyprus in *Figure 2.8c*).

It should be noted that the figures probably underestimate the number of people living in jobless households, since our method only classes a household as jobless if none of its working-age members worked a single (!) month in the period studied. There is likely to be a far greater number of households where practically no one works.

THERE IS CONSIDERABLE VARIATION BETWEEN COUNTRIES IN THE PROPORTION OF PEOPLE LIVING IN JOBLESS HOUSEHOLDS.

THE INDICATOR MAY UNDERESTIMATE THE PROPORTION OF PEOPLE LIVING IN JOBLESS HOUSEHOLDS.

2.3.2. The work intensity of households

THE WORK INTENSITY
OF HOUSEHOLDS IS QUANTIFIED
BY A LAEKEN INDICATOR.

The work intensity of households is quantified by a Laeken indicator.

The Laeken indicators. The indicator system has been developed to help provide comparative data on income inequalities and poverty in individual member states for the ‘open co-ordination mechanism’, which seeks to co-ordinate social policies across the European Union. The Laeken indicators form a hierarchical system with three levels. The group of primary indicators comprises the major indicators of financial poverty – those which capture the major dimensions leading to social exclusion. They include indicators such as poverty rate, poverty rate by gender, activity status, household type and housing tenure status; share of income quintiles; persistent poverty rate; poverty gap; regional inequalities; long-term unemployment; the share of jobless households; the share of early school leavers; life expectancy at birth, etc.

The group of secondary indicators includes the robustness of the poverty rate, persistent poverty, long-term unemployment share, and the share of low educational attainment. The Laeken system specifies a so-called tertiary level as well, but no specific indicators are listed here – individual countries are free to decide which indicators are important for interpretation of the primary and secondary indicators in their own particular instances.

The indicator of work intensity used in our study was included among the Laeken indicators at a later state. It is intended to show how many of the theoretically available 12 months of work are spent working by the working-age (18–64 years here) members of a household in the income reference period. The number of months spent working by the working-age members of the population is divided by the number of months theoretically available. The final value of the Laeken indicator of work intensity is determined by categorizing the results: 1, 2, 3 or 4 if the active members of the given household worked, respectively, 0, 1–49 per cent, 50–99 per cent or 100 per cent of the total number of working months available. The indicator takes a value of 1 if the household has no working member or working-age member.

Unfortunately, these households therefore cannot be distinguished from those where there are working-age members who should be working in theory but who for some reason are not.

The work intensity of the various countries is thus represented by this categorical variable calculated on the basis of the EU-SILC data in *Figure 2.9*. The bottom data row shows the share of households with a value of 1 and the top row displays the share of those with a value of 4.

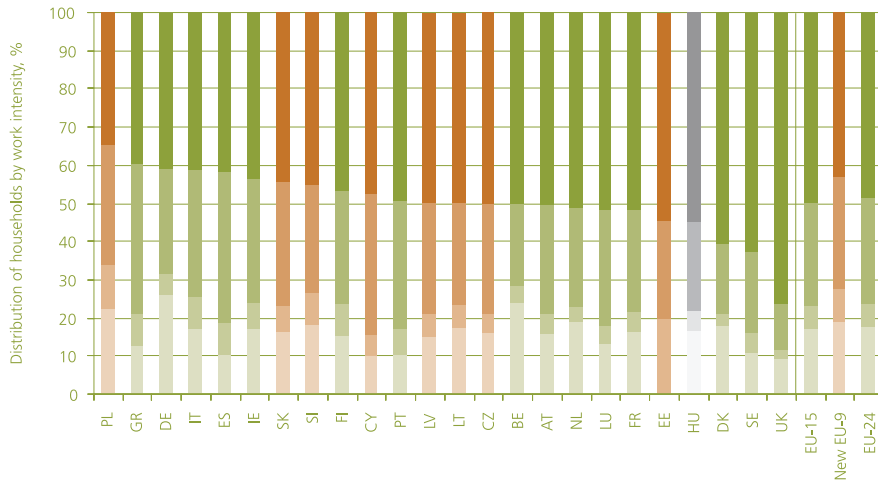


Figure 2.9: The distribution of the work intensity of households in the European Union, by country (%)

Source: Authors' computations based on EU-SILC (2005)

Explanation: Work intensity is the ratio of the total number of months worked by the adult members of the household to the number of theoretically available working months (0%, 1–49%, 50–99%, 100%).

The columns in the above figure are arranged in increasing size of the topmost data row, i.e. the share of those households where every member worked throughout the reference period. We can see that the majority of the new member states (the exceptions being Estonia and Hungary) are located in the lower half of the range, along with the countries of Southern Europe, Germany, Ireland and Finland, i.e. these are the countries with the lowest share of households in which everyone works full time. The United Kingdom, the other two Scandinavian countries and the rest of the continental states – together with Hungary and Estonia – are positioned in the higher section of the range, where over half of all households spend all their theoretical working months actually working.

If we look at the opposite end of the spectrum, i.e. the share of those households where no one works, we do not see a reversed order. The Mediterranean countries (with the exception of Italy) are once again at the lower end of the scale, but the majority of the continental states are among the countries with the highest share of jobless households. This result could, in part, be explained by the widely discussed observation that few part-time jobs or temporary jobs are available in these countries.³⁰ Hungary is located in the middle of the range, with a value somewhat closer to those of the continental countries.

Leaving aside the aggregate national data, we now turn to the distribution of household types.³¹ Since childless households in the 'other' category (including those

THE PROPORTION OF HOUSEHOLDS WHERE EVERY WORKING-AGE MEMBER WORKS IS RELATIVELY LOW IN THE MAJORITY OF THE NEW MEMBER STATES AND IN THE MEDITERRANEAN COUNTRIES.

HOUSEHOLDS WITH PART-TIME EMPLOYMENT ARE RELATIVELY INFREQUENT IN THE CONTINENTAL STATES.

HOUSEHOLDS WITH ELDERLY MEMBERS, THOSE WITH SEVERAL CHILDREN AND THOSE WITH LONE PARENTS RECEIVE SPECIAL ATTENTION IN OUR STUDY.

³⁰ We must remember, however, that the results should be interpreted with caution, since the indicator shows the number of months worked rather than the regular working hours.

³¹ Single-person households, households with two parents and one or two children and 'other' households with children (e.g. those with more than two generations) are less frequent in the new EU member states than in the old member states. Also, in the new member states the share of childless households is either very high (probably due to the great number of households with all their members aged 65 or over, as in Hungary and the Czech Republic) or very low. The remaining household types (lone parent with at least one child, two parents with at least three children) occur with roughly equal frequencies in the new and the old member states. See Tárki–UniCredit, 2008, Figure F2.4.

with two adults aged 65 and over), lone-parent households and households with several children are highly susceptible to poverty, the following discussion places special emphasis on their work intensity figures.

Let us first examine the work intensities of the various household types in the old and the new member states, as shown in *Figure 2.10*.

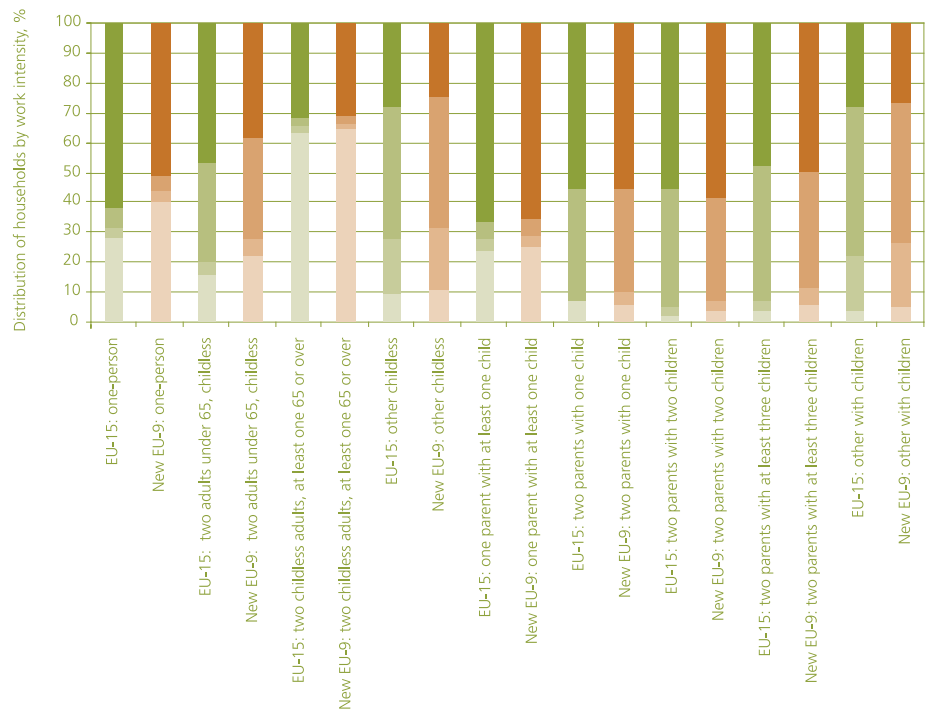
We can see that the work intensity patterns across the different household types are fairly similar in the old and the new member states: the respective shares of households with no work, 'part-time' work activity and 'full-time' work activity are roughly equal in the majority of household types. It should be noted, however, that the share of jobless households is slightly (but consistently) higher in every household type in the new states. This difference is largest for single-person households, but is also noticeable for childless households with two adults under 65 and for the category of other households with children. A further interesting result is that there is a higher share of workers using their full working capacity among childless households in the EU-15 countries, but the advantage of this group of countries disappears when we look at households with children, and in fact the EU-9 group fares better as regards households with three or more children. A general pattern characterizing both groups of countries is that two-parent households with children spend the highest portion of their theoretical working months working at least some time. They are followed by other childless households, childless couples under 65, lone-parent households, single-person households and finally, not surprisingly, childless households with two adults, at least one of whom is aged 65 or over, which includes pensioner households. The share of households where all available working months are used for work is greatest among lone parents, two parents and single-person households, and lowest among other households with children and other childless households. The latter two household types, however, have the highest share of workers using only part of their working months.

THE WORK INTENSITIES OF THE DIFFERENT HOUSEHOLD TYPES ARE SIMILAR IN THE NEW AND THE OLD MEMBER STATES.

Figure 2.10: The work intensity of household types in the old and new member states of the European Union (%)

Source: Authors' computations based on EU-SILC (2005)

Explanation: Work intensity is the ratio of the total number of months worked by the adult members of the household to the number of theoretically available working months (0%, 1–49%, 50–99%, 100%).



We now examine the country-level data for the three household types most susceptible to poverty. *Figure 2.11* reveals that Hungary is among the countries where the proportion of jobless households remains low among those households that are most susceptible to poverty, and indeed the work intensity values for households with several children are among the best in the new member states. We further find that the share of jobless households is robustly low in the United Kingdom and Sweden, in both of which countries a high proportion of households use their full labour capacity. By contrast, we find several of the continental states among the countries where there is a relatively high proportion of jobless households. Furthermore, among families with several children, we find that the relatively high frequency of jobless households is coupled with a noticeably lower proportion of households working at full intensity – that is, there is a high proportion of households working ‘part time’. Families with several children display a similar pattern in the Mediterranean countries, which suggests that households may follow a traditional family model where there is one earner.

IN NEW MEMBER STATES
THE PROPORTION OF HOUSEHOLDS
WITH MANY CHILDREN OR WITH
ELDERLY MEMBERS IS HIGH.

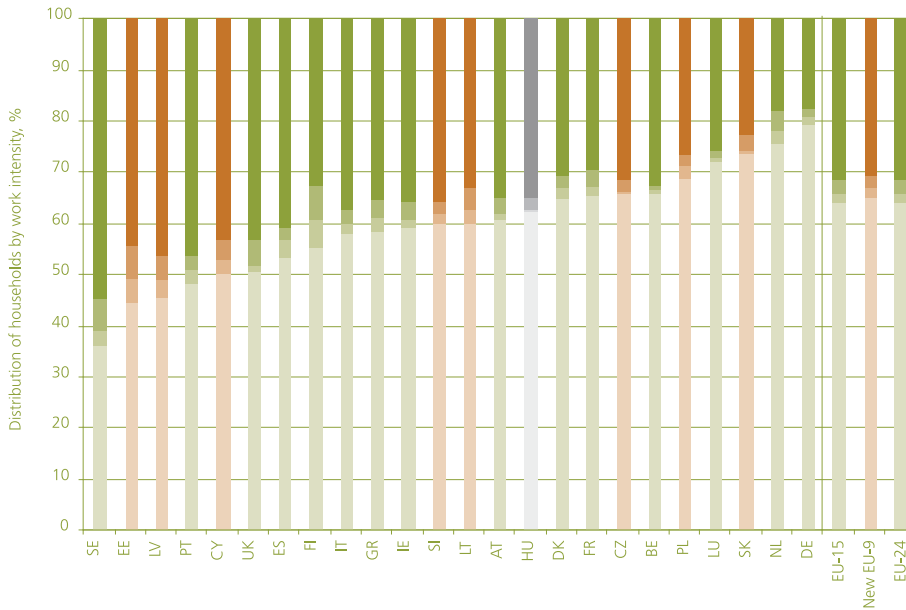
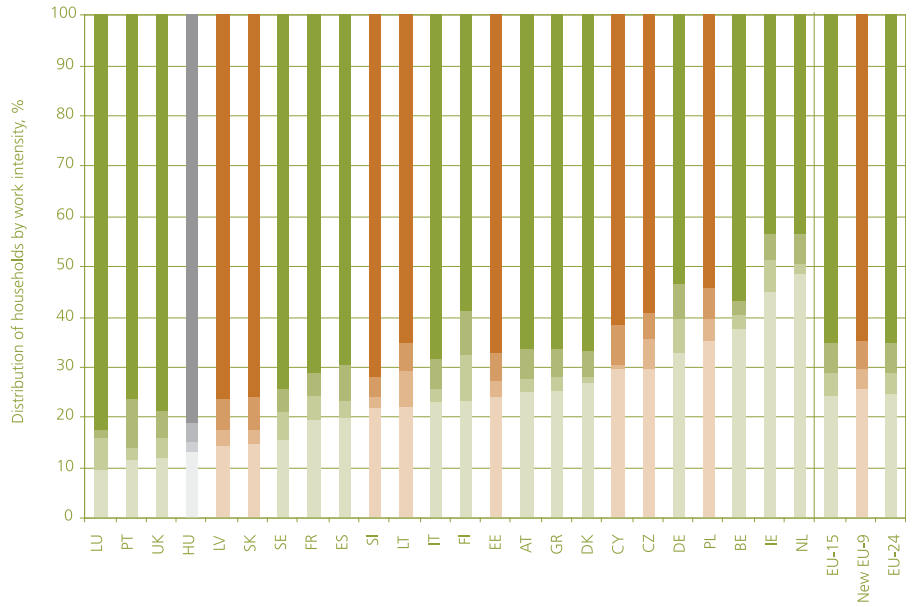


Figure 2.11: The distribution of the work intensity of households in three household types in the countries of the European Union (%)

a) Two childless adults, at least one aged 65 or over

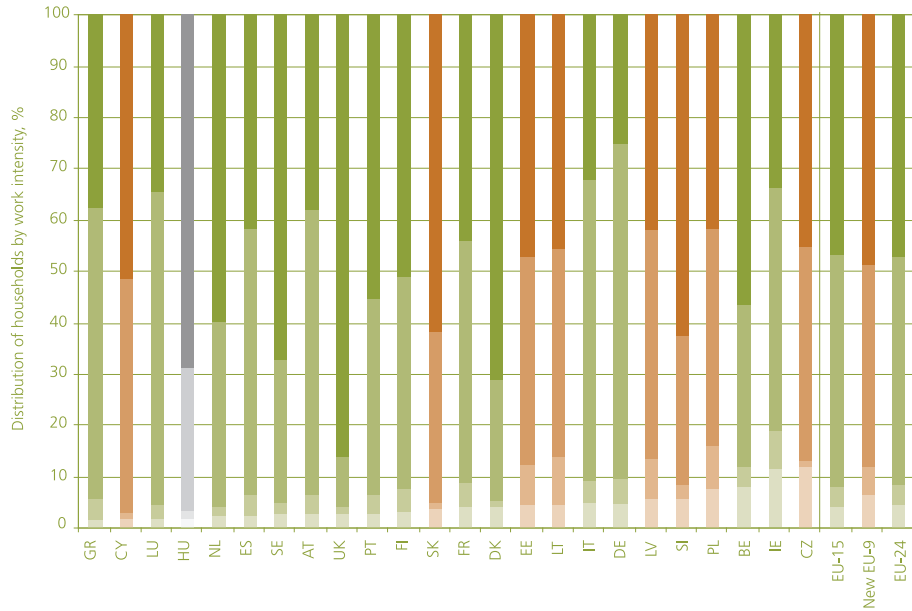
b) Parent raising children alone



c) Two parents with at least three children

Source: Authors' computations based on EU-SILC (2005)

Explanation: Work intensity is the ratio of the total number of months worked by the adult members of the household to the number of theoretically available working months (0%, 1-49%, 50-99%, 100%).



2.3.3. Hours of work – individual work intensity

Leaving the work intensity of households, we now return to individual-level data and look at the work intensity of individuals on the basis of their hours of work. This is more difficult to interpret as a continuous labour supply decision, since people usually either work full time or do not work at all. In some developed countries, however, part-time work is becoming more common, and people may have more than one job if they wish and are able to.

The following paragraphs thus present a regression analysis involving individual-level data on the total working-age (15–64 years, again) population.³² We use the average weekly number of hours of work in proportion to the statutory weekly working hours³³ as our dependent variable. This includes the hours worked in both full-time and part-time jobs; for irregular working hours, the weekly average is taken. Our explanatory variables are those used in the activity and employment estimations, and an additional variable of household type (single-person, other childless, lone parent, couple with one or two children, couple with several children, other household with children). To reveal how much of our results is explained by complete joblessness (0 hours of work), a control regression analysis is carried out among the population with jobs. The results are displayed in *Figure 2.12*.

INDIVIDUAL WORK INTENSITY IS CAPTURED BY AN ESTIMATION PROCEDURE BASED ON HOURS OF WORK.

