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The average length of working life in the European Union

Preface

The idea for this study arose from discussions concerning a previous report by Hytti and Nio (2004), in which the authors analysed and evaluated different statistical measures for monitoring the length of working life in Finland in the context of the European employment strategy. According to the authors a life table based indicator combining information on total life expectancy and labour market participation was the best measure for monitoring the duration of working lives in Finland and in other European countries. The purpose of this study is to continue the discussions and analyses presented by Hytti and Nio (2004) by extending them to the European level.

This study would not have been possible without the goodwill and interest we met when presenting the "Finnish model" for monitoring the length of working life to the Indicator Group of the European Employment Committee. We wish to thank the Indicator Group for interesting and stimulating discussions. We are grateful to Eurostat for providing us with the extra data we needed in addition to the data accessible through the Eurostat website. We would also like to thank Ilkka Nio of the Finnish Ministry of Employment and the Economy and Peter Biström of the Finnish Centre for Pensions. Ilkka Nio has provided valuable comments and encouragement to this project from the very beginning. Peter Biström created the Excel program needed for calculations. Many thanks also to Hilkka Ruuska for drawing up the charts and to Harri Lipiäinen for language revision.

We welcome all comments and critiques so as to carry forward the discussion on the methodological and substantial questions surrounding this highly topical and interesting issue.

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Contents

1 Aim of the study

There is widespread agreement in Europe that people will have to stay on at work for longer due to accelerating population ageing and to rising life expectancies. In order to examine these developments we need statistical measures which allow us to analyse the length of working life in the life course perspective separately from the effects of population ageing. The purpose of this study is to analyse, in the above context, the length of working lives in the member states of the European Union. As a measure of the average length of life spent in the labour market we use labour market life expectancies calculated on the basis of official life tables and European labour force surveys.

The study concerns the EU member states in the years 2005 and 2001.

2 Background

At the turn of the decade Europe, along with most of the industrial world, is facing a new era of unprecedented population ageing. This development is caused by two mutually enforcing factors of population dynamics: the ageing of the large baby boom generations born after WW2 and continuously rising life expectancies. As a response to the historical population change there is widespread agreement in the Member States of the European Union that people will have to stay on at work for longer in order to maintain high employment and to guarantee stable economic growth and the survival and viability of the European social model.

Public discussion about the need to increase active years of life started in the 1980s among economists and actuaries who where increasingly concerned about the widening gap between actual and legislated retirement age. The strong emphasis placed on the problems of pension systems early on in the public discussion may be the main reason why the statistical measures developed for monitoring the length of active working life are even today mainly focused on the *average age of withdrawal* rather than *the average number of years during the life course* spent in different labour market states.

In searching for suitable measures to monitor the lengthening of working life an important starting point is the EU's overall goal of achieving full employment by tackling the problems of all age groups with respect to quality and productivity at work as well as social and territorial

cohesion (Employment guidelines 2005–2008). For this purpose we need a statistical measure which allows us to take the entire life span into consideration in order to describe the complex interplay between the age-specific model of labour market participation and the growing life expectancies of the population groups under consideration. The life-table based method for calculating the average expected years in employment/ in the labour force as a part of total life expectancies obviously fulfils these criteria.

In this context the overarching aim to lengthen the working life is also closely connected to growing demands for more flexibility in the labour markets. Demand for longer life-time working careers can be justified by improved health and longer life expectancies, and longer careers in turn both enable and require more flexibility in the coordination of paid work and private lives among European citizens. Increased flexibility is needed, among other things, for coordination of training and work in accordance with the principles of life-long learning, for reconciliation of paid work and family life and for better integration of various disadvantaged groups into the labour market by allowing more individual adjustments during the life courses. From this point of view it is obvious that the schematic model of a person's life span described as consecutive stages of life first from education to work and then to retirement has become outdated. Instead we need measures which enable us to proportion the length of the entire life span into different stages of life regardless of whether the years spent in various labour market states consist of a single period or whether they are scattered over several short periods during the entire life course.