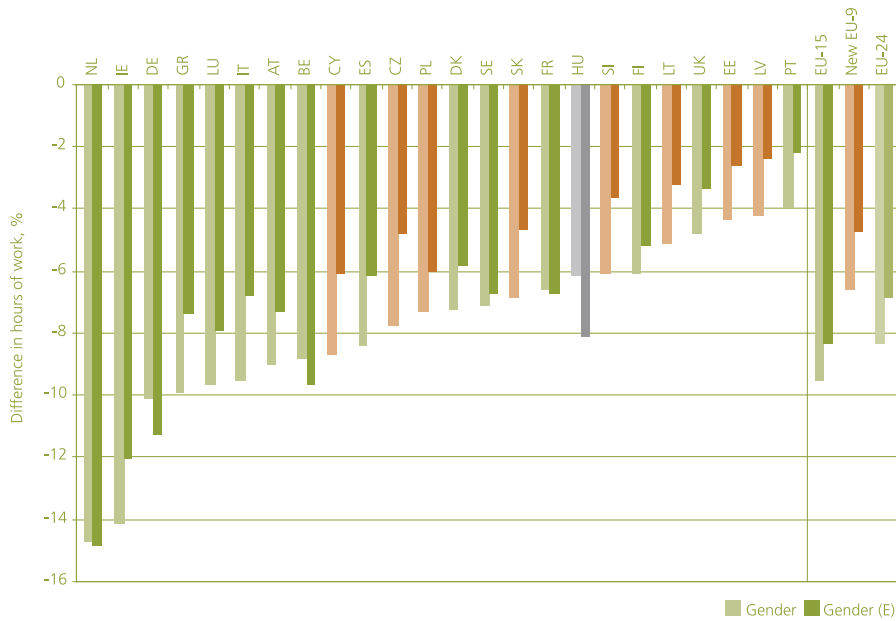


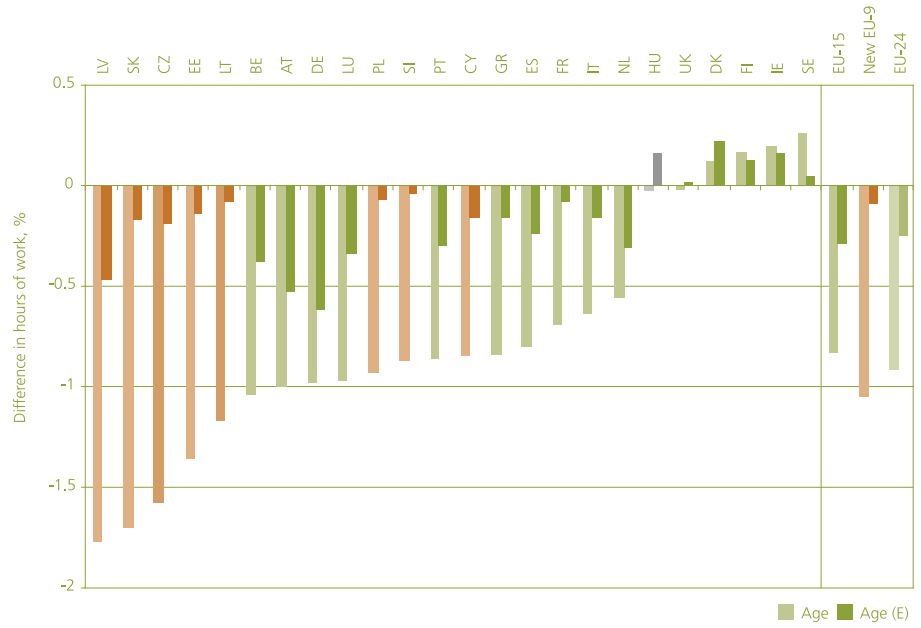
Figure 2.12: Country-specific differences in hours of work ratios in the European Union (%)

a) Gender differences

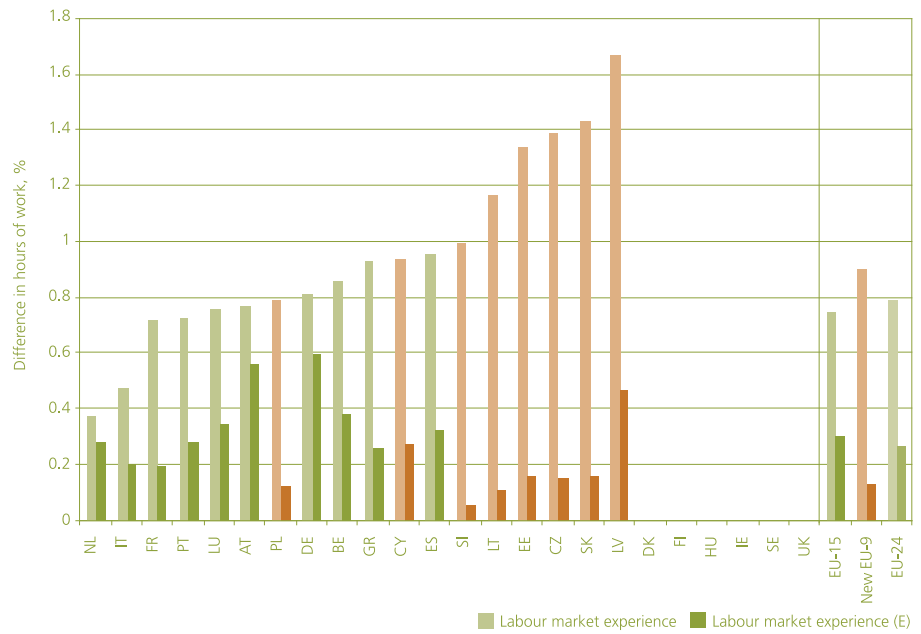
³² Since we would like to approximate some kind of labour supply decision, the total working-age population, including those currently not working, is included in the analysis, rather than just the employed population alone.

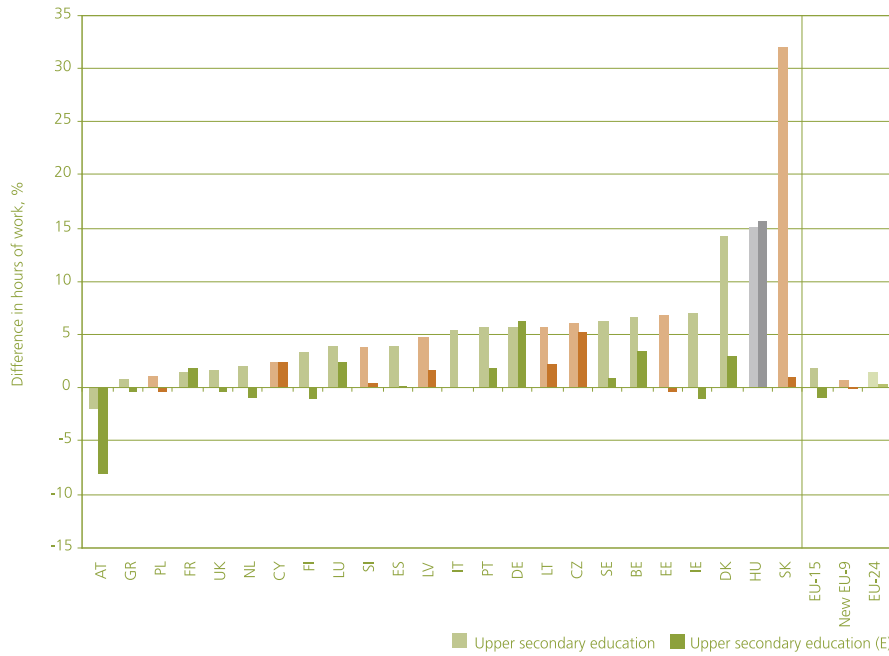
³³ The length of the working week is 35 hours in France and 40 hours in all other EU-SILC countries.

b) The effects of age

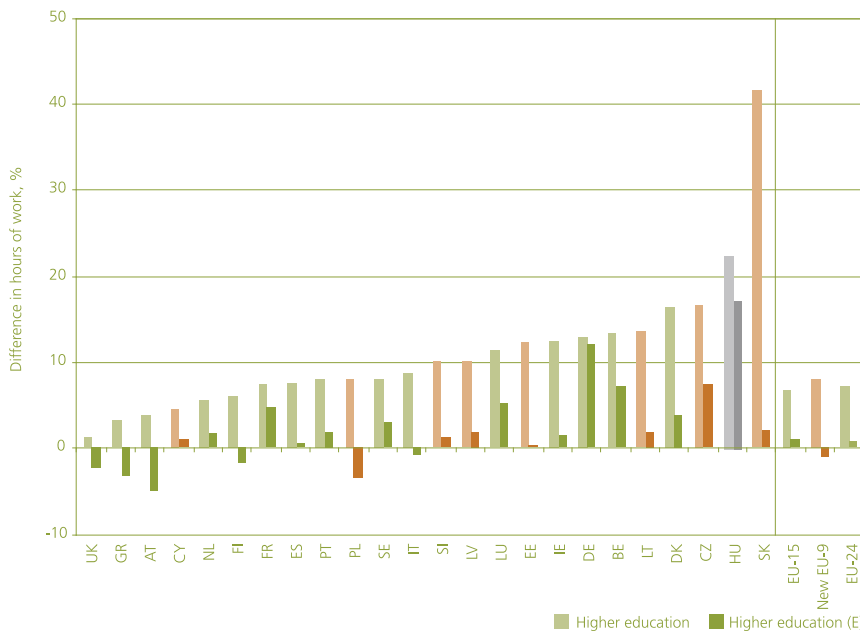


c) The effects of labour market experience





d) The effects of upper secondary education



e) The effects of higher education

Source: Authors' computations based on EU-SILC (2005)

Notes: The figures show partial effects in an unweighted linear regression model. The first, light-coloured data bar shows the results of the analysis involving the total working-age (15–64 years) population, while the second, darker data bar (E) displays the results for the model run on the employed population. Reference group for educational attainment: people with less than upper secondary education. (The estimations were also carried out in a left-censored tobit model (censored in 0); the results were both qualitatively and quantitatively similar with respect to the average of the continuous variables and the 0 values of the dummy variables.) Hours of work ratio: the total number of hours worked in a week in full-time and part-time jobs divided by the number of theoretically compulsory working hours (35 hours in France, 40 hours elsewhere).

THE GAP BETWEEN MEN'S AND WOMEN'S HOURS OF WORK IMPLIES EMPLOYMENT SEGREGATION, ESPECIALLY IN HUNGARY.

Once again, we use Hungary as an example to present the results of our analysis. *Figure 2.12a* shows the effects of gender: women work significantly shorter hours in each of the countries. This effect is strongest in the continental states; it is somewhat weaker in the new member states, but the difference is not striking. Hungary is located in the mid-range of the countries. Looking at the results for the group of employed people, however, we find considerable differences between men and women in an international comparison.³⁴ In Hungary, among the total working-age population, women work on average 6 hours a week less, while the corresponding figure is 8 hours among the employed population. In the Netherlands, however, where part-time work is well known to be common, there is a difference of 14 hours between the sexes in the weekly hours of work among both the employed and the total population, i.e. the gap cannot be attributed to differences in employment probability.³⁵ These results indicate that, among the total population, the labour market differences between men and women in Hungary are smaller than the European average. This could be explained by Hungarian women's labour supply preferences, but it could equally well be the case that their financial circumstances leave them with less choice, or that part-time jobs are less widely available to them than to women in other (continental) countries. The fact that we find a relatively large gap in terms of hours of work between men and women in the employed population of Hungary suggests that women experience relatively strong segregation in terms of job types: they are more likely to have jobs with shorter working hours, and possibly lower wages (e.g. teacher or low-ranking employee) than are women in countries where we do not find such a large gap between employed men and women.³⁶

AN EXTRA YEAR OF LIFE GOES TOGETHER WITH SHORTER HOURS OF WORK, AND AN EXTRA YEAR OF LABOUR MARKET EXPERIENCE IS ACCOMPANIED BY LONGER HOURS OF WORK; THESE EFFECTS ARE CONSISTENTLY STRONGER IN THE NEW MEMBER STATES.

Leaving to one side the minor differences between the sexes, we now turn to the effects of age. In this dimension, as *Figure 2.12b* shows, the new member states are in the lead: with every other factor held constant, a one-year increase in age is accompanied by a one-hour reduction in the weekly hours of work on average. Hungary is the only exception among the new member states: the effect is close to 0, although it is still significant. In the Scandinavian and the Anglo-Saxon countries, by contrast, age has a positive effect: an extra year of life is accompanied by a statistically significant (though slight) increase in weekly work. These differences (in contrast with gender differences) are, however, almost fully explained by employment status – to a lesser extent in the continental states, and to a greater extent in the new member states, where the level of employment is significantly lower among older people (see Section 2.2.2). Similar observations can be made with respect to the

³⁴ However, with certain employment parameters (whether in management, whether doing manual labour) controlled for, Hungary is among the European countries with the smallest gender gap in terms of hours of work (and also activity and employment probabilities).

³⁵ And this difference (as with the other continental countries) is barely reduced with the two employment parameters mentioned above (whether in management, whether doing manual labour) controlled for.

³⁶ There are no good examples among the 24 countries under consideration; as shown in *Figure 2.12a*, Portugal is the country with the smallest gap.

effects of labour market experience (*Figure 2.12c*),³⁷ but with the opposite sign: an extra year in the labour market is accompanied by longer hours of work per week, and the effect is somewhat stronger in the new member states (almost 1 hour vs. 45 minutes), although the difference is almost entirely down to the employed.

People with upper secondary education work more on average than do people with lower educational attainment, and this gap is substantially greater in the old member states: 1.7 hours more, as opposed to 0.6 hours in the new member states (*Figure 2.12d*). No effect is observed among the employed population (it is significantly 0). Second only to Slovakia, Hungary has the largest difference between the average hours worked by people with upper secondary education and people with lower educational attainment. In Slovakia, however, the enormous gap disappears among the employed population (i.e. it is the result of differences in employment probability), while in Hungary, the difference persists. That is, in Hungary people with upper secondary education are more likely (as we have seen in Section 2.2.2) to find employment with longer hours of work (and possibly higher wages); although these people are also more likely to find jobs in Slovakia, their jobs are not significantly different in terms of working hours. If we look at the effects of higher education relative to lower secondary education (*Figure 2.12e*), we find a similar pattern emerging, though overall the effects are stronger than was the case for upper secondary education. This pattern is quite similar to the ranking observed for the effects of higher education on employment probability (see Section 2.2.2). This outcome suggests that in the majority of countries (with the exception of Hungary, Germany and, to a lesser extent, some other countries), differences in hours of work are explained by differences in level of employment.

These findings indicate that labour supply tends to be a binary decision at the level of the individual (both on the part of the worker and on the part of the employer), and part-time work is generally infrequent (in terms of either availability or choice). That is, it is more fruitful to study work intensity at a household level (as we did in the previous section), because individuals appear to be able to optimize their working hours at the level of the household. We conjecture, however, that optimization leaves its mark at the level of the individual: people take their household type into consideration in making their labour supply decisions, i.e. it should have an effect on hours of work (*Figure 2.13*).

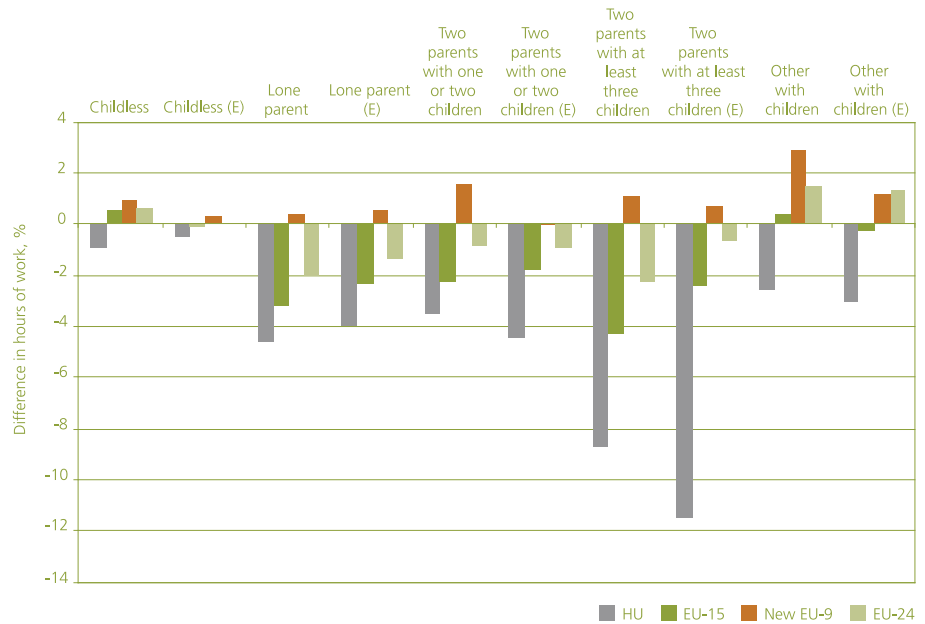
DIFFERENCES IN HOURS OF WORK AS A FUNCTION OF EDUCATIONAL ATTAINMENT ARE MOST LIKELY EXPLAINED BY DIFFERENCES IN EMPLOYMENT PROBABILITY.

LABOUR SUPPLY APPEARS TO BE A HOUSEHOLD DECISION RATHER THAN AN INDIVIDUAL ONE.

³⁷ No data on labour market experience are available for the Scandinavian or the Anglo-Saxon countries.

Figure 2.13: Differences in hours of work ratios in the European Union, by household type (%)

a) Differences relative to single-person households



b) Gender differences in various household types relative to single-person households

Source: Authors' computations based on EU-SILC (2005)

Notes: The figures show partial effects in an unweighted linear regression model relative to people living alone as the reference group. In each category, the first group of bars shows the results of the analysis involving the total working-age (15–64 years) population, while the second group (E) displays the results for the model run on the employed population.



THE LOWER AVERAGE NUMBER OF HOURS OF WORK IN FAMILIES WITH CHILDREN IS EXPLAINED BY A LOWER RATE OF FORMAL EMPLOYMENT AMONG WOMEN CARING FOR CHILDREN.

As Figure 2.13a shows, Hungary's behaviour is qualitatively different from the average behaviour of the new member states and shows more similarity with the average of the old member states: people living in different types of family with children work 3–11 hours less on average than people living in single-person households. The corresponding value comes to about 2 hours in the old member states, while the

effect has a small positive value in the new member states. That is, the lower individual ‘work intensity’ (in terms of hours of work) of families with children may be related to the overall shorter working hours of women and to the greater likelihood of women staying at home, and this difference remains impressive when only the employed population is considered.

Although our results may reveal important relationships, we must be careful in interpreting them – just as with the estimation results in Section 2.2.2. Due to various problems of endogeneity, the effects found here simply show correlations and do not signal cause and effect relationships.

THE RELATIONSHIP BETWEEN THE IDENTIFIED FACTORS AND INDIVIDUAL WORK INTENSITY IS NOT CAUSAL BUT CORRELATIONAL.

2.4. Education and the labour market

Leaving the variables that can be regarded as equilibrium variables in some respects (employment, number of hours of work), in this section we turn to the educational attainment of the working-age (15–64 years) population. This factor is often considered to be a barrier to both labour demand and labour supply – the reason being that, willing though companies may be to expand their workforce, they cannot do so if there are no suitable (suitably qualified) workers in the labour market. By the same token, if a skilled worker, say, is looking for work but finds that there is no demand for his or her skills, s/he will stop looking after a while. Education, therefore, may lower or raise the probability of *employability* (activity, in our interpretation) as well as the probability of employment. Studies of economic science have shown time and again that labour market inequalities can often be traced back to such factors as educational differences, which are good predictors – well before they enter the labour market – of certain differences in productivity, which in turn have an impact on activity and employment probability, as well as on wages.³⁸ The investigation of educational attainment and education inequalities can thus lead to very important conclusions and objectives for education policy.

LABOUR MARKET INEQUALITIES MAY HAVE THEIR ROOTS IN EDUCATION.

In what follows, some potential indicators of education and training inequalities are presented for the 24 EU member states included in the EU-SILC database, and the relationships that exist between them and labour market aggregates (activity, employment and unemployment rates) are discussed.

³⁸ On this subject, through the example of inequalities between black and white people, see Neal and Johnson (1996).

2.4.1. Educational attainment and education inequalities

COUNTRIES WITH POOR LABOUR MARKET PERFORMANCE ARE CHARACTERIZED BY LOWER AVERAGE NUMBERS OF YEARS IN EDUCATION.

The simplest indicator of educational attainment by country is the average level of education and the average number of years of schooling. These two cannot be distinguished here, as only the highest level of education attained is given in the EU-SILC database, classified according to the OECD ISCED-97 categories³⁹ (see OECD, 1999 for the manual of classification). In our study, the data are recoded into the number of school years, based on the OECD manual, to allow us to investigate the average figures for the countries (*Figure 2.14*). The indicator is not particularly informative: the country that fares worst is Portugal, and the new member state with the poorest value is Slovenia; Germany and the United Kingdom show the highest average number of school years of all the countries, and Lithuania and Estonia lead the new member states. The old and the new member states do not cluster separately: new member states can be found in both the first and the second half of the countries ranked according to the average number of school years of their population. An interesting pattern emerges, however, within the group of old member states: the countries of Southern Europe and those continental countries with a poor performance in the dimension of labour market aggregates (Belgium, Luxembourg, France) are to be found among the countries with relatively small average numbers of school years, while the Scandinavian and the Anglo-Saxon countries, as well as those of the continental countries that fare better in the labour market, are among the countries with high average levels of schooling. Hungary falls in the lower half of the range, where the only other Visegrad country is Poland. The results of this simple indicator appear to accord with our hypothesis: lower levels of education are accompanied by lower labour market performance.

THE AVERAGE NUMBER OF SCHOOL YEARS IS AN INADEQUATE INDICATOR OF INEQUALITIES, BUT THEIR STANDARD DEVIATION IS REVEALING.

Though suitable for a cross-country comparison, the average number of school years is not a good indicator of inequality, because it is not at all sensitive to inequalities within a given country. The simplest indicator to use in any analysis of this latter is the standard deviation of school years and its ratio to the mean number of school years (*Figure 2.14*).

COUNTRIES WITH A HIGHER AVERAGE LEVEL OF EDUCATION AMONG THE POPULATION SHOW LESS EDUCATION INEQUALITY.

The figure reveals a moderately strong, negative correlation between the average number of school years and their standard deviations (correlation coefficient: -0.55). That is, where the average number of school years is high, their standard deviations tend to be small. In other words: in countries where people are relatively highly educated, education inequalities tend to be smaller. The correlations do not seem to be perfectly linear, but two groups are clearly distinguishable: countries with low means and high standard deviations (from Portugal to Cyprus in the figure) and

³⁹ And whether an individual is currently at school and, if so, what category of school it is according to the ISCED-97 system.

The number of school years does not tell us how long someone took to attain a given level of education; it is simply an unambiguous way of establishing the average number of school years needed to attain a given level of education in a given country.

The average number of school years may, in principle, distort education data if a given level of training requires different average numbers of years in different countries.

countries with high means and low standard deviations (from Austria to Germany in the figure).

The indicators used to analyse the human capital of a country – such as the proportion of the population with low educational attainment and the proportion with higher education – can also give at least some indication of education inequalities. The group of people with low educational attainment comprises those with less than upper secondary education in the Hungarian system, and the population with higher education comprises those with a college or university degree. Looking at these two figures in combination, an interesting pattern emerges among the countries (Figure 2.15).

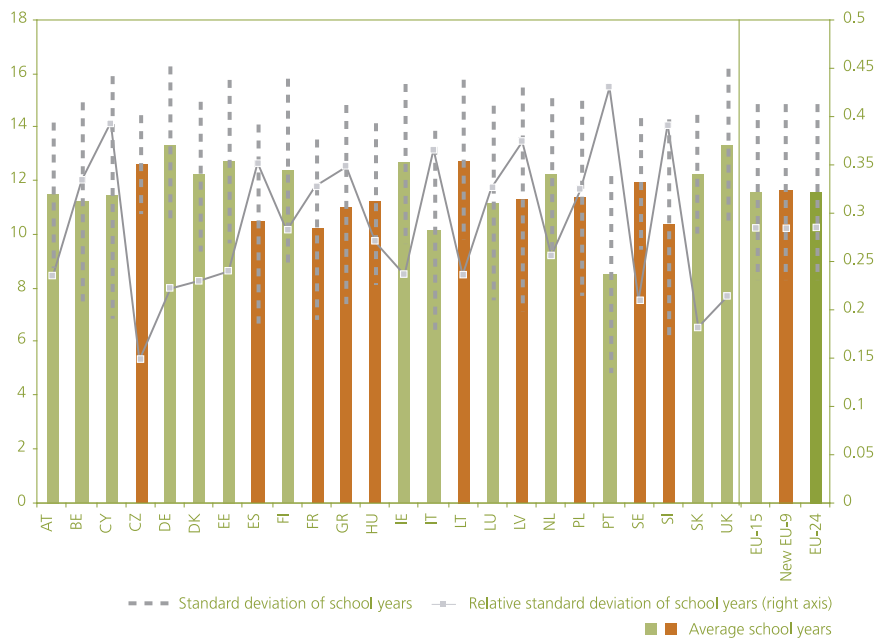


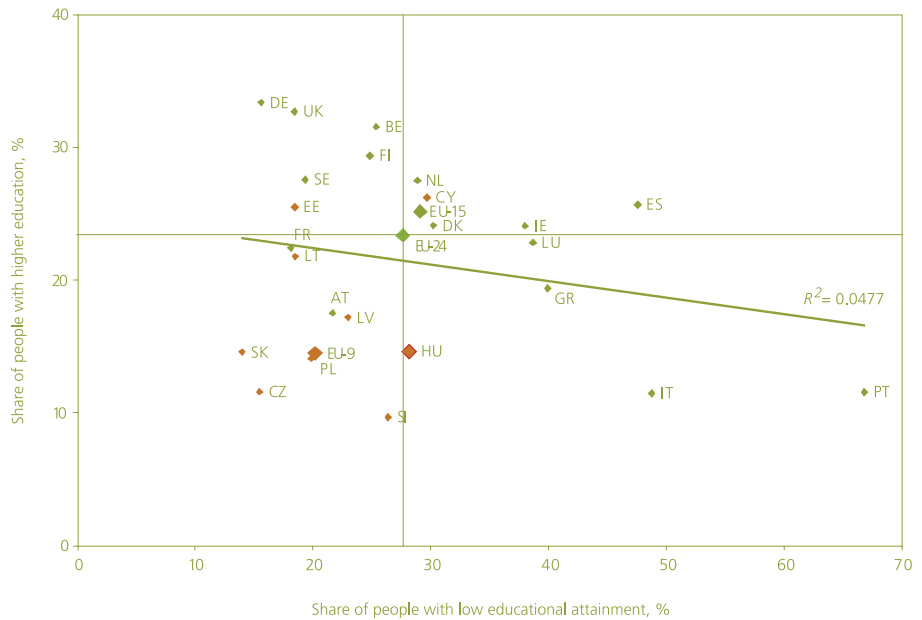
Figure 2.14: Average years of schooling and their standard deviation in the European Union, by country

Source: Authors' computations based on EU-SILC (2005)

Figure 2.15: The share of people with low educational attainment and those with higher education among the working-age population in the European Union, by country (%)

Source: Authors' computations based on EU-SILC (2005)

Notes: People with low educational attainment are those with less than upper secondary education; people with higher education are those with a college or university degree.



Taking the EU-24 average as our standard of comparison, four clear groups can be distinguished among the countries: in one group, both low educational attainment and higher education occur with about the average EU-24 frequency (Cyprus, Denmark, the Netherlands); in the second group, the proportion of people with low educational attainment is substantially higher than the average (the countries of Southern Europe, Ireland and Luxembourg); in the third group, the proportion of people with low educational attainment is lower than average, while people with higher education occur with higher than average frequency (Belgium, the United Kingdom, Estonia, Finland, France, Germany, Sweden); in the last group, although the share of people with low educational attainment is smaller than average, the same observation holds for the population with higher education (the majority of the new member states and Austria). Hungary is characterized by an average proportion of people with low educational attainment and a smaller than average proportion of the population that is highly educated. The new member states therefore typically have a large share of people with secondary education, which suggests that there are relatively mild education inequalities in these countries. This conclusion is supported by the observation that in the new member states (and in countries with a large share of higher education and a small share of low educational attainment) educational attainment typically has a small standard deviation (Tárki–UniCredit, 2008, Figure F2.6).

Returning to the indicator based on the number of school years: the Gini coefficient of human capital is defined in the population aged 15–64 in accordance with the methods of Castello and Domenech (2002) as an indicator of within-country education inequalities. As with the usual Gini coefficient for income distribution: an indicator value closer to 0 means less inequality in the given country; the highest possible value is 1, which signals perfect inequality (i.e. that 100 per cent of the total

THE GINI COEFFICIENT OF HUMAN CAPITAL IS A GOOD INDICATOR OF INEQUALITIES.

school years completed in a country were completed by a single person). Recoding the available education data into years once again, we get the Gini coefficient of human capital shown in *Figure 2.16*.



Figure 2.16: The Gini coefficient of human capital in the working-age population in the European Union (%)

Source: Authors' computations based on EU-SILC (2005)

The only cluster visible is that of Southern European countries with a high Gini coefficient; the rest of the old member states and the new member states show a varied picture. We can also see that the average inequality is somewhat lower among the new member states than among the old member states (Gini coefficients of 0.136 vs. 0.149). Hungary falls in the middle of the range, with a Gini coefficient similar to the average for the new member states.

The indicators of education inequalities discussed so far all point in the same direction, with strong relationships between some of them. The correlation matrix presented in *Table 2.1* shows the strengths of the relationships.

BOTH THE NEW AND THE OLD MEMBER STATES ARE HIGHLY HETEROGENEOUS WITH RESPECT TO EDUCATION INEQUALITIES.

Table 2.1: Correlation matrix for education indicators

Source: Authors' computations based on EU-SILC (2005)

Education indicators	Average number of school years	Standard deviation of school years	Share of people with low educational attainment	Share of people with higher education
Standard deviation of school years	-0.55			
Share of people with low educational attainment	-0.71	0.45		
Share of people with higher education	0.54	-0.03	-0.25	
Gini coefficient of human capital	-0.65	0.93	0.69	-0.19

THE DIFFERENT INDICATORS OF INEQUALITY ARE HIGHLY CORRELATED.

With the exception of the share of people with higher education, most indicators show moderately high correlations with each other. This means that a higher average number of school years tends to co-occur with a lower standard deviation in a given country; a higher proportion of people with low educational attainment is accompanied by a smaller average number of school years and a higher standard deviation; and a higher Gini coefficient of human capital goes hand in hand with a smaller average number of school years and a larger share of people with low educational attainment. The two indicators of inequality in a strict sense, the standard deviation of school years and the Gini coefficient, are very highly (almost perfectly) correlated (correlation coefficient: 0.93).

2.4.2. Education inequalities and the labour market

THERE ARE WEAK MODERATE CORRELATIONS BETWEEN EDUCATIONAL ATTAINMENT AND THE AGGREGATES OF THE LABOUR MARKET.

After the correlations between indicators of educational attainment, we now investigate whether there are correlations between those indicators and labour market aggregates (activity, employment and unemployment). It is repeatedly observed in the relevant literature that educational differences account for a large share of labour market inequalities. Although researchers may hold qualitative rather than quantitative differences responsible (such as the quality of education and school environment, see e.g. Neal and Johnson, 1996 for details), the data that can be measured quantitatively and that are available in the EU-SILC database (educational attainment, number of school years) also show weak or moderately strong correlations at an aggregate level.

Indicator	Average number of school years	Standard deviation of school years	Share of people with low educational attainment	Share of people with higher education	Gini coefficient of human capital
Activity rate (EU-SILC)	0.29	-0.38	-0.08	0.32	-0.38
Activity rate (Eurostat)	0.34	-0.29	-0.14	0.49	-0.34
Employment rate (EU-SILC)	0.26	-0.32	-0.02	0.36	-0.31
Employment rate (Eurostat)	0.28	-0.20	0.00	0.48	-0.21
Unemployment rate (EU-SILC)	-0.01	0.00	-0.15	-0.28	-0.05
Unemployment rate (Eurostat)	-0.04	-0.05	-0.26	-0.26	-0.12

Table 2.2: Correlation matrix for labour market aggregates and indicators of educational attainment

Source: Authors' computations based on EU-SILC (2005)

Note: Correlation coefficients are shown for the labour market aggregates calculated from the EU-SILC data and those downloaded from the Eurostat database.

Table 2.2 reveals that a higher average number of schools years and a larger share of people with higher education are accompanied by higher activity and employment rates, while a larger share of people with low educational attainment is paired with a somewhat lower activity rate, which has an impact on unemployment. These results could mean that unemployed people with low educational attainment simply leave the labour market behind! A relatively high number of people with higher education is accompanied by a lower unemployment rate and – in a trend that mirrors this and is of the same order of magnitude – a higher unemployment rate is matched by a larger share of people with low educational attainment. The standard deviation and the Gini coefficient, as indicators of inequality, only show fairly strong correlations with activity and employment, but not with unemployment.

Those of the above relationships that show fairly strong correlations and also divide the countries into groups of some kind are displayed graphically in Figure 2.17.

Figure 2.17a reveals that the majority of the new member states have unemployment rates above the EU average and relatively low proportions of people with higher education and of people with low educational attainment. The countries of Southern Europe form a relatively homogeneous group, with average unemployment rates and high proportions both of people with higher education and of people with low educational attainment. In the Netherlands, the Scandinavian states and the Anglo-Saxon countries, average-level unemployment rates are accompanied by high proportions of people with higher education. The continental countries show far less uniformity.

Looking at the relationship between education inequalities and employment (Figure 2.17b), we find several of the new member states in a relatively homogeneous group: low education inequalities are accompanied by low employment rates. This is no cause for celebration. As was suggested before, there is a very high proportion of people with secondary education in these countries, and this, in combination with

EMPLOYMENT LEVEL IS CORRELATED WITH BOTH EDUCATIONAL ATTAINMENT AND THE INEQUALITY INDICATORS.

PATTERNS IN EDUCATION AND LABOUR MARKET PERFORMANCE

NEW MEMBER STATES: LOW LEVEL OF EMPLOYMENT – LOW EDUCATION INEQUALITIES.

MEDITERRANEAN COUNTRIES: LOW
LEVEL OF EMPLOYMENT – HIGH
EDUCATION INEQUALITIES;
DEVELOPED COUNTRIES: HIGH LEVEL
OF EMPLOYMENT – LOW
EDUCATION INEQUALITIES.

this latest finding, implies a relatively low level of employment⁴⁰ not only among people with low educational attainment, but also among the population with secondary education in countries like Hungary.⁴¹

Two more fairly homogeneous groups emerge in the figures illustrating the relationship between education inequalities and employment: the Mediterranean countries (with the exception of Portugal, where an employment rate above the EU average appears side by side with exceptionally high inequalities), where employment rates are lower than average but education inequalities are higher than average; and the successful group of the Scandinavian, Anglo-Saxon and continental countries (Austria, Finland, the United Kingdom, the Netherlands, Sweden and Denmark), where we find high employment rates and moderate education inequalities relative to the average for the old member states. It must be noted, however, that this 'low' education inequality is, in fact, higher than that measured in the region of Central Europe (which is shown by the fact that the EU-15 average is higher than the average for the new member states).

⁴⁰ One possible reason for the relatively low employment rate among people with secondary education is that workers with high human capital (educational attainment) gradually pushed people with secondary or lower education out of jobs. Kertesi and Köllő (2006), however, argue that this hypothesis is not supported by the data in Hungary. While it is true that jobs that used to require secondary training in the past are more and more likely to be taken by workers with higher qualifications, it is also the case that people with secondary education take the places of those with lower educational attainment, and thus their employment probabilities do not show the negative effects of exclusion.

⁴¹ The position of Hungary is deceptive in the figures – the EU-SILC data estimate higher activity and employment rates than do the Eurostat figures; this is why the employment rate appears close to the EU average.

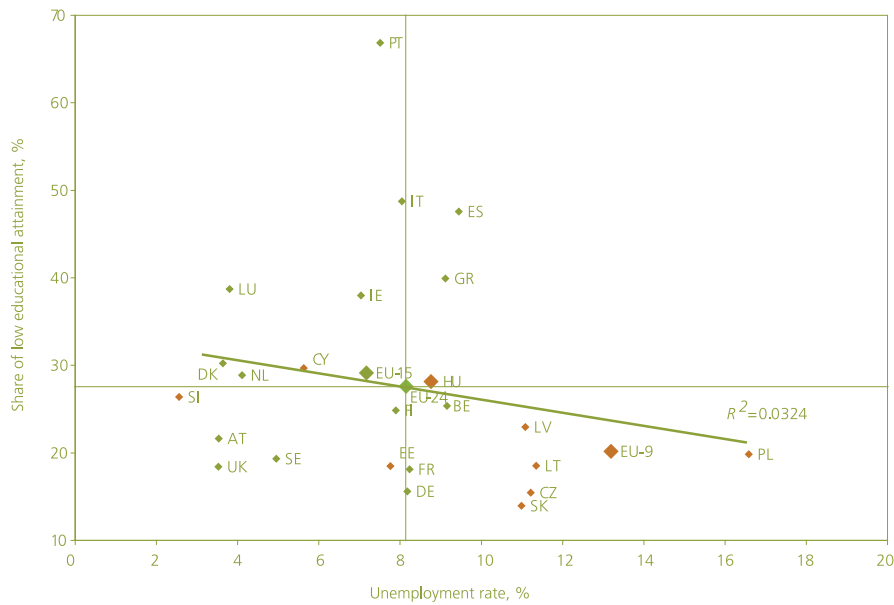
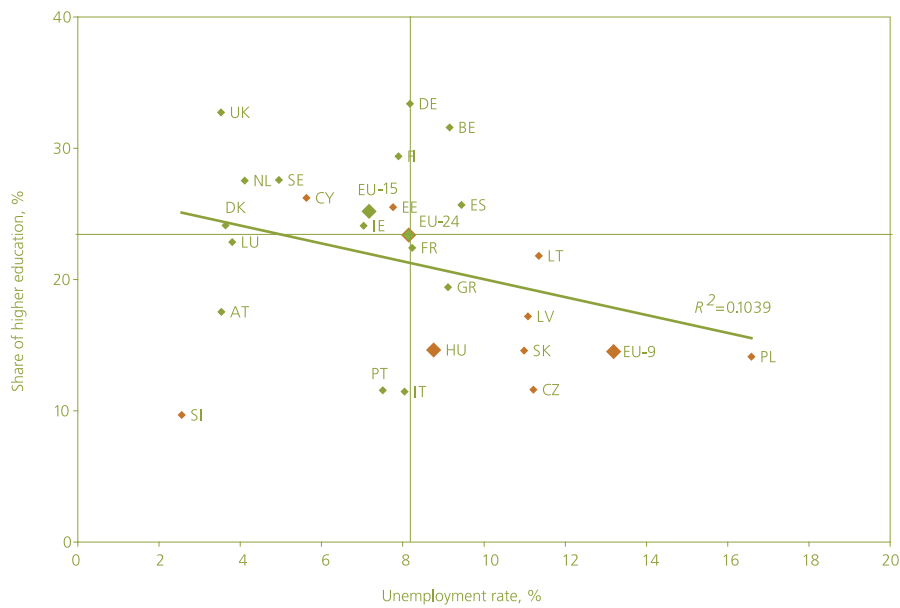


Figure 2.17: Employment, unemployment and education

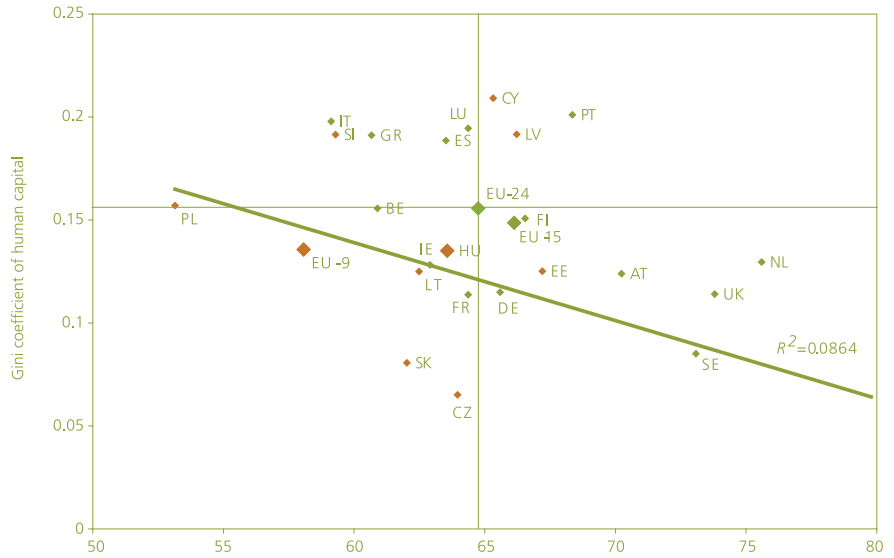
a) Educational attainment and unemployment



b) Education inequality and employment

Source: Authors' computations based on EU-SILC (2005)

Notes: Denmark does not appear in Figure 2.17b, as its employment rate data given in the EU-SILC database appear to be unreasonably high.



3. INCOME DISTRIBUTION IN EUROPEAN COUNTRIES: FIRST REFLECTIONS ON THE BASIS OF EU-SILC 2005

3.1. Introduction

OUR AIM IS TO DESCRIBE DIFFERENCES IN INCOME INEQUALITY AND POVERTY ACROSS THE EUROPEAN UNION AND TO INVESTIGATE INTER-COUNTRY DIFFERENCES IN THE EFFECT OF AGE, EDUCATION AND EMPLOYMENT ON THE DISTRIBUTION OF HOUSEHOLD INCOMES.

The first part of this chapter presents comparative estimates of income inequality based on data from the 2005 EU-SILC ('Community Statistics on Income and Living Conditions'). The aim of the chapter is to describe inter-country differences in income inequality across the European Union.⁴²

The second part of the chapter (Section 3.4) investigates inter-country differences in the effect of age, education and employment on the distribution of household incomes by applying static and dynamic decomposition analysis. The main aim is to provide a cross-country comparison of the overall effect of age, education and employment on the distribution of household incomes. Section 3.4.1 describes the methodology of the analysis, and Section 3.4.2 presents the main results.

3.2. Description of inequality and poverty: data and methods

OUR ANALYSIS FOLLOWS THE METHODOLOGICAL FRAMEWORK OF THE EU LAEKEN INDICATORS.

During the European Council meeting held in Laeken in December 2001, the member states adopted an indicator system for monitoring social inclusion processes, elaborated by Atkinson et al. (2002).

We use the methodological framework of the Laeken indicators for the description of inequality and poverty in the EU. When working on empirical studies about inequality and poverty, researchers have to make a number of decisions regarding the methodology of the analysis. The first decision concerns the definition of household income. Researchers have to decide whether it is the disposable net income or the gross income of households that is of interest, and then they have to decide whether to use monthly or yearly income. The second decision researchers must make has to do with calculating individual well-being based on data about income measured at the household level. This decision involves the choice of an equivalence scale. A third decision involves choosing indices for the measurement of inequality and poverty.

THE GINI INDEX IS USED TO MEASURE INCOME INEQUALITY, AND THE RELATIVE POVERTY RATE IS USED TO MEASURE THE EXTENT OF POVERTY.

The income concept adopted in this analysis is – following the methodology of the Laeken indicators – annual net household disposable income, including any social transfers received and excluding direct taxes and social contributions. In inequality and poverty analysis, equivalence scales are used to calculate measures of an individual's income situation from information about household income.

Equivalence scales are used in inequality research to adjust household incomes for differences in household size, taking into account economies of scale in consumption and differences in household composition. Unfortunately, equivalence

⁴² The analysis of income distribution is partly based on: Income Distribution in EU Member States: First Reflections on EU-SILC data, Chapter 1 of the Annual Monitoring Report 2007 of the Network on Social Inclusion and Income Distribution, European Observatory on the Social Situation, December 2007. (See SSO 2007 in the bibliography.)

scales cannot easily be estimated by observing household consumption behaviour, and research studies on inequality or poverty invariably adopt some widely used equivalence scale, such as the scales advocated by the OECD. In this analysis, we use the so-called modified OECD, or OECD II, scale, which assigns a value of 1 to the first adult in the household, 0.5 to additional members above the age of 14, and 0.3 to children under 14. The incomes of all the household members and any other household income are summed, and total household disposable income is adjusted for differences in household size and composition by use of an equivalence scale. The equivalized income thus calculated is then assigned to each household member. The inequality indices reported here are estimated on the basis of these figures.

The Laeken indicators suggest the use of two inequality indicators. One is the S80/S20 index, which is the ratio of the share in total income of those in the top quintile to those in the bottom quintile of the distribution. The other inequality index is the Gini coefficient⁴³ of income inequality. The Gini index can take values from 0 to 1. The Gini index equals 0 when the distribution of incomes is equal in the society, and thus everyone has the same income. The value of the index rises as inequality gets higher, and equals the maximal value of 1 when all incomes are in the hands of one single person. In the case of poverty, the most important index is the relative poverty rate, which shows the proportion of individuals who have less than 60 per cent of the median income. The analysis is based on data from the 2005 EU-SILC.⁴⁴ The database covers all member states, except Malta. The data relate to the population living in private households in the country in question at the time of the

Standard error of estimates. In order to draw policy conclusions from inequality and poverty data, it is essential to take account of the fact that the data are derived from surveys of a sample of households, and inevitably, therefore, they involve some margin of error. The incomes observed are not those of all households, but only of those belonging to the selected sample, which nevertheless is intended to be representative of the total. In order to make meaningful comparisons between countries or over time, it is necessary to allow for the margin of error that arises from the fact of sampling, which can be done by calculating the standard error of the estimates and taking confidence intervals around this. Such standard errors might be based on asymptotic theory or on simulation methods such as the bootstrap. In this analysis, bootstrap standard errors of the Gini coefficient are examined. Confidence intervals are reported on the basis of the 'percentile method', which divides the estimated sample distribution into 100ths, with the lower bound being the 2.5th percentile and the higher bound the 97.5th percentile. (The confidence interval estimates are based on 1,000 replications, and those reported are also corrected for estimation bias.)

⁴³ $Gini = (1/2n(n-1)) \sum_{i=1, \dots, n} \sum_{j=1, \dots, n} |y_i - y_j|$, where y_i are individual incomes, n is sample size.

⁴⁴ The present analysis takes into account changes that Eurostat carried out on the EU-SILC 2005 User Database version 1 released on 01/06/07. These changes affect the results on income inequality and poverty for Portugal and Germany.

survey. Those living in collective households and institutions were, therefore, generally excluded. The reference period is the year 2004, except for Ireland, where it is the 12-month period before the date of the interview.⁴⁵

3.3. Description of inequality and poverty: results

3.3.1. Inequality in the EU

We first present countries' rankings according to the Gini coefficient of inequality, and the results regarding changes in inequality in the early years of this decade.

Gini rankings and inequality change

PORTUGAL IS THE MOST UNEQUAL COUNTRY IN THE EU.

THE GROUP OF RELATIVELY HIGH INEQUALITY COUNTRIES CONSISTS OF THE BALTIC STATES, SOUTHERN EUROPEAN COUNTRIES AND ANGLO-SAXON COUNTRIES.

Figure 3.1 shows the rankings of countries according to the Gini index, as well as the 95 per cent confidence intervals around the estimates. Portugal is clearly the country with the highest inequality, with a Gini index of 38 per cent. The new member states of Lithuania, Latvia and Poland form a second group of countries, with Gini coefficients of around 35–36 per cent. A third cluster of relatively high-inequality countries comprises the Southern European countries of Spain, Greece and Italy, the Anglo-Saxon countries of the UK and Ireland and the new member state of Estonia. These countries have Gini indices of above 30 per cent but below 35 per cent. The four Southern European countries, the two Anglo-Saxon countries and the three Baltic states, together with Poland, have relatively high levels of inequality in the EU.

THE COUNTRIES WITH THE LOWEST INEQUALITY ARE SWEDEN, DENMARK AND SLOVENIA.

At the other end of the spectrum, countries with the lowest inequality by this measure include Sweden, Denmark and Slovenia, with Gini indices of below 25 per cent. Between the low- and the high-inequality countries is a large number of countries with Gini indices of above 25 per cent but below 30 per cent. Differences in the indices between countries in this group are often very small, and in many cases the confidence intervals of the estimates overlap. At the lower end of the group

⁴⁵ Non-positive income values – which result from the way that the income of the self-employed is defined, i.e. essentially in terms of net trading profits – have been excluded from the analysis. In order to tackle the problem of 'outliers' (i.e. extreme levels of income reported), a bottom and top coding procedure (or 'winsorizing') was carried out. (Specifically, income values at the bottom of the ranking of less than the 0.1 percentile were replaced by the value of the 0.1 percentile, while at the top of the ranking, values greater than the 99.95 percentile were replaced by the value of this percentile.)

come the Nordic countries, such as Finland, together with the Netherlands. At the higher end of the group are Hungary, France and Cyprus.

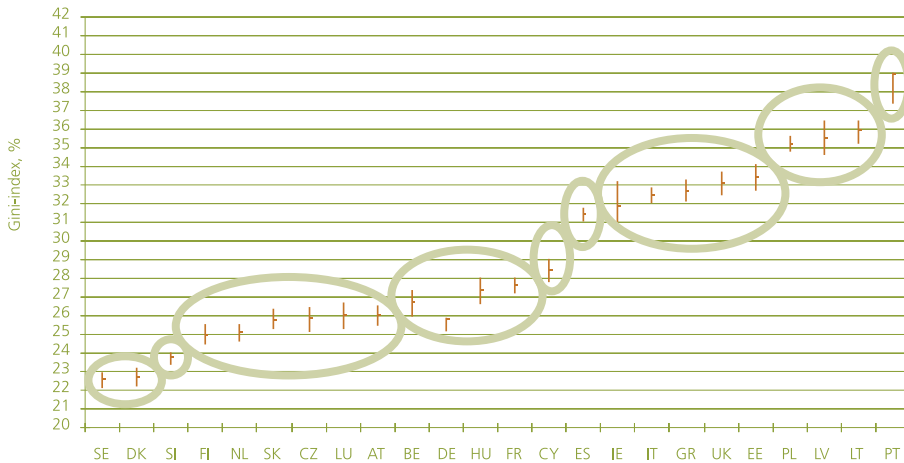


Figure 3.1: Gini indices and bootstrapped 95 per cent confidence intervals

Note: Bootstrap confidence intervals were obtained by 1,000 replications.

Source: own calculations on EU SILC 2005 (2008 March data release).

Since the high-inequality countries in Europe are mainly the relatively low-income transition countries (the Baltic states and Poland) or the Southern European countries (Portugal, Greece), while the low-inequality countries (for example the Nordic countries or Luxembourg) are countries with high incomes, it is not surprising that there is a negative relationship between the level of income and inequality (Figure 3.2).

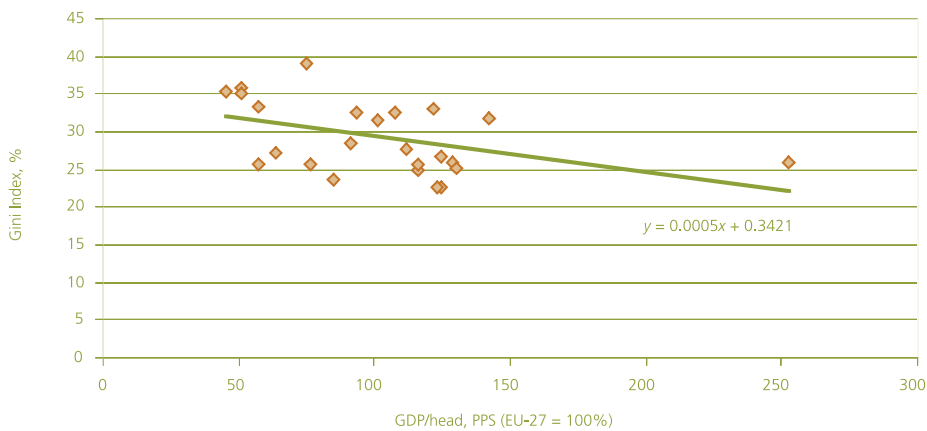


Figure 3.2: Inequality and national income in 2004

Source: GDP data from Eurostat NewCronos database. Inequality figures: own calculations on EU SILC 2005 (2008 March data release).

If we compare Gini coefficients in 2004 with their values at the start of the decade (Figure 3.3) we can see important (more than 10 per cent) increases in Italy, Poland, Lithuania and Ireland. In other countries – such as the UK, Hungary, Latvia, Slovenia, Austria and Germany – inequality increased by a few percentage points. In Sweden, Belgium, Luxembourg, Estonia, Spain and the Netherlands, we observe a decrease of a few percentage points in the Gini index. In the remaining countries there was no significant inequality change. The ranking of countries according to the

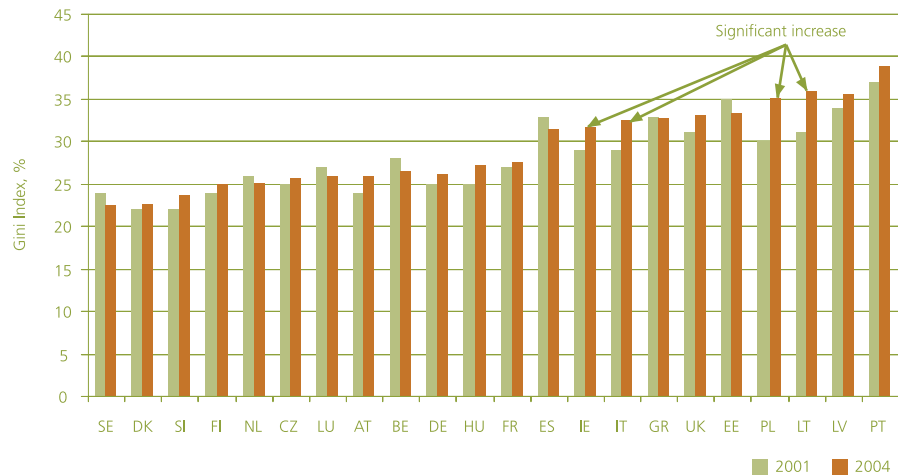
BETWEEN 2001 AND 2004, AN IMPORTANT (MORE THAN 10 PER CENT) INCREASE IN INCOME INEQUALITY WAS DETECTED IN ITALY, POLAND, LITHUANIA AND IRELAND.

Gini index in 2004 shows some minor differences compared to the ranking for 2001. Portugal was also the most unequal country in 2001, but Poland and Lithuania had index values below Spain, Greece and Estonia. The least unequal countries were the same in 2004 as in 2001, while among countries in between the highest and the lowest groups there are a number of smaller differences in the country rankings. It should be emphasized, however, that since the sources of data in the earlier year were different (the European Community Household Panel (ECHP) for EU-15 countries, national sources for others), there is need for caution in interpreting these differences as indicating changes over the period.

Figure 3.3: Gini indices in 2001 and 2004

Note: 2001 Gini indices are from NewCronos. Countries are ranked according to 2004 Gini indices.

Source: own calculations on EU SILC 2005 (2008 March data release).



NO CONSISTENT PATTERN EMERGED IN THE GROWTH–INEQUALITY RELATIONSHIP. COUNTRIES WITH IMPORTANT INEQUALITY INCREASES AND COUNTRIES THAT SHOWED A DECREASE IN INEQUALITY HAD DIVERSE GROWTH AND EMPLOYMENT EXPERIENCES.

We attempted to establish a relationship between changes in inequality and the growth experience of countries. The following table (Table 3.1) shows inequality changes (shown by the colour) in countries in different categories of GDP and employment growth. Our expectation was that ‘jobless growth’ was likely to lead to an increase in inequality, since in these cases the main driving force of economic growth is increased productivity, which is likely to raise inequalities in earnings. Our table shows that it is difficult to find consistent patterns in the short-run growth and inequality experience of European countries. Countries where more important inequality increases occurred in this period had diverse growth and employment experiences. For example, Poland and Lithuania had similar growth experiences but different evolutions in employment, and both countries finally ended up with increasing inequalities. Growth and employment experience is likewise diverse in the countries where inequality decreased. For example, inequality decreased in Luxembourg and Spain, which both had a GDP growth rate of 10–15 per cent, but employment was decreasing in the former and increasing in the latter.

GDP growth 2001–04	Change in total employment rate 2001–04			
	Decrease (<-1%)	Small decrease (-1–0%)	Small increase (0–+2%)	Important increase (>+2%)
0–5%	Portugal <i>Netherlands</i>	Germany Denmark		Italy
5–10%	<i>Sweden</i>	Ausztria Finland	<i>Belgium</i> France United Kingdom	
10–15%	Poland	Czech Republic <i>Luxembourg</i>	Cyprus Szlovenia	<i>Spain</i>
15% felett			Hungary Slovakia Ireland	Latvia Lithuania <i>Estonia</i> Greece

Table 3.1: Interrelationships between growth, employment and inequality change

Note: Countries marked orange are those where the Gini index rose by more than 10 per cent between 2001 and 2004. Countries marked green are those where the Gini index rose by 3–10 per cent between 2001 and 2004. Countries marked with italics are those where the Gini index decreased by more than 3 per cent between 2001 and 2004. In countries marked black there was no significant change in the Gini index (change was less than ± 3 per cent). Data on GDP growth and employment are from the NewCronos database.

Income distribution and income structure

The distribution of incomes in individual European member states is shown in *Figure 3.4*. The income distribution of the countries is represented by the average income of each income decile. The income values are shown in Euros at purchasing power parity (PPP), i.e. with cross-country price differences taken into consideration, allowing direct comparisons to be made. The countries are arranged in increasing order of average income.

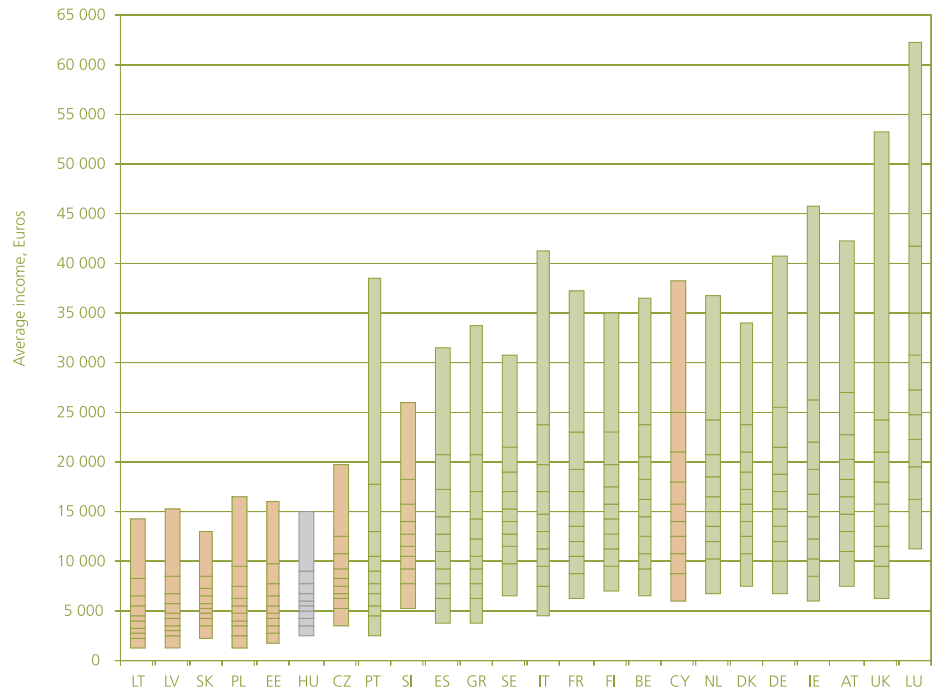
As can be seen from *Figure 3.4*, there are significant differences in income levels between the EU member states, and a substantial proportion of the income inequality between the citizens of the European Union can be explained by differences in incomes from country to country. Of the EU countries, Lithuania has the lowest standard of living, with an average equivalent income of 5,304 Euros, while the highest average income level (29,153 Euros) is measured in Luxembourg. The former socialist countries cluster together at the bottom of the scale, with average incomes of under 10,000 Euros. As we can see, people in the top decile of the former socialist countries' income distribution have an average standard of living that is typical of the middle class in the developed Western European countries (France, Germany). There are three Southern European countries, Portugal, Greece and Spain, where average incomes fall between 10,000 and 15,000 Euros. One of the former socialist countries, Slovenia, is grouped with them. The largest group of European countries is characterized by average incomes of between 15,000 and 20,000 Euros, and, apart from Luxembourg, average levels in excess of 20,000 Euros are only to be found in the United Kingdom. The figure also gives an indication of income inequalities in the various countries. In countries where relatively high inequalities are a feature, the average incomes of the ninth and tenth deciles are substantially higher than those of the bottom deciles. In Portugal, for instance, the average income of the top decile is more than twice that of the ninth decile and more than three times overall average income.

AMONG THE EU MEMBER STATES, LITHUANIA AND THE FORMER SOCIALIST COUNTRIES HAVE THE LOWEST LIVING STANDARDS, WHILE THE HIGHEST LEVEL OF INCOME WAS MEASURED IN LUXEMBOURG.

Figure 3.4: The income distributions of the countries of the European Union (Euros, PPP)

Source: EU-SILC (2005), recalculations from the 2008 March data release

Note: The bottom of the data bars represents the first decile, the top represents the tenth decile and the marks in between show the average incomes of the individual deciles.



THE NETHERLANDS, DENMARK, SWEDEN AND THE UNITED KINGDOM ARE THE COUNTRIES WITH THE HIGHEST SHARE OF EARNINGS IN HOUSEHOLD INCOME. THE OTHER END OF THE SCALE IS REPRESENTED BY CYPRUS, THE CZECH REPUBLIC, HUNGARY AND IRELAND.

The income of households comes from different sources. Household members may have labour income or capital income from the lease of capital assets; they may earn income as self-employed individuals; and they may receive transfers from the state, civil organizations or private individuals. Households also pay tax on their income and provide transfers. The income types recorded in the EU-SILC database are classified here as follows: wages, capital income, self-employment income, public transfers and direct tax payments. The income composition of the average household is shown in *Table 3.2*. The countries with the highest share of earnings in the total income of the household are the Netherlands, Denmark, Sweden and the United Kingdom. In these countries, gross wages amount to over 100 per cent of the disposable income of the households. At the other end of the scale come Cyprus, the Czech Republic, Hungary and Ireland, where gross wages make up only about three-quarters of household income. The highest share of capital income is to be found in Finland (11 per cent of household income), while capital income accounts for 1 per cent or less in Estonia, Slovenia and Slovakia. The 20 per cent share of income from self-employment that is observed in the Czech Republic and Ireland constitutes the highest among the countries; meanwhile the lowest share of this category of income, only 2 per cent, is found in Estonia. The share of public transfers is one-third or more in Sweden, Poland, the Netherlands, Hungary, Austria, Germany, France and Denmark. Those countries with a relatively small share of public transfers in household income are Cyprus, the Baltic states and the Anglo-Saxon countries. The greatest reductions in gross household income due to direct tax payments are observed in the Netherlands, Denmark, Sweden, the United Kingdom and Belgium, where taxes reduce household income by at least 40 per cent. In Cyprus, Slovakia, the Czech

Republic, Estonia, Lithuania and Ireland, by contrast, only about 20 per cent of income is deducted.

Table 3.2: Elements of household income in the European Union, by country (%)

Source: EU-SILC (2005)

Note: In case of Spain, Greece, Portugal, Italy and Latvia only data on net incomes were collected; for this reason these countries do not appear in this table.

Country	Labour income, %	Capital income, %	Self-employment income, %	Public transfers, %	Taxes, %
AT	81	3	13	35	- 33
BE	93	5	13	30	-41
CY	75	4	15	17	-10
CZ	76	2	20	24	-21
DE	81	5	14	35	- 35
DK	106	5	10	33	- 54
EE	97	1	2	21	-22
FI	88	11	9	32	- 39
FR	79	4	10	33	-26
HU	77	2	15	35	-29
IE	76	3	19	24	-21
LT	88	2	9	22	-21
LU	85	5	5	30	-24
NL	115	4	12	35	-66
PL	80	2	14	36	- 31
SE	105	5	5	37	- 51
SI	95	1	6	30	- 32
SK	88	0	6	27	-20
UK	100	5	15	26	-46

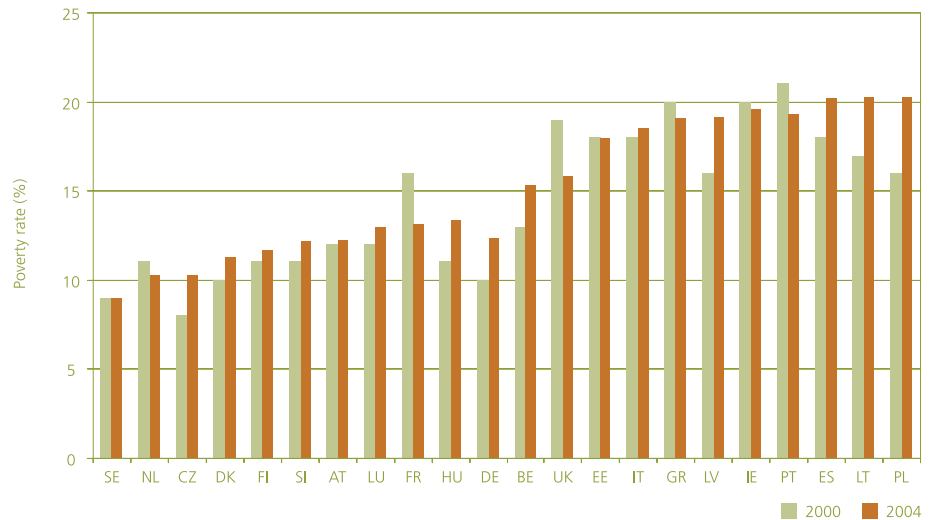
3.3.2. Poverty in the EU

The poverty rate used in this part of the analysis is based on the same relative income concept as are the inequality indices. The poverty threshold was set at 60 per cent of median equivalized household income (according to the methodology applied by Eurostat). *Figure 3.5* shows poverty rates across EU countries in 2004.

Figure 3.5: Poverty rates across European countries in 2000 and 2004

Source: ECHP (2000) and EU-SILC (2005) recalculations from the 2008 March data release.

Note: countries are ranked according to year 2004.



THE COUNTRIES WITH THE HIGHEST RELATIVE POVERTY RATES IN EUROPE ARE FROM EASTERN AND SOUTHERN EUROPE, WHILE THE NORTHERN EUROPEAN COUNTRIES ARE TO BE FOUND AT THE OPPOSITE END OF THE RANKINGS.

The countries with the highest poverty rates in Europe are from Eastern and Southern Europe. One-fifth of the total population is estimated to be poor in two of the new member states (Poland, Lithuania) and in two Mediterranean countries (Spain and Portugal), as well as in Ireland. The incidence of poverty is also high in other Eastern and Southern European countries: Latvia, Greece, Italy (19 per cent) and Estonia (18 per cent). The Northern European countries are to be found at the opposite end of the rankings, with poverty rates of around 10 per cent: Sweden (9 per cent), Denmark (11 per cent). The Czech Republic (10 per cent), as an Eastern European country, can also be listed among the low-poverty countries, as can the Netherlands (10 per cent). Other countries, mainly belonging to the group of continental European countries have poverty rates of 12–16 per cent.

THE RANKING OF COUNTRIES ACCORDING TO THE POVERTY RATE IS BROADLY SIMILAR TO THE INEQUALITY RANKING AS MEASURED BY THE GINI INDEX.

The ranking of countries according to the poverty rate is broadly similar to the inequality ranking as measured by the Gini index, but there are some differences. Low-inequality countries are usually also low-poverty countries, and in high-inequality countries poverty also tends to be high, but the actual position of a country within the two rankings can vary. The biggest difference between the inequality and the poverty rankings can be found in Spain. Spain has the third highest poverty rate among the countries studied, but it has the tenth highest inequality. Slovakia, Slovenia and the UK also figure higher in the poverty rankings than in the inequality rankings, while Estonia, Latvia and France are higher in the inequality rankings.

POVERTY RATES WERE ON THE INCREASE BETWEEN 2000 AND 2004 IN MOST EUROPEAN COUNTRIES.

Certain changes occurred in both the magnitude of poverty and the standing of countries between 2000 and 2004; however, these must be interpreted carefully because of the shift in data sources already mentioned. Poverty rates were on the increase during this period in most European countries. The Poles (from 16 per cent to 20 per cent), the Germans (from 10 per cent to 14 per cent), the Lithuanians (from 17 per cent to 20 per cent) and the Latvians (from 16 per cent to 19 per cent) experienced the highest growth in the poverty rate. The most eye-catching exceptions are France (where the poverty rate decreased from 16 per cent to 13 per cent) and the UK (from 19 per cent to 16 per cent). Portugal had the highest poverty rate in 2000 (21 per cent), and the incidence of poverty was also high in Ireland (20 per cent),

Greece (20 per cent) and the UK (19 per cent). The group of countries at the bottom of the rankings in 2000 was very similar to the 2004 group, although in 2000 Germany was also part of that group.

If we compare poverty rates estimated using the OECD II scale to poverty rates based on the OECD I scale, we might conclude that, in most countries, there are no significant differences. The most eye-catching exception is the UK, where the poverty rate calculated using the OECD I scale is much higher than if the OECD II scale is used (21 per cent vs. 16 per cent). In certain other countries the opposite is true – Ireland (18 per cent vs. 20 per cent) and Denmark (9 per cent vs. 11 per cent).

3.3.3. The overall distribution of income in Europe

Income inequalities and poverty within the EU may also be approached by regarding the member states as a single populace and investigating the position of individuals in the overall income distribution of this cross-European populace. *Figure 3.6* shows the income position of the populations of individual countries, relative to the overall European median income.

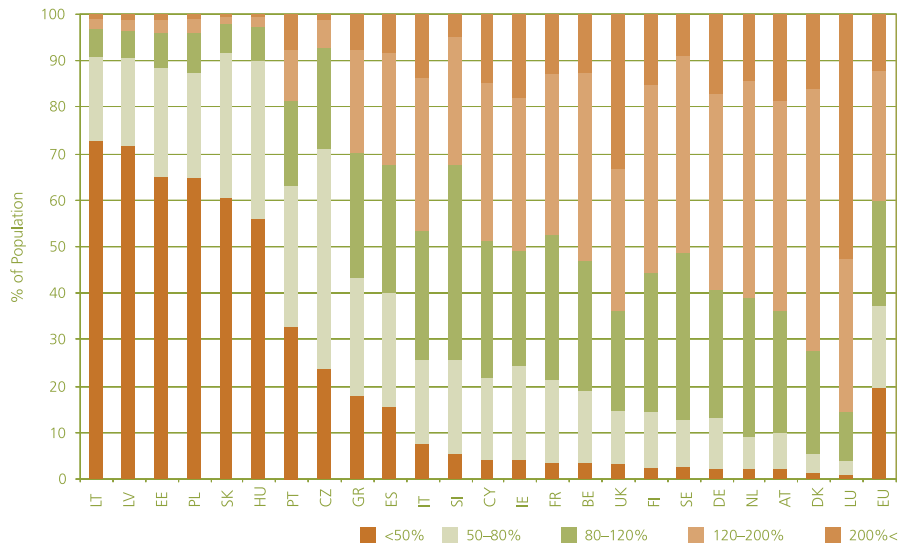


Figure 3.6: The distribution of the population among the different categories of the overall European income distribution by country (%)

Source: EU-SILC (2005)

A fifth of Europe’s populace lives on an income of less than half the European median income. The proportion of those who have an income of between 50 and 80 per cent of the median income is 18 per cent, while 23 per cent of people have an income at about the median level. The income of 28 per cent of the European populace is 20 to 100 per cent higher than the overall European median income, while 12 per cent have an income of at least twice the median.

With the exception of Slovenia and the Czech Republic, the majority of people in the former socialist countries are in the bottom fifth of the European income

A FIFTH OF EUROPE’S POPULACE LIVES ON AN INCOME OF LESS THAN HALF THE OVERALL MEDIAN EUROPEAN INCOME.

distribution. Around 70 per cent of the population of the Baltic states live on incomes of less than half the European median, and the same is true of as many as 56 per cent of households in Hungary. In Luxembourg and Denmark, by contrast, the proportion of those with incomes of below half the overall European median income is under 2 per cent. The majority of people in Luxembourg have incomes more than double the overall European median, and a third of the UK population also belongs in this category.

We have also examined the poverty rates of individual countries relative to a common poverty threshold, which was determined with reference to the relative concept of poverty: specifically, the poverty threshold was set at 60 per cent of the overall European median income. The effects of differences in price levels between the individual countries were controlled for by comparing the incomes achieved in the different countries using the purchasing power parity recommended by Eurostat.

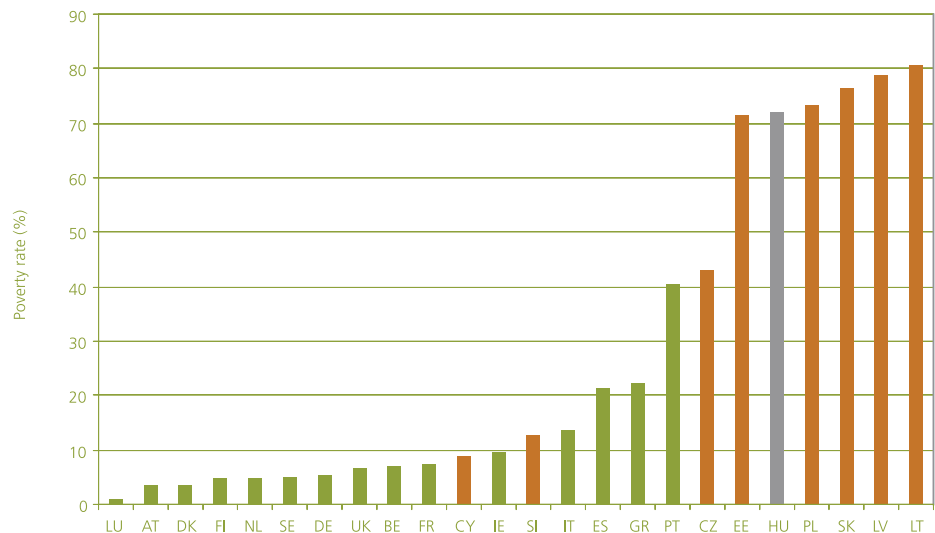
The resulting ranking of the countries is shown in *Figure 3.7*. The gap between absolute income levels is well illustrated by the finding that poverty rates relative to a common poverty threshold are highest by far in the former socialist, new member states of the EU. Lithuania is at the top of the range, with a poverty rate of 82 per cent; but a further five countries (Latvia, Slovakia, Poland, Hungary and Estonia) can 'boast' similarly high rates. The 48 per cent rate measured in the Czech Republic is not too far from the poverty rate in Portugal, which is the country with the highest rate among the old EU-15 member states. The lowest rate is observed in Luxembourg, where less than 3 per cent of the population live on an income below the common European poverty threshold. Austria and Denmark have poverty rates of about 4 or 5 per cent, and Finland, Sweden and the Netherlands around 6 per cent.

POVERTY RATES RELATIVE TO A COMMON POVERTY THRESHOLD ARE HIGHEST BY FAR IN THE FORMER SOCIALIST, NEW MEMBER STATES OF THE EU.

Figure 3.7: Poverty rates relative to a common European relative poverty threshold in the European Union, by country (%)

Source: Authors' computations based on EU-SILC (2005)

Note: The poverty threshold is defined as 60 per cent of the median of the overall European income distribution.



3.4. The role of age, education and employment in shaping inequalities: decomposition analysis

In this section, we investigate the main driving forces of inequality. As labour income is the most important element of household resources, we study the effect of being in the labour force, as well as the main determinants of earnings: age and education. Human capital theory states that better educated workers enjoy higher wages, which reflects their higher productivity. Workers also accumulate knowledge while working, thus experience is also rewarded with higher wages on the labour market.

It is often argued that increasing inequality of earnings in developed countries is a result of technological change, which uniformly increases the productivity of better-educated workers, relative to the less well educated. If, in the short run, the supply of educated people fails to match the increase in demand, the premium for education will increase. Sudden technological changes might also result in a change in the steepness of the age–earnings profile, in that the education of younger people may be better adapted to the requirements of new technology than the education and skills of older workers. In such cases, there will be greater demand for the well-educated young and less demand for older people, which will result in a less steep age–earnings profile. We study the effect of age, education and employment by applying static and dynamic decomposition of inequality indices. While this methodology is not suited to uncovering true, causal relationships, it is a first step and provides intuition, which remains to be confirmed by more elaborate analysis.

WE INVESTIGATED THE EFFECTS OF INDIVIDUAL CHARACTERISTICS SUCH AS AGE, EDUCATION AND EMPLOYMENT ON INEQUALITY.

DIFFERENCES IN EARNINGS ACCORDING TO EDUCATION LEVEL HAVE INCREASED IN DEVELOPED COUNTRIES OVER THE PAST DECADES.

3.4.1. Methodology of decomposition analysis

When decomposing income inequality, the population is divided into mutually exclusive groups according to some characteristic (age, education, household composition) and we are interested in the share of inequality, which can be attributed to income differences between groups. Some inequality indices are additively decomposable, which means that they can be written as the sum of two components: a weighted sum of within-group inequalities and between-group inequality. A convenient family of additively decomposable inequality indices is the generalized entropy family, which comprises, among others, the mean log deviation (MLD) index. Based on Shorrocks (1980), the MLD index is selected here to perform the calculations. In this case, the effect of the grouping variable on inequalities can be expressed as the ratio of the between-group inequality to total inequality.

In addition to this static decomposition, a decomposition of intertemporal change in inequality was also carried out following the methodology used in Mookherjee and Shorrocks (1982). This method decomposes the change in inequality in three

components. The first is a ‘pure’ effect of inequality increase – that is, the effect attributable to increase in within-group inequalities. The second component is the effect of structural change due to change in relative population shares of the various subgroups, while the third component measures the effect of change in relative mean incomes of the various subgroups. For a clearer understanding of decompositions by various dimensions, it is useful to show changes in *relative* terms: the change of inequality between the two periods as a percentage of the value measured in period.

The data used for the dynamic decomposition analysis come from the ECHP, year 2000, and from EU-SILC (2004). It is important to bear in mind that the two surveys differ to some extent in their methodologies,⁴⁶ and thus results regarding changes should be interpreted with caution. The analysis is carried out on the distribution of equivalized⁴⁷ household income. Variables used for grouping in the decomposition analysis are based on the attributes of the (assumed) head of the household in which respondents live. Since no household head is defined in EU-SILC, this is taken to be the oldest man of active age (between 18 and 64 years). If there is no active-age man, then the oldest active-age woman is taken as the household head instead. If there are no active-age members in the household, the oldest man of 65 or older is taken as the household head (or the oldest woman if there is no man). The same definition of household head has been applied to the ECHP database. For simplicity of analysis, the attributes of the household head are assumed to apply to all household members. The necessary provisos implied by this have been emphasized above.

3.4.2. Results of decomposition analysis

First we present the results of the static decomposition analysis; the results of decomposition of changes in inequality follow in the second part of the section.

The role of age, education and employment in shaping inequalities

We first describe the results of static decomposition analysis for each explanatory factor, and then we summarize the results by reviewing the importance of the explanatory factors by country group.

The role of the age of the household head. In general, age is a less important factor in explaining inequalities than is the education or employment of the household

AGE DIFFERENCES ARE MOST IMPORTANT IN THE NORDIC COUNTRIES AND CYPRUS.

⁴⁶ On the difference between the methodologies of the surveys see Eurostat (2005).

⁴⁷ The OECD II equivalence scale is used. The first household member older than 14 years of age equals one consumption unit. Additional household members older than 14 years of age count as 0.5 consumption units, while household members younger than 14 equal 0.3 consumption units.

head. With the exception of five countries, age differences account for less than 5 per cent of total inequality, as measured using the MLD index. Age differences are most important in the Nordic countries and Cyprus. In Denmark, the component of inequality between groups defined by age is 13 per cent of the total, in Sweden it is 10 per cent, and Finland likewise show percentages that are higher than most other countries. In Cyprus, age accounts for 8 per cent of total inequality. On the other hand, in countries such as Poland, Luxembourg, Portugal, Austria, Hungary and Greece, age of the household head only explains 0–2 per cent of total inequality.

Age differences might arise if the age–earnings profile is steep and so income differences between older and young employed people are considerable. Another possible source of income difference by age is related to the pension system. Low coverage, a low replacement rate or inadequate indexation of pensions might lead to the incomes of retired people lagging behind the incomes of active-age people. In countries with a high between-group effect of age, income differences both between active-age groups and between active-age people and retired people are important. In Denmark, the incomes of those aged 50–64 years are 41 per cent higher than of those aged 18–35, and 56 per cent higher than the income of the retired. Sweden also shows a similar pattern. In Cyprus, it is low incomes among the elderly that drive the results. The average income of those aged above 65 years is only 66 per cent of the national average income, which means that the relative income situation of the elderly in Cyprus is the worst among the countries surveyed in EU-SILC. The relative incomes of the elderly are also low in the Baltic states and in the Anglo-Saxon countries, especially Ireland. In contrast, the elderly enjoy a relatively favourable income position in Austria, France and the Netherlands, where their average income is close to the national average or even slightly above it, as in Poland.

The role of education of the household head. In general, education is more important in explaining income differences than is age, but the role of education differs greatly among the European countries. In some of the countries, education accounts for less than 10 per cent of income inequality, as measured by the MLD index. This is the case for Nordic countries such as Denmark and Sweden, and for continental countries such as Austria, Germany and France. In a second group of countries, education accounts for 10–15 per cent of income inequality. In this group we find the continental countries of the Netherlands and Belgium, the Mediterranean countries of Italy and Spain, and the transition countries of the Czech Republic, Latvia and Estonia, together with Finland and the UK. The group of countries where the between-group effect of education is higher than 15 per cent comprises the Mediterranean countries of Portugal, Cyprus and Greece, and the transition countries of Hungary, Lithuania, Slovenia and Poland, plus Luxembourg and Ireland.

Income differences between educational groups can be important at both ends of the educational distribution. The relative incomes of the poorly educated are lowest in the UK, Lithuania, Estonia, Latvia, the Czech Republic and Poland. In these countries, the average income of those with primary education is around 70 per cent of the national average. The average income of those with tertiary education is highest in Portugal, where the income of those with a university degree exceeds the national average income by 226 per cent. The relative income of those with tertiary education is also high in Poland, Latvia, Lithuania, Hungary, Slovenia and Italy, where average income exceeds the national average by 60 per cent.

IN COUNTRIES WITH A HIGH BETWEEN-GROUP EFFECT OF AGE, INCOME DIFFERENCES BOTH BETWEEN ACTIVE-AGE GROUPS AND BETWEEN ACTIVE-AGE PEOPLE AND RETIRED PEOPLE ARE IMPORTANT.

INCOME DIFFERENCES BY EDUCATION LEVEL ARE MOST IMPORTANT IN SOME OF THE MEDITERRANEAN AND EASTERN EUROPEAN COUNTRIES.

THE RELATIVE INCOMES OF THE POORLY EDUCATED ARE LOWEST IN THE UK, THE BALTIC STATES, THE CZECH REPUBLIC AND POLAND.

COUNTRIES WHERE INCOME DIFFERENCES ACCORDING TO EMPLOYMENT STATUS ACCOUNT FOR MORE THAN 10 PER CENT OF INEQUALITY ARE THE BALTIC COUNTRIES, THE ANGLO-SAXON COUNTRIES, FINLAND, DENMARK, AS WELL AS BELGIUM AND THE CZECH REPUBLIC.

THE GREATEST DIFFERENCE BETWEEN THE AVERAGE INCOME OF THE EMPLOYED AND THE ACTIVE-AGE INACTIVE IS TO BE FOUND IN THE ANGLO-SAXON AND BALTIC COUNTRIES.

THE ANGLO-SAXON AND THE BALTIC COUNTRIES SHOW SIMILAR STRUCTURE OF INEQUALITY, WITH A HIGH EFFECT OF EDUCATION AND EMPLOYMENT AND LOW EFFECT OF AGE. CONTINENTAL, CENTRAL EUROPEAN AND MEDITERRANEAN COUNTRIES ARE SIMILAR TO EACH OTHER, IN THAT EDUCATION IS THE MOST IMPORTANT FACTOR IN EXPLAINING INEQUALITIES.

The role of employment status of the household head. There is also considerable variability in the effect of the employment status of the household head. In some countries, income differences according to employment status account for less than 5 per cent of income inequality. These include continental countries such as France, Austria, the Netherlands and Luxembourg, as well as Southern European countries such as Italy, Greece, Portugal and Cyprus. In the second group (5–10 per cent income inequality) we find Central European transition countries like Poland, Slovakia, Slovenia and Hungary, plus Sweden, Germany and Spain. Among countries where the role of employment is above 10 per cent, we find the Baltic countries, the Anglo-Saxon countries, the Nordic countries of Finland and Denmark, as well as Belgium and the Czech Republic.

The greatest difference between the average income of the employed and the active-age inactive is to be found in the Anglo-Saxon and Baltic countries. In those countries, the average income of the employed exceeds the national average income by 16 per cent, while the income of the inactive is around 60 per cent of the overall mean income. The income of the employed is also relatively high in the Czech Republic, Germany, Denmark, Finland and Poland. We find low income among the inactive in the Czech Republic, Belgium and Denmark.

Summary of static decomposition analysis. In order to summarize the static decomposition analysis, we created six country groups and calculated the averages of between-group effects for each country group. The groups considered were: the Nordic countries (Sweden, Denmark, Finland), the Mediterranean countries (Portugal, Spain, Italy, Greece and Cyprus), the continental countries (France, Germany, Belgium, the Netherlands, Luxembourg, Austria), the Anglo-Saxon countries (United Kingdom and Ireland), the Central European countries (Poland, the Czech Republic, Slovakia, Slovenia, Hungary) and the Baltic states (Lithuania, Estonia and Latvia). The results are displayed in *Figure 3.8*.

The Anglo-Saxon and the Baltic countries show similar structures of inequality, with a high effect of education and employment and low effect of age. The Nordic countries form another distinctive group, where age, education and employment all have a similar effect on income inequality – around 10 per cent. Continental, Central European and Mediterranean countries are similar to each other, in that education is the most important factor in explaining inequalities. In the case of Central European and Mediterranean countries, the effect of education is stronger than in the case of continental countries. Employment is also important in the case of continental and Central European countries, but among Mediterranean countries the effect of employment status is similar to that of age – below 5 per cent.

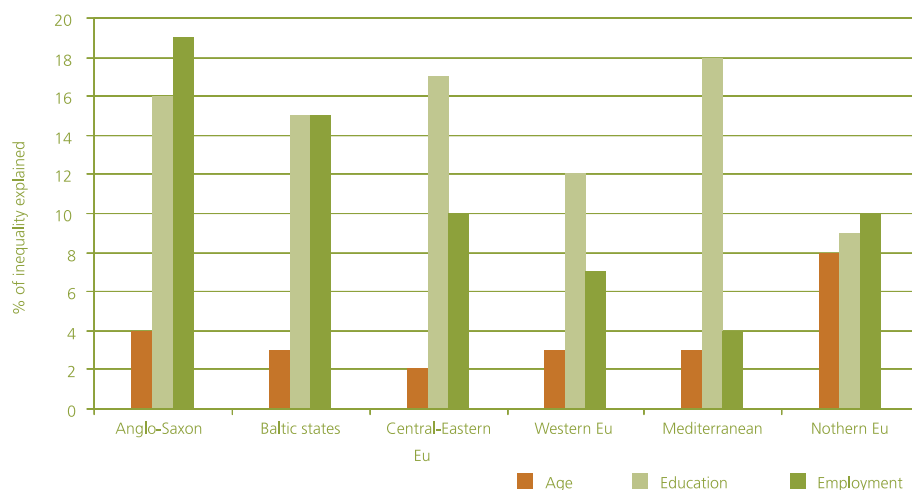


Figure 3.8: Percentage of inequalities explained by various dimensions in different groups in 2004

Note: Percentages are simple country averages.

The role of age, education and employment in inequality change

As described before, we used data from the 2000 ECHP to decompose recent changes in inequality. From the 2000 ECHP and the 2004 EU-SILC, we have comparable data for 12 countries. The increase in inequality in the first half of this decade was important in Ireland and Italy. In these countries, the rise in the MLD index exceeded 15 per cent. There was a moderate increase in Austria and Denmark, where the MLD index increased by 11 per cent. In contrast, there has been a moderate decrease in inequality in Spain, Belgium and Sweden. In these countries, the value of the MLD index was 11–14 per cent lower in 2004 than in 2000. In the rest of the countries for which we have comparative data (Luxembourg, Greece, Finland and France) there was no significant change in inequality.

The results of the dynamic decomposition analysis are summarized in *Table 3.3*. As we have seen, the biggest increases in inequality were observed in Italy and Ireland. In Italy, important between-group effects were found in the case of education and age. Increasing income differences between groups defined by level of education account for 28 per cent of the increase in inequality, while the differences between groups defined by age are responsible for 18 per cent of the increase. In the case of employment, the between-group effect is not important, but changing population structure did contribute to the increase in inequality. The fraction of those living in households where the head is inactive increased from 11 per cent to 15 per cent, while the proportion of those with an employed household head decreased. This change in population structure accounts for 26 per cent of the increase in inequality. In Ireland, there is an important between-group effect in the case of employment: increasing income differences by employment status account for 49 per cent of the change in inequality. In 2000, the average income of the employed exceeded that of the inactive by 63 per cent, and this percentage rose to 91 per cent in 2004. Changing

educational distribution was also an important driving force behind the increase in inequality in Ireland, where it accounts for 43 per cent of the increase in inequality.

Countries with a moderate increase in inequality included Austria and Denmark. In Austria, we find important between-group effects for age and education, but in both cases these are inequality-reducing effects, as income differences according to age and education decreased during this period. In the case of age, the increase in inequality was mainly caused by increasing income dispersion within groups, while, in the case of education, changing population structure had an important inequality-increasing effect as well. By contrast, in the case of Denmark, income differences by age or education widened, and this had an important inequality-increasing effect, accounting for 25 per cent and 71 per cent, respectively, of the increase in inequality.

Belgium, Spain and Sweden experienced falling inequality during this period. In the case of Belgium and Sweden, falling within-group inequality was the main factor, and changing income differences between groups did not contribute significantly. In the case of Spain, income differences by education decreased between 2000 and 2004, and this is responsible for 44 per cent of the decrease in inequality.

Table 3.3: The role of between-group components in inequality change

Note: meaning of signs in parentheses are the following: ++/--: strong inequality-increasing/decreasing effect of changing relative mean incomes (contribution to inequality change is more than 25 per cent), +/- moderate inequality-increasing/decreasing effect of changing relative mean incomes (contribution to inequality change is 10–25 per cent).

Change of inequality	Explanatory factors		
	Age	Education	Employment
Important increase (+15%) IE, IT	IT (+)	IT (++)	IE (++)
Moderate increase (+5–15%) AT, DK	AT (-), DK (++)	AT (--), DK(+)	
No change (-5%–+5%) LU, GR, FR, FI, PT			
Moderate decrease (-5–15%) ES, BE, SE		ES (++)	
Important decrease (-15%)			

4. HOUSING AND MATERIAL CONDITIONS

4.1. Introduction

This chapter investigates the housing conditions of European households and the availability of household durable goods. Special emphasis is placed on comparing Hungary to the old and the new member states of the European Union.

In our analysis of housing conditions, in Section 4.2 we discuss the financial burdens of sustaining a home, the quality of housing and whether crowding is experienced by families and households. Durable goods are the subject of Section 4.3, where, in addition to presenting data on the availability of household appliances in the home (colour television, telephone, washing machine, computer), we also look at ownership of cars – one of the durable goods of the highest value.

4.2. Housing

4.2.1. Housing conditions – housing integration

Analysis of housing conditions is clearly important for social policy. The residential segregation of disadvantaged populations and the poor, and the emergence of city slums are subjects that are widely discussed in social research. Till (2002) investigates *housing integration* with reference to risk of homelessness. The author finds that different groups can be distinguished according to problems related to the *affordability, quality* and *size* of housing, and that the welfare systems of the various European countries included in the study handle the problem of those populations at risk of homelessness with varying degrees of efficiency. Our study also takes these three factors as the focus of inquiry. Our discussion centres on the position of Hungary, relative to the old and the new member states of the EU, with respect to housing conditions and integration.

Although housing integration is an uncommon notion in housing research, it has appeared in a number of studies since the 1960s. The concept usually appears in the context of the residential segregation of ethnic minorities, and is used as the opposite of the concept of segregation. It is used in this sense, for instance, by Phillips (2006) in her qualitative analysis of the housing conditions of refugees housed by local governments in the UK.

The most comprehensive discussion of the concept is found in the publications of the EUROHOME-IMPACT project, where it is used with a slightly more general meaning. The research was conducted under the aegis of the EU Fifth Framework Programme from 2000 to 2002. Till's paper (mentioned above) was written as part of the project. The researchers argue that three conditions all need to be met for housing integration to materialize: (1) if no problems are faced with regard to affordability, (2) if the housing standard is high and (3) if crowding is not experienced (Giorgi, 2003).

4.2.2. Dwelling type and tenure status

Looking at the data on dwelling type (*Figure 4.1*), we find a higher proportion (56 per cent) of detached houses in Hungary, compared to the average for the old EU-15 member states (41 per cent) or the new member states (29 per cent). Semi-detached and terraced houses are more frequent in the old member states (27 per cent), as are small apartment buildings (21 per cent).

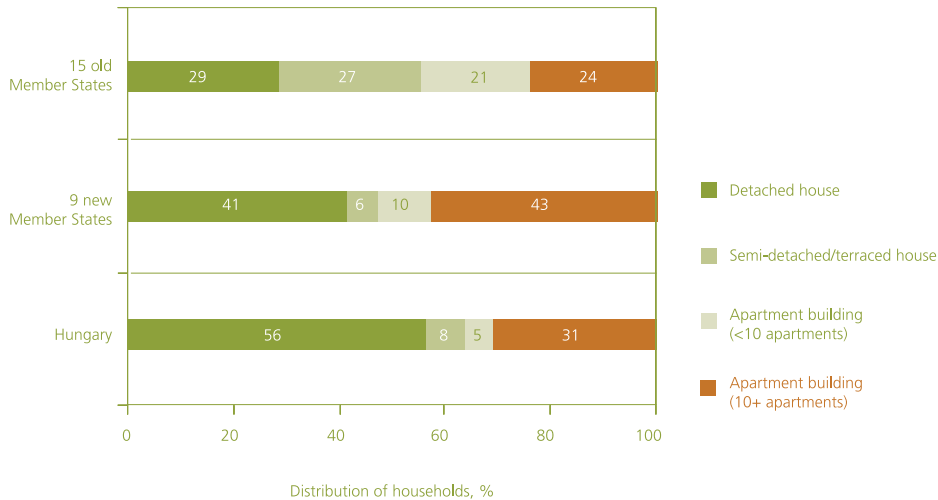


Figure 4.1: Distribution of households according to dwelling type in the old and new member states of the European Union and in Hungary (%)

Source: EU-SILC (2005)

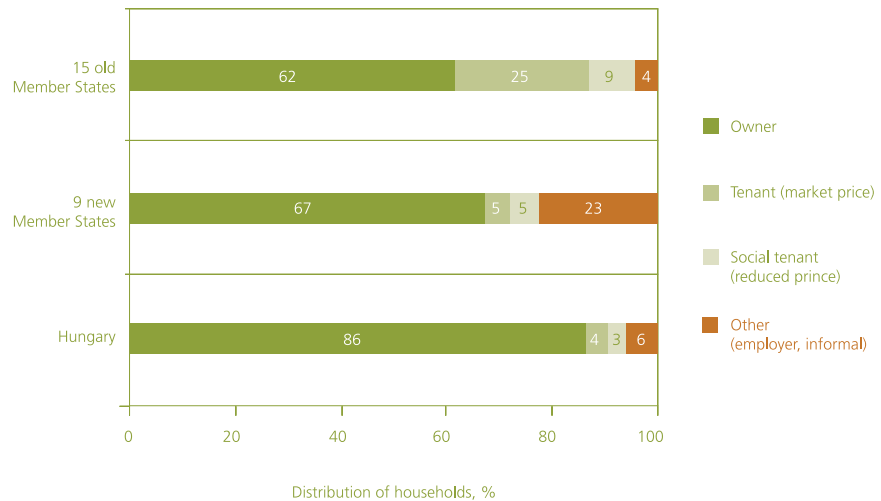
This is probably related to the characteristic (state-socialist) policies of industrial and urban development in the new member states, which are reflected in the fact that, in those countries, over two-fifths (43 per cent) of dwellings are to be found in apartment buildings containing 10 apartments or more. We should note here that Hungarian housing standards were found to be among the best in the former socialist countries at the end of the eighties and beginning of the nineties (Hegedűs et al., 1994).

THE SHARE OF SOCIAL HOUSING HAS NOT DROPPED TO THE LEVEL OBSERVED IN HUNGARY (3 PER CENT) IN EVERY FORMER SOCIALIST COUNTRY.

Hungary stands out for its exceptionally high share (86 per cent) of owner occupiers (*Figure 4.2*). The value of this indicator rose to a high level in the nineties, after the regime change, when the housing stock in council or local government ownership was privatized. The proportion of council housing did not, however, fall to the level (3 per cent) observed in Hungary in every former socialist country. In the Czech Republic, for instance, every fifth household (20 per cent) lives in rented social housing, and a similar percentage is to be found in Finland. Subsidized social housing makes up a similar share of the housing stock in France (16 per cent) and the United Kingdom (14 per cent). An outstandingly high share of households rent their dwellings at market price in the Netherlands (45 per cent), Germany (44 per cent), Denmark (42 per cent) and Sweden (40 per cent). Other types of tenure (employer-provided housing, informal rent-free arrangements) are exceptionally frequent in Poland.

Figure 4.2: Distribution of households according to tenure status in the old and new member states of the European Union and in Hungary (%)

Source: EU-SILC (2005)



4.2.3. Affordability of housing – sustainability of dwellings

THE COST OF KEEPING UP THEIR HOME IS A HEAVY BURDEN FOR 20–25 PER CENT OF HOUSEHOLDS IN HUNGARY. HOUSEHOLDS IN PORTUGAL, LITHUANIA, POLAND AND CYPRUS ARE THE MOST LIKELY TO REPORT THAT THEY ARE UNABLE TO KEEP THEIR HOMES SUFFICIENTLY WARM.

The affordability of housing and the cost of home upkeep can be captured by several indicators. Our analysis relies on two subjective indicators: the share of households able to keep their homes sufficiently warm and the share of households where housing costs constitute a heavy financial burden.

Looking at the values of the former indicator in the EU-24 (*Figure 4.3*), we find that households are most likely to report being unable to keep their homes sufficiently warm in Portugal, Lithuania, Poland and Cyprus. Hungary is in the middle of the range: heating is not a problem in four out of five households, but it is a problem in the remaining one household. Similar figures apply to Greece, Belgium and Slovakia, while in the rest of the countries at most one household in ten experiences difficulties of this kind.

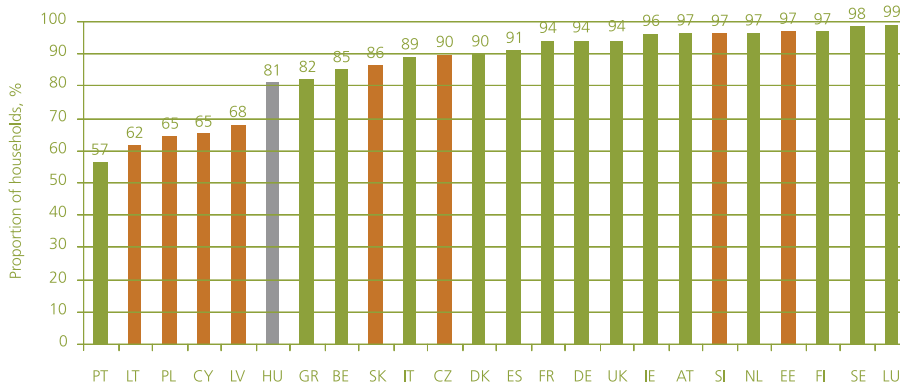


Figure 4.3: Share of households able to keep their homes sufficiently warm in the European Union, by country (%)

Source: EU-SILC (2005)

The countries with the highest share of households that struggle to meet housing costs are Cyprus (61 per cent), Italy (51 per cent), and Poland and Estonia (45 per cent each). Hungary is once again in the middle of the range: housing costs are a heavy burden for about a quarter (24 per cent) of Hungarian households, which places the country in the same league as Greece, the Czech Republic, Denmark, the United Kingdom, Germany and Portugal (Figure 4.4).

THE COUNTRIES WITH THE LARGEST SHARE OF HOUSEHOLDS THAT FIND HOUSING COSTS TO BE A SEVERE PROBLEM ARE CYPRUS (61 PER CENT), ITALY (51 PER CENT), POLAND AND ESTONIA (45 PER CENT).

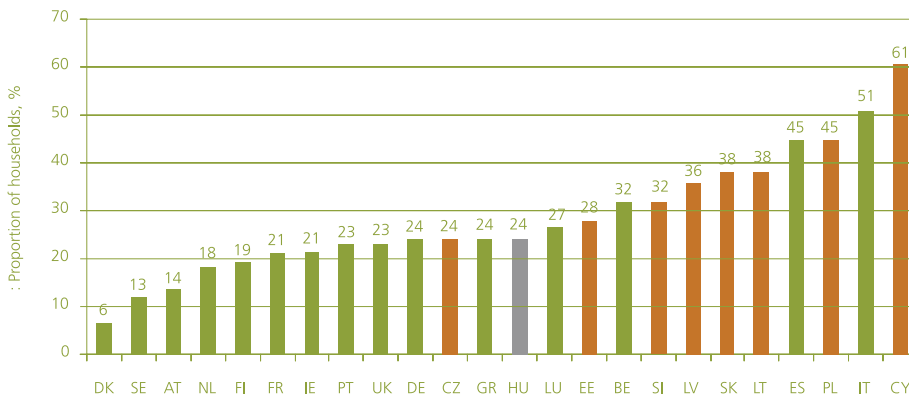


Figure 4.4: Share of households struggling to meet housing costs in the European Union, by country (%)

Source: EU-SILC (2005)

4.2.4. The size of dwellings

In terms of the average number of rooms in a dwelling, Hungary (2.54 rooms) falls behind both the member states that joined the EU in 2004 (2.76 rooms on average) and the older member states (3.84 rooms on average).

The EU-SILC database – unfortunately – does not record data on the size of the living area of dwellings, and thus we only have the number of rooms to use as an indicator of dwelling size. We know from other data sources, however, that dwellings in Hungary have an average surface area of 78 m². Average living spaces below that are only recorded in the following countries: Slovakia (56 m²), Latvia (57 m²), Lithuania

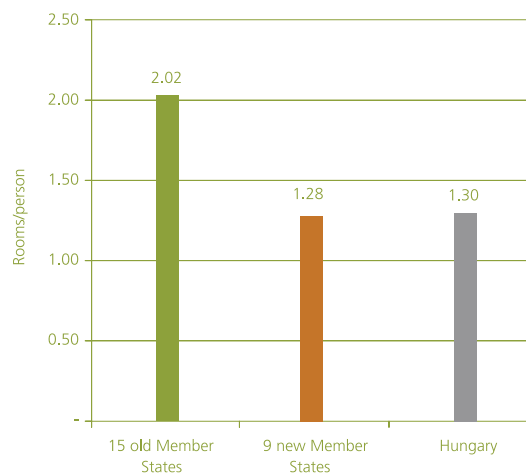
THE WORST LEVEL OF CROWDING IS OBSERVED IN LATVIA; BELGIUM HAS THE LEAST OVERCROWDING.

(60 m²), Poland (69 m²) and Finland (76 m²). The largest average living spaces in Europe are observed in Luxembourg (126 m²), Slovenia (114 m²) and Denmark (111 m²). For the sake of reference, the value of this indicator was 165 m² for the United States in 2003 (UNECE, 2006).

In terms of the *number of rooms per person*, however, Hungary keeps up with the countries in its group. The average number of rooms per person in Hungary is 1.3, as opposed to an average of 1.9 for the 24 countries under consideration. The indicator has a value of 2.02 for the old member states and 1.28 (equivalent to the Hungarian value) for the group of new member states (*Figure 4.5*). Crowding presents the greatest problem in Latvia (1.15 rooms per person) and the least problem in Belgium (2.64 rooms per person). The Hungarian figure therefore does not deviate significantly from the figures characterizing the new member states.

Figure 4.5: Average number of rooms per person in the old and new member states of the European Union and in Hungary

Source: EU-SILC (2005)



4.2.5. Standard of housing

DWELLING STANDARDS IN HUNGARY LAG BEHIND THE EUROPEAN AVERAGE IN SEVERAL RESPECTS. A LARGE PROPORTION OF BUILDINGS HAVE STRUCTURAL DEFECTS, AND DWELLINGS THAT LACK BASIC SANITARY AMENITIES ARE FREQUENT. THE HIGHEST INCIDENCE OF DILAPIDATED BUILDINGS WAS REPORTED IN POLAND, LATVIA, CYPRUS AND HUNGARY.

With respect to the quality of residential buildings (*Figure 4.6*), Hungary fares badly compared to the majority of countries. Major structural defects in the condition of their building are reported by 34 per cent of households: these faults include a leaking roof, rotten window frames and damp walls. Similar or worse conditions are only recorded for Poland (42 per cent), Latvia (38 per cent) and Cyprus (36 per cent). Respondents in Finland, Sweden, Slovakia and Denmark report residential buildings to be in the best state of repair.

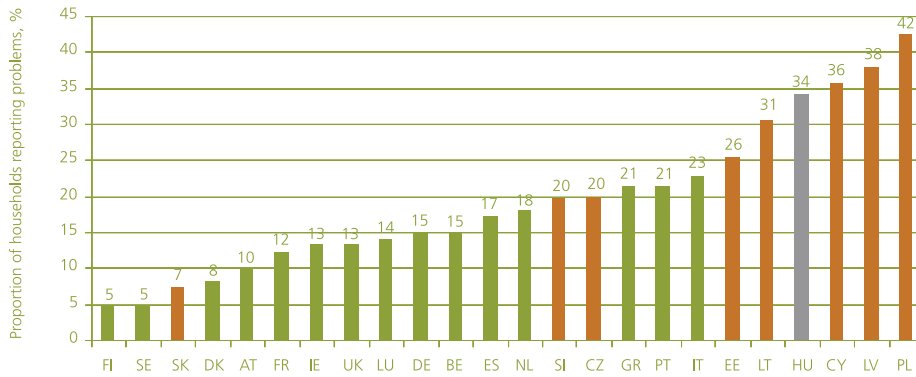


Figure 4.6: Percentage of households reporting 'leaking roof, damp walls/floors/foundation, or rot in window frames or floor' in the European Union, by country (%)

Source: EU-SILC (2005)

It may come as a surprise that a low proportion (7 per cent) of households in Slovakia report major defects in residential buildings. As there is substantial variation between the countries, the figure characterizing Hungary is not significantly different from the average for the nine new member states (Figure 4.7).

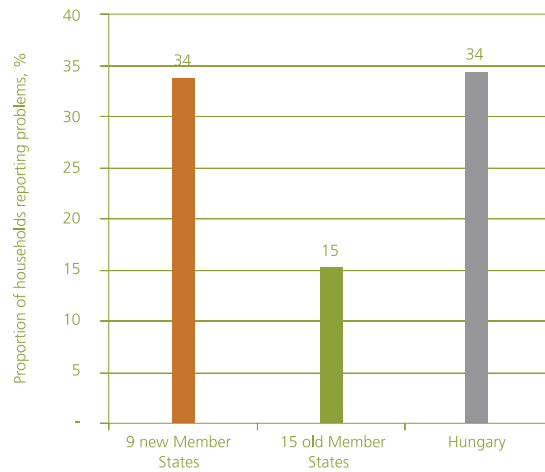


Figure 4.7: Percentage of households reporting 'leaking roof, damp walls/floors/foundation, or rot in window frames or floor' in the old and new member states of the European Union and in Hungary (%)

Source: EU-SILC (2005)

In terms of basic sanitary facilities, the Baltic states are in the worst position, with the highest proportion – over 20 per cent – of households lacking private access to a bath or shower (Figure 4.8) or a private flush toilet (Figure 4.9). Hungary and Poland, though in a far better position than the Baltic states, still lag behind the rest of Europe in this respect. In these two countries, about 10 per cent of households live in dwellings with no baths or flush toilets, while the corresponding figure is typically below 5 per cent in the rest of the countries of the EU.

WHEN IT COMES TO BASIC SANITARY FACILITIES, THE BALTIC STATES ARE IN THE WORST POSITION.

Figure 4.8: Share of households living in dwellings with no bath/shower in the European Union, by country (%)

Source: EU-SILC (2005)

Note: No data are available for the Netherlands.

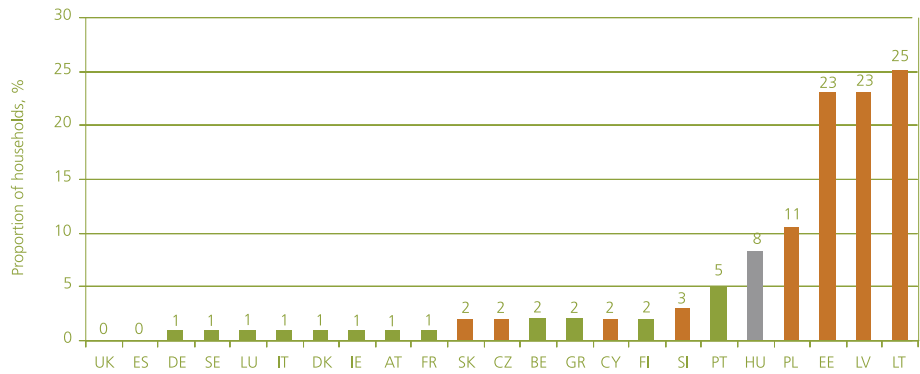
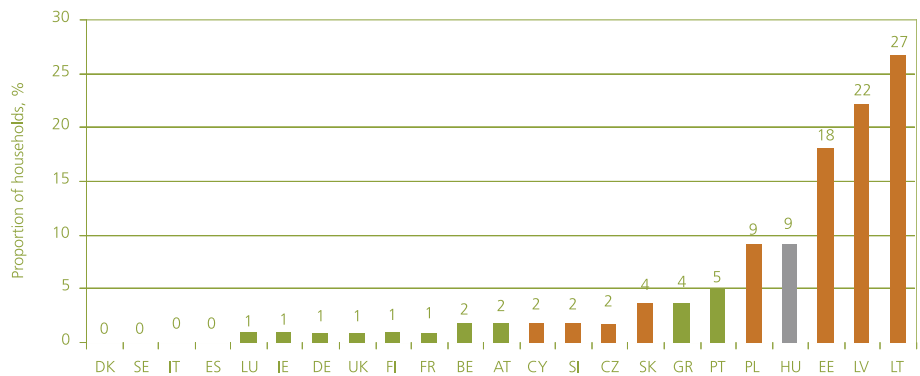


Figure 4.9: Share of households living in dwellings with no private flush toilet in the European Union, by country (%)

Source: EU-SILC (2005)

Note: No data are available for the Netherlands.



In addition to the above indicators, one further measure of housing standards (of the many available) is discussed here: the amount of light entering the home. This indicator also relies on the personal assessment of household survey respondents (Figure 4.10). This seemingly banal, insignificant factor has an effect on the market value of the property, as well as on the mental well-being of the residents. Psychological experiments demonstrate that having insufficient light is related to the development of symptoms of depression, and artificial lighting can only be a limited substitute for the biological effects of natural light, as is shown by research into well-being and the seasons of the year.⁴⁸

⁴⁸ As with everything, there is a three-letter English acronym for this condition, which is not only short but – in this case – also witty. Seasonal Affective Disorder is abbreviated to SAD. See Rosenthal (1993).

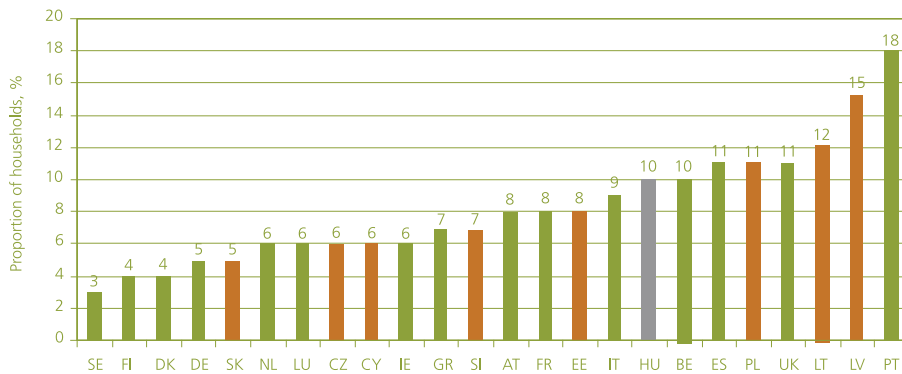


Figure 4.10: Proportion of respondents who find the dwelling ‘too dark, with not enough light’ in the European Union, by country (%)

Source: EU-SILC (2005)

A lack of light in the dwelling is most frequently reported in Portugal (18 per cent) and the Baltic states (11–15 per cent). The situation is not much better in the United Kingdom, Poland, Spain, Belgium or Hungary, but the indicator values characterizing these countries do not differ significantly from the European average (8 per cent).

4.2.6. Degree of housing integration

If housing integration is to be captured by a single indicator, the factors considered above need to be mapped onto a single value, while preserving their information content relevant to the latent dimension under consideration – housing integration. This goal was achieved by factor analysis (principal components analysis). The following variables were included in the analysis:

- Affordability:
 1. housing costs are very difficult to secure (dichotomous, 1 if yes; 0 if no);
 2. there are no adequate heating facilities (dichotomous, 1 if yes; 0 if no).
- Standard of dwelling:
 1. there is no flush toilet (dichotomous, 1 if yes; 0 if no);
 2. there is no bathroom (dichotomous, 1 if yes; 0 if no);
 3. building has major faults (dichotomous, 1 if yes; 0 if no);
 4. dwelling is dark (dichotomous, 1 if yes; 0 if no).
- Space, crowding:
 1. there are over two people to each room (dichotomous, 1 if yes; 0 if no).

The outcome of the principal components analysis of the seven variables is shown in *Table 4.1*.

Table 4.1: Principal components analysis of factors measuring housing integration

Source: Authors' computations based on EU-SILC (2005)

*Note: Factor weight below 0.1. The factor analysis was run on unweighted data.

Explanatory variable	Principal component 1	Principal component 2
No bathroom	0.82	-0.43
No flush toilet	0.81	-0.45
Crowded	0.51	0.41
Building defects	0.38	0.31
Dark dwelling	0.33	*
Costs are difficult to pay	0.24	0.63
No heating	0.43	0.49
<i>Eigenvalue</i>	<i>2.09</i>	<i>1.31</i>
<i>Explained variance</i>	<i>29.82</i>	<i>18.67</i>

The first principal component corresponds to housing integration, the latent dimension to be measured, since each variable has a positive factor weight here. The factor loadings quantify the phenomenon under investigation in a standardized format (expected value of 0, standard deviation of 1). Finally, the inverse values of the factor loadings were taken to let higher values indicate a more integrated position and lower values signal a lack of integration. Since our factor loadings are standardized, a value close to 0 signals average European housing conditions.

Figure 4.11: Average housing integration factor scores in the European Union, by country

Source: Authors' computations based on EU-SILC (2005)

Note: Weighted data.



WITH RESPECT TO HOUSING INTEGRATION, LITHUANIA AND LATVIA FARE WORST, WHILE THE SCANDINAVIAN COUNTRIES COME OUT BEST.

As Figure 4.11 shows, Lithuania and Latvia are in the worst position with respect to housing integration, followed by Estonia and Poland. Cyprus, Portugal and Hungary fare slightly worse than the European average. Among the new member states, the Czech Republic, Slovenia and Slovakia are in line with the European average. The states with the most highly integrated housing conditions are the Scandinavian countries, Sweden, Denmark and Finland. Some other old member states also fare better than average: the Netherlands, Luxembourg, Austria, Ireland, Germany, France and the United Kingdom. The values of the factor loadings capturing housing integration show the greatest dispersion for disadvantaged countries: the Baltic states, Poland and Hungary (Tárki–UniCredit, 2008, Table F4.4), which indicates that these countries are characterized by heterogeneity and stratification with respect to housing standards and problems (crowding, upkeep).

4.2.7. Substandard dwellings, problems of quality and income conditions

Investigating one of the factors of housing integration in isolation – namely, the distribution of substandard dwellings or dwellings in need of renovation across the EU countries – a highly similar picture emerges (Figure 4.12). Substandard dwellings are defined as dwellings with no bathrooms or flush toilets, or that are in buildings with major structural defects. Almost 1 per cent of households (1.82 million) in the 24 European countries under study live in dwellings of this kind. Some 81 per cent of those housed in substandard dwellings (1.48 million households) live in the nine new member states. Among the old member states, substandard dwellings are effectively nonexistent in Denmark, Sweden, the Netherlands and the United Kingdom – none were recorded in the survey sample.

The residents of substandard dwellings live on incomes below the average in each of the countries, but there is substantial variation in the income gaps that exist between them and households living in standard accommodation (Table 4.2). The gap is 20 per cent in Italy at one end of the scale, and 54 per cent in the Czech Republic at the other end.

Housing that is dilapidated or in need of renovation is defined as dwellings where at least one of the quality problems discussed above are observed, i.e. lack of bathroom or toilet, or structural defects in the building. Almost one-fifth (19.1 per cent) of the European households that were studied live in housing of this kind. This proportion approaches 50 per cent in some of the countries, while it remains below 10 per cent in others, i.e. there are substantial differences between the countries (Figure 4.12). The order of the countries does not change, however, compared to the ranking observed for housing integration and the incidence of substandard dwellings. In Hungary, over one-third of dwellings are dilapidated and in need of renovation.

OVER A THIRD OF DWELLINGS IN HUNGARY ARE IN NEED OF RENOVATION. THE SHARE OF HOUSEHOLDS LIVING IN SUBSTANDARD OR RUN-DOWN HOUSING IS HIGHEST IN THE NEW MEMBER STATES OF THE EU.

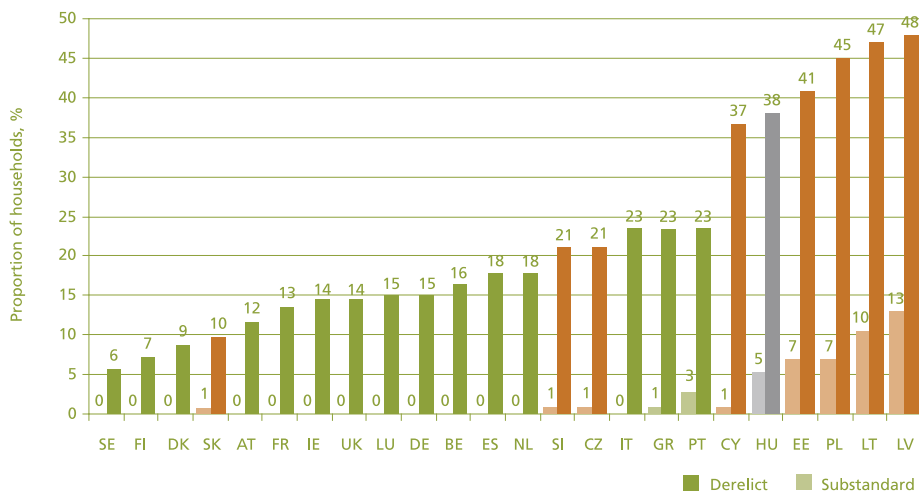


Figure 4.12: Share of households living in substandard or dilapidated housing in the European Union, by country (%)

Source: Authors' computations based on EU-SILC (2005)

Table 4.2: Average annual equivalent incomes of households living in standard and substandard dwellings in the European Union, by country

Source: Authors' computations based on EU-SILC (2005)

Note: Disposable income is the income remaining to a person after costs have been deducted. It is the portion of income available to spend.

Country	Average annual equivalent disposable income, Euros	Income of households living in standard housing, Euros	Income of households living in substandard housing, Euros	Income of households living in substandard housing, % (households in standard housing = 100)
AT	20 212	20 232	10 147	50.2
BE	18 634	18 671	10 500	56.2
CY	14 653	14 747	7 910	53.6
CZ	4 747	4 772	2 188	45.8
DE	16 684	16 687	9 435	56.5
DK	22 362	22 362	n. a.	n. a.
EE	3 444	3 549	2 029	57.2
ES	12 238	12 246	6 444	52.6
FI	18 704	18 714	11 482	61.4
FR	18 237	18 261	9 983	54.7
GR	10 990	11 047	5 568	50.4
HU	3 885	3 962	2 474	62.4
IE	21 387	21 418	12 244	57.2
IT	16 718	16 725	13 301	79.5
LT	2 467	2 594	1 371	52.8
LU	33 000	33 013	20 777	62.9
LV	2 649	2 812	1 535	54.6
NL	19 300	19 300	n. a.	n. a.
PL	3 158	3 261	1 772	54.4
PT	9 630	9 768	4 733	48.5
SE	18 173	18 173	n. a.	n. a.
SI	9 123	9 169	5 154	56.2
SK	3 041	3 049	1 920	63.0
UK	22 104	22 104	n. a.	n. a.

4.3. The availability of durable goods

The economic position of European households may be captured by the availability of certain durable goods in the household. The position of Hungary among the 24 countries of the European Union is analysed in our study in terms of the availability of cars, washing machines, colour televisions, telephones and computers.

This section looks at the 'minimum requirements' of living standards by examining the availability of widely used appliances (colour television, telephone, washing machine) in the household, with the aim of revealing what percentage of households in the individual EU member states lack these basic goods. It should be noted, however, that poverty may not be the only explanation for the absence of a colour TV, telephone or washing machine in a household, since households, even in the

developed Western states, may, on rare occasions, choose not to use these seemingly basic goods for cultural rather than financial reasons: they may decide not to watch television, use telephones or washing machines (because they use laundry services).

Cars and computers are assigned to a separate group of household goods in our analysis. Their availability introduces more variability between individual countries, as well as within them, and thus they are better suited to capturing differences in financial position between countries and households. The distinction between financial vs. lifestyle choices, of course, holds for this group of goods as well; that is, the decision to own certain kinds of equipment of high value may be influenced by the needs, lifestyle, skills or abilities and cultural standing of people in the household, in addition to their financial circumstances. At the same time, it seems self-evident that households in a better financial position are more likely to want and to acquire these goods. There may be further factors to account for the figures for car ownership in Hungary in comparison to the rest of Europe, which will be discussed briefly.

One way of measuring the financial standing of households is to look at the incidence of durable goods that are widely perceived to be basic components of everyday life and that are affordable to all but those in dire financial straits. However – as was mentioned above – it is also well known that there is a small section of the population that has a clearly high standard of living and that could easily afford to buy goods of relatively high value, and yet is disinclined to do so for reasons of lifestyle or cultural considerations. We also find goods that are genuinely beyond the means of a lot of households and that are not actually necessary; our analysis involves cars and computers in this category.

We now look at the availability of some basic household appliances – colour televisions, telephones and washing machines – in European households. We find that almost all EU households are equipped with television sets and some kind of phone: 97 per cent of households in the 24 EU countries under consideration have colour televisions, and the same percentage have landline and/or mobile phones (*Figures 4.13 and 4.14*).

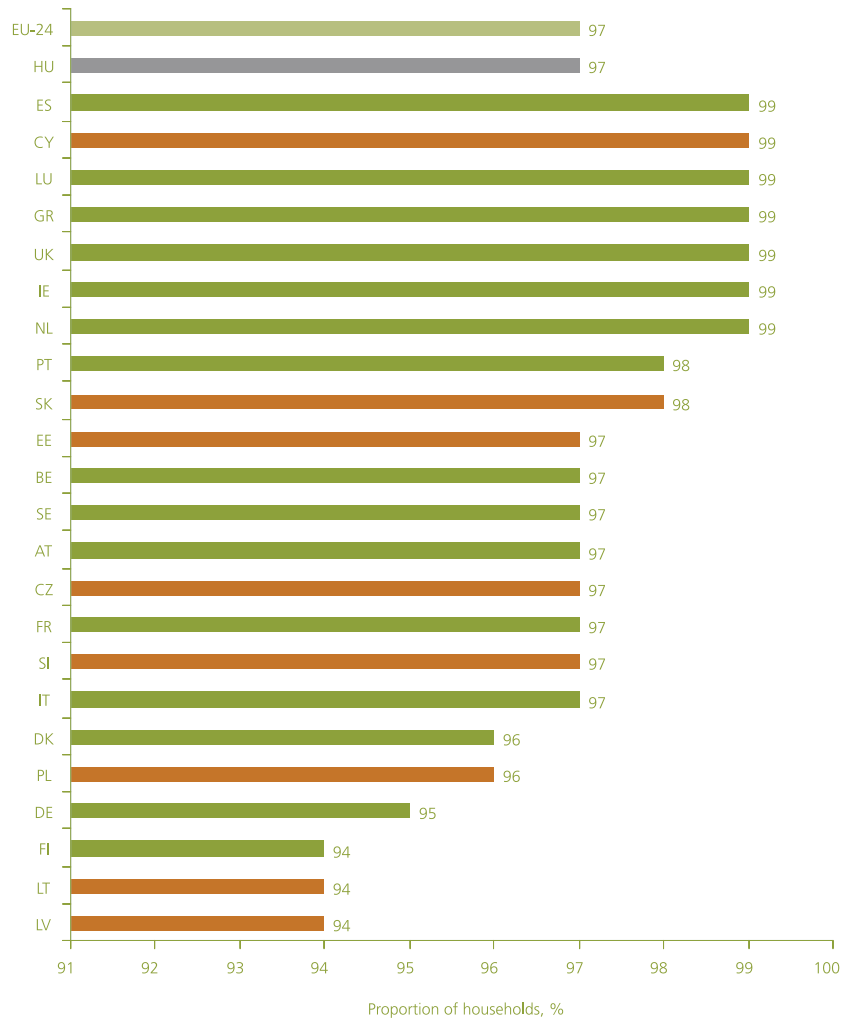
The availability of colour televisions in Hungary is in line with the EU average, i.e. 97 per cent of Hungarian households are equipped with a colour television. Hungary is thus located in the middle of the range, but there is very little variation between countries (*Figure 4.13*). Across Europe, only 5 percentage points (within the margin of sampling error and thus essentially negligible) separate the two extremes of the ‘most advanced’ countries (where almost all households have a colour TV) and the ‘least advanced’ (where 94 per cent have). In summary, then, at least 94 European households in 100 have colour televisions, and this ratio can be as high as 99 households in 100 in some of the countries.

THE ABSENCE OF DURABLE HOUSEHOLD GOODS DOES NOT NECESSARILY IMPLY POVERTY; IT MAY BE EXPLAINED BY CULTURAL OR LIFESTYLE CHOICES.

BASIC HOUSEHOLD APPLIANCES ARE AVAILABLE IN ALMOST ALL EUROPEAN HOUSEHOLDS, INCLUDING COLOUR TVs...

Figure 4.13: Share of households with colour television sets in the European Union, by country (%)

Source: EU-SILC (2005)



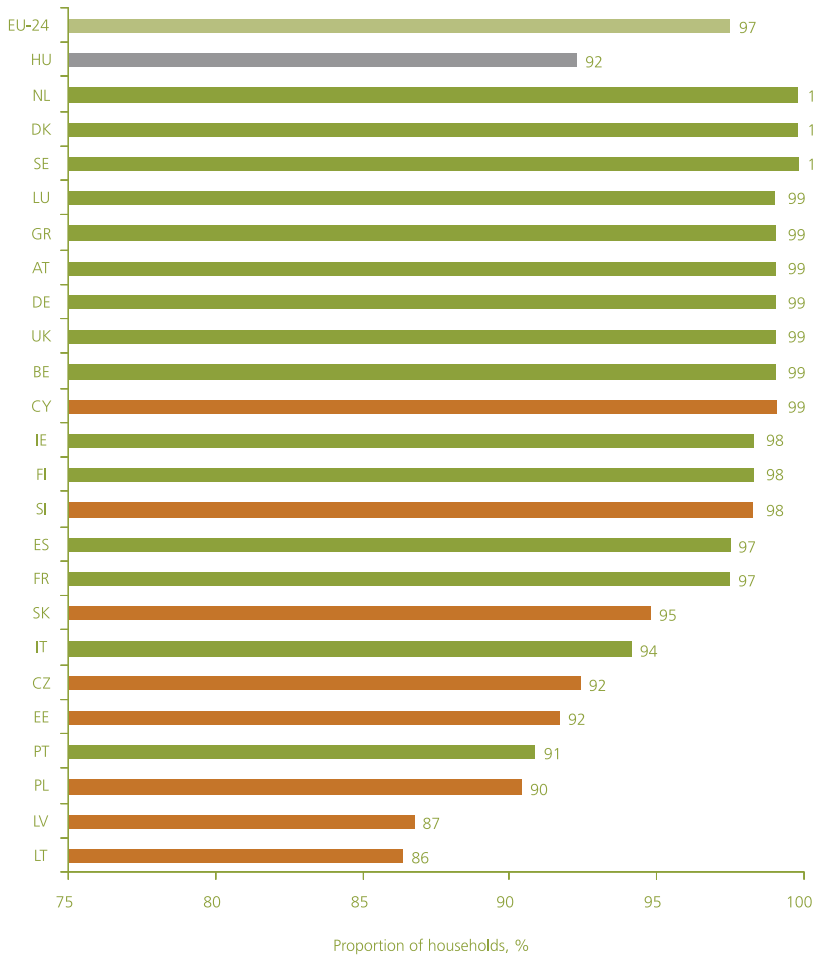


Figure 4.14: Share of households with (landline and/or mobile) telephones in the European Union, by country (%)

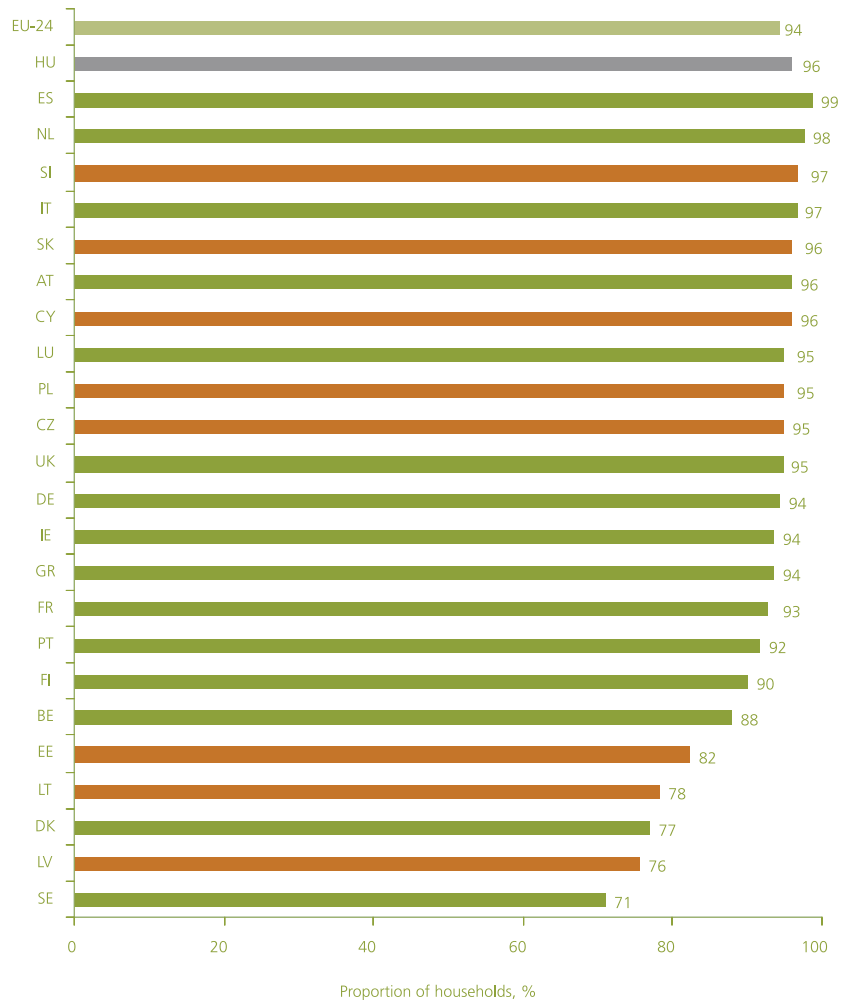
Source: EU-SILC (2005)

A similar level of availability, but with more substantial cross-country differences, is observed with respect to the most basic communication tool, the telephone, in the EU-24 member states (Figure 4.14). While the telephone penetration rate reaches or approaches 100 per cent in some of the countries (typically relatively small and affluent countries and those in the Northern European region: the Netherlands, Denmark, Sweden and Luxembourg, plus Greece as an exception), the proportion of households with phones can be around 90 per cent (or even lower), mostly in the new member states of the Eastern and Central European region (the three Baltic states, Poland and the Czech Republic, plus Portugal as an exception). Hungary also belongs in this latter group, ranking in the lowest third of the range, with 92 per cent of households having a landline and/or mobile phone – 4 or 5 percentage points lower than the EU-24 average.

... LANDLINE OR MOBILE PHONES...

Figure 4.15: Share of households with washing machines in the European Union, by country (%)

Source: EU-SILC (2005)



... AND WASHING MACHINES.

The countries studied are found to have the greatest variation in the availability of washing machines (*Figure 4.15*), even though the overall EU average penetration rate is at the fairly high level of 94 per cent. Hungary fares slightly better than average, with 96 per cent of households equipped with washing machines. Similarly high rates, above 90 per cent, are found in the majority of EU countries, with the exception of the Baltic states and some of the Scandinavian countries (Sweden and Denmark), where only 70–80 per cent of households are equipped with washing machines. The latter two countries may be examples of the phenomenon whereby a section of households that are comparatively affluent in an EU context and live in relatively rich countries choose, for reasons of lifestyle or habit rather than financial considerations, not to have appliances (such as washing machines) that are otherwise held to be a basic good.

COMPUTERS ARE AVAILABLE
IN EVERY SECOND EUROPEAN
HOUSEHOLD...

Somewhat over half (55 per cent) of European households are equipped with a computer; the indicator shows a slightly poorer figure (39 per cent) for Hungarian households (*Figure 4.16*). The level of PC penetration registered in the Netherlands

(78 per cent) is twice as high as the Hungarian figure, which places the former country at the head of the list. Similarly high rates are to be found in Sweden and Denmark, where approximately three-quarters of households have computers. Interestingly, in those two countries, computers occur with about the same frequency as washing machines.

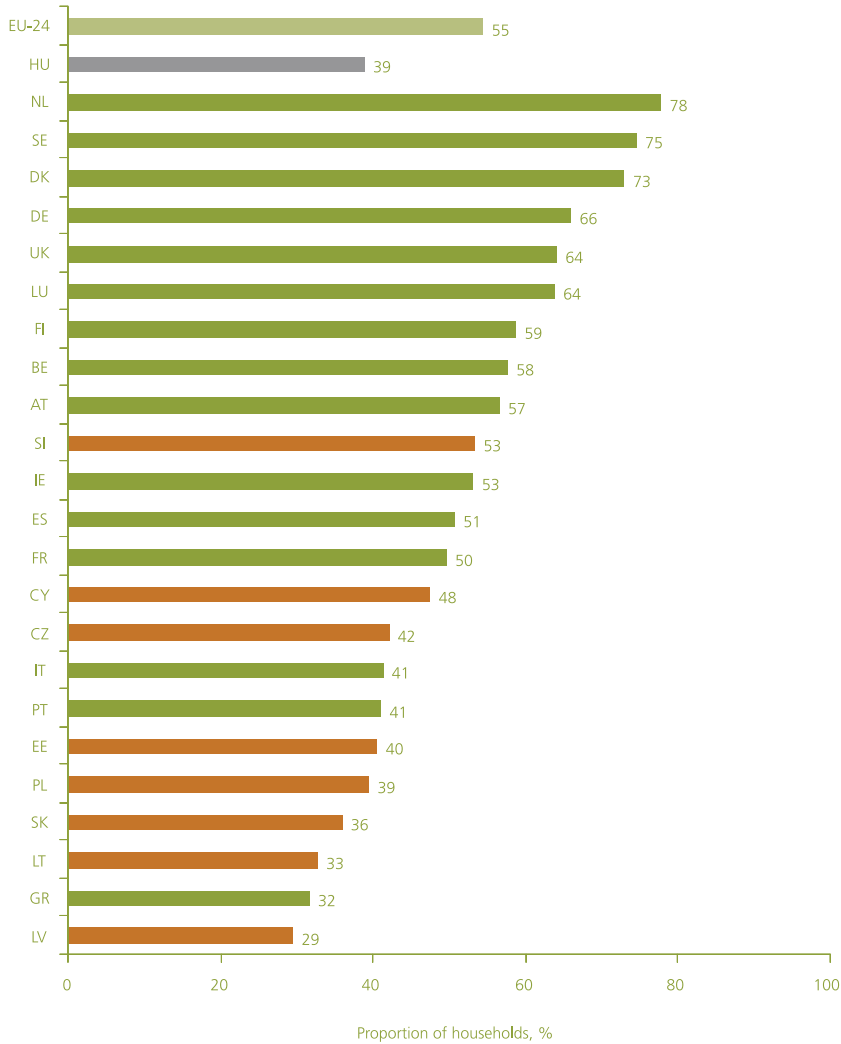


Figure 4.16: Share of households with computers in the European Union, by country (%)

Source: EU-SILC (2005)

Information society in Hungary. The annual report of the World Internet Project reveals that four Hungarian households in ten had computers in 2006. However, only two households in ten (21 per cent) had Internet access in the home, though the majority of these (71 per cent) had a broadband connection. Thus in 2006 a total of 15 per cent of households in Hungary could access the Internet via a broadband connection. The infrastructure of information technology showed a substantial growth in Hungary in the following year: the frequency of computers in the home increased by a quarter, so that in 2007 every second household (49 per cent) had a computer, which led to an increase in Internet penetration – that same year, one-third of Hungarian households (35 per cent) had access to the Internet, over 80 per cent of which via broadband technology. That is, 29 per cent of Hungarian households now have broadband Internet access. With the developments of the past year, Hungary has embarked on the process of closing the gap with Europe in terms of home IT infrastructure. The data suggest that computer, and especially Internet, penetration has begun a rising trend, and dynamic growth is expected in the next few years (WIP, 2007).

...WHILE IN HUNGARY ONLY FOUR HOUSEHOLDS IN TEN HAVE A COMPUTER, WHICH IS ONE OF THE WORST RATIOS IN EUROPE.

WHILE THREE-QUARTERS OF EUROPEAN HOUSEHOLDS HAVE A CAR, ONLY HALF OF HUNGARIAN HOUSEHOLDS DO.

As *Figure 4.16* shows, according to the EU-SILC survey, four households in ten in Hungary are equipped with a computer, which puts the country alongside the Czech Republic, Italy, Portugal, Estonia and Poland at the front of the last third of the European range. PC penetration levels lower than the Hungarian rate are only to be observed in the other two Baltic states, Slovakia and Greece.

Almost three-quarters (73 per cent) of households in the 24 EU countries under consideration own cars (*Figure 4.17*), but less than half (46 per cent) of households in Hungary are in that position, which secures for it one of the last places in the European rankings, alongside Estonia, Slovakia and Latvia. Luxembourg has the largest share of households with a car, 88 per cent, with Cyprus next in line (85 per cent). Compared to Europe generally, the level of ‘motorization’ in Hungary is quite low – a feature that is also supported by data other than those presented above. The number of cars per one thousand people, for instance, is lowest in Hungary (together with Slovakia): in 2005, there were just 287 cars per thousand Hungarian citizens, which was half the EU-25 average (476 cars per thousand people) or the EU-15 average (503 cars per thousand people) (Tárki–UniCredit, 2008, Table F4.5).

The frequency of cars in a country is obviously related to the road infrastructure and transport structure of that country – that is, to the standards and affordability of travel options offered by various forms of public transport as an alternative to car travel. One indicator that is suitable for capturing this complex issue is the overall use of major types of land transport services by the local population and the use of each type relative to other types. Eurostat data from 2004 reveal (EC, 2006b) that of the EU-25 countries, Hungary has the lowest share of car travel: 60 per cent of all passenger kilometres on land are travelled by car (as opposed to 84 per cent for the EU-25 and 83 per cent for the EU-15), while it has the highest share of train journeys (13 per cent) and bus and coach journeys (24 per cent).⁴⁹

⁴⁹ Although Cyprus and Malta are slightly ahead of Hungary with respect to the share of bus and coach journeys, there are no rail-based forms of transport (train, tram, underground) in those countries, i.e. buses and coaches are the only alternatives to car travel, which clearly distorts the distribution of passenger kilometres over all types of land transport (Tárki–UniCredit, 2008, Table F4.6).

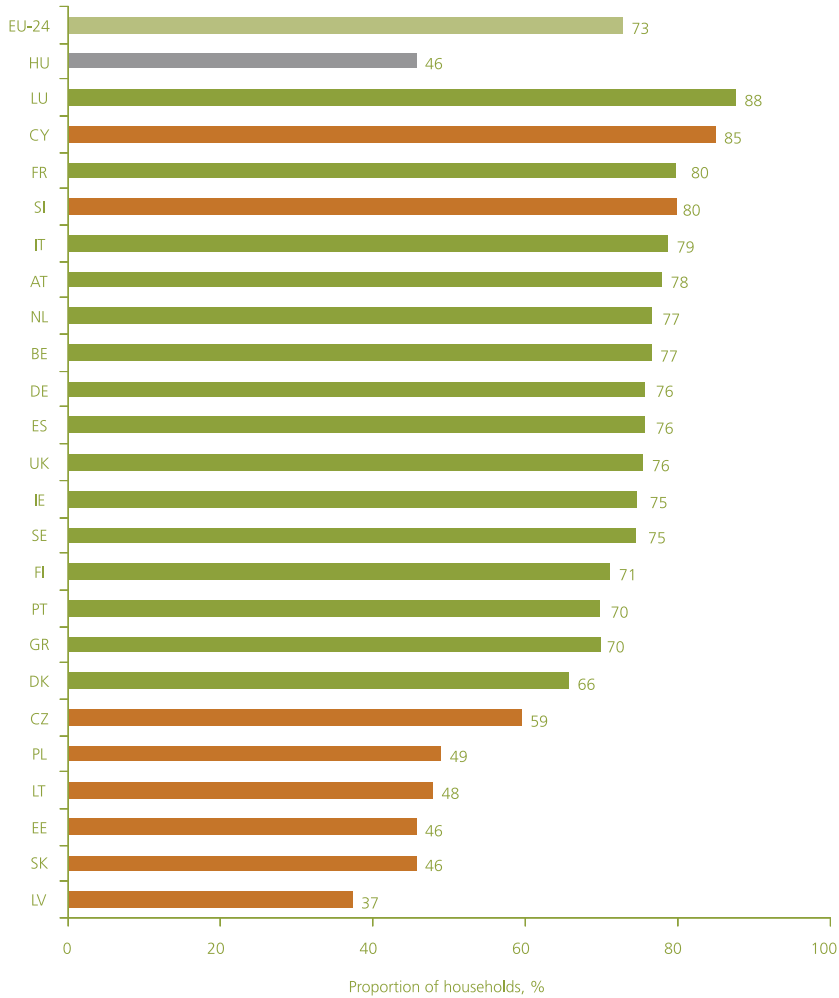


Figure 4.17: Share of households with cars in the European Union, by country (%)

Source: EU-SILC (2005)

Another notable finding, giving further evidence for the above conclusions, is that Hungary experienced the slowest growth in the number of passenger kilometres in the period 1990–2004 – an increase of just 2 per cent. Among the EU-25 countries, the average growth was 18 per cent over the same period. It is especially striking that those EU countries comparable to Hungary (in terms of their historical past, economic present and area and/or population size) registered increases several times greater: an increase of 84 per cent in Greece, 64 per cent in Portugal, and even in the Czech Republic, car travel increased by 24 per cent between 1990 and 2004.

THE LEVEL OF MOTORIZATION IS GENERALLY LOW IN HUNGARY COMPARED TO THE REST OF EUROPE: IT IS THE COUNTRY WITH THE LOWEST LEVEL OF CAR USE IN PROPORTION TO ALL TYPES OF LAND TRAVEL.

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The European Social Fund in Hungary

The objective of the European Social Fund is to support the Member States in their policies working towards increasing employment, improving the quality of work and productivity, promoting social acceptance and reducing inequalities in employment at national, regional and local level. In other words, the Fund – established in 1957 – does not solely support employment but it also develops people's educational qualifications and skills.

The purpose of the ESF is to encourage employment in the EU, and it achieves its aims through the targeted allocation of European funds. It backs the Member States so that European employees and companies are better able to adapt to new global challenges. In the course of implementation the Member States and the regions draft their own ESF operational programmes, which are thus able to respond to the specific demands of the given area.

In Hungary, the National Development Plan (shortly to be wound up) and the New Hungary Development Plan covering the period 2007-2013 act as the frameworks within which grants from the Structural Funds are utilized. These programmes determine development policy goals and priorities.

Between 2004-2006, utilization of the European Social Fund in Hungary was based on the *Human Resources Development Operational Programme (HRDOP)*. The objectives of HRDOP include raising the level of employment and reducing unemployment. Within labour market reintegration the programme pays particular attention to assisting the entry onto the labour market of those in disadvantaged situations, thereby reducing their social exclusion. Furthermore, the operational programme backs development of the supply side of the labour market via training programmes arranged inside and outside the schooling system, reinforcing flexibility and entrepreneurial skills, as well as through the modernization of labour market services. Strengthening the infrastructural bases of training, education and labour market services represents one key area of intervention. From 2007, ESF developments are conducted within the frameworks of two New Hungary Development Plan operational programmes with a national remit. The goal of the *Social Renewal* programme is to boost growth and employment through measures which primarily concentrate on improving the quality of human resources. The aim of funding from the *State Reform* operational programme is to improve the standard of operation of public administration and the judiciary, as well as the working of governmental institutions supplying public administrative functions and non-governmental organizations.

This publication is supported by the European Social Fund, while its analysis serves as a background for policy formulation aiming to increase employment and the promotion of social inclusion objectives of equal importance for Hungary and Europe.

TÁRKI Social Research Institute

TÁRKI Social Research Institute provides reports, consultancy and analytic tools for all clients wishing to understand social developments both at national and European level. Genuine, targeted polls, desk research and analysis of large-scale administrative datasets serve as background data to TÁRKI policy analyses and social trends overviews. TÁRKI's flagship projects include household surveys, microsimulation databases and several series of social reports. TÁRKI is an independent research organisation with an extended network of experts and partners nationwide and throughout Europe.

TÁRKI has its own fieldwork department with a nation-wide interviewer network and hosts Hungary's national social science data archive, which is a member of the Council of European Social Science Data Archives (CESSDA).

Research areas:

- social stratification
- income distribution, labour market, poverty
- economic-social effects, microsimulation
- intergenerational transfers, pension systems
- international comparative social policy
- health care system, health status
- family policy, fertility, demographics
- education, life-long learning
- minorities, immigrants, discrimination
- attitudes, opinions, satisfaction
- IT research
- local government research
- development policy research
- marketing research
- methodology, statistics
- social reporting

Services:

- consultancy and strategy papers for government agencies and private firms
- developing software and producing microsimulation databases (like on tax/benefit reforms or on modelling election results)
- carrying out surveys and producing research and monitoring reports (on social trends, savings, inflation expectations, business forecasts, etc.)
- carrying out political and general opinion polls
- providing business cycle research reports based on enterprise surveys.

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