3 Method and data

3.1 Overview of life table based methods in analyses of the length of working life

In monitoring the average length of working life of European populations, our starting point is that the method used should describe changes in the number of years spent in the labour market within the context of changes in total life expectancies. What is needed is a statistical measure which is as generally applicable as possible, and which gives comparable results both between countries and over periods of time. It is also important to be able to compare genders and age groups. There is a method widely used in public health studies, where the total life expectancy is divided into different stages of life in terms of health or functional ability, and which thus fulfils the above requirements. The method combines information on mortality rates, which determine life expectancy, with structural information describing the age-specific morbidity or disability

experiences of the investigated population in a given year. It is similar to many other demographic indicators, where demographic phenomena during one year are collated to form an indicator for an artificial cohort (e.g. total fertility rate and total divorce rate).

There are two main types of methods based on dividing up life expectancy and describing the expected average duration of the various stages of life: those based on prevalence (cross-sectional data) and those based on incidence (flow data). The best known versions of these models are the prevalence based Sullivan method and the incidence based multistate method (see Sullivan 1971; Branch et al. 1991; Robine et al. 1999). In labour market studies, the prevalence-based method draws on the percentages of employed people and people belonging to the labour force, i.e. labour market resource information, at a given time. By contrast, the incidence-based method uses the probability of transition from one labour market status to another, e.g. transitions into the labour force or transitions out of the labour force.

In population health studies on disability-free life expectancies there has been much discussion about calculation principles and about differences in the interpretation of results between prevalence and incidence based methods. According to a harmonisation and consensus report of the international REVES network (Crimmins et al. 1993) the prevalence and incidence based methods are complementary in that they measure different phenomena and permit distinctively different interpretations. The prevalence based method describes the average life span in light of mortality data and structural data on population health conditions or labour market participation within an existing population. The incidence based method shows how the various phases of life are distributed in the average life span assuming that the probability of a certain health related or labour market event, as observed in the study year, remains constant over a longer period. The results of the two methods would be the same in the case that all transition rates would stay constant over a long period of time.

Obviously such differences in calculation principles as exist between prevalence and incidence based methods must also have repercussions for what is demanded of the data used in a stud, As a rule incidence based methods presuppose register data, which provide a basis on which to calculate transition probabilities from one state to another (in the labour market, outside the labour market, death), whereas the prevalence based method can utilise both survey data and register-based data. As a matter of fact one great advantage of the prevalence based Sullivan method used in this study is that cross-sectional total participation rates in the investigated year and the labour market expectancies calculated for an artificial cohort can be derived from the same source, namely the European labour force survey. This makes it possible to combine the two mutually complementing aspects of labour market analyses, the cross-sectional approach

which is influenced by differences in population age structures and the life course approach, where the influence of age structures is eliminated.

3.2 The Sullivan method used in this study

The method used in this study is originally derived from health studies on the length of disability-free life expectancy. Similarly to these studies the total life expectancy is divided into different stages of life, consisting, for purposes of this study, of different labour market and educational stages. The main principle of the method is to transform one-year experiences of different age groups in a given population to the life-time experience of an artificial cohort experiencing during its life course the same age-specific mortality and participation rates as the population in the investigated year. (See more detailed description of the method by EURO-REVES 2001.)

Appendix table 1 explains the calculation principles of the prevalence-based life table method. The example gives the total expected years of life from age 15 to the exact age of 75[1] and the expected years in and outside the labour force within the same age range. The figures in the first column (l_x) denote the number of persons in an artificial birth cohort of 100,000 who will attain age x, when the probabilities of dying (q_x) between the exact ages of x-1 and x are the same as in 2005. Column L_x shows the total number of person years lived at age x. This is obtained by calculating the average of those having attained age x and (x+1). Life expectancy is calculated by first adding up the person years lived at age x and upward, giving the sum of person years for the remaining life span of the cohort (T_x). When the total number of remaining person years at age x is divided with the number of people who attained this age (l_x), the result is the life expectancy at age x (e_x). The labour force expectancy is obtained by first multiplying the person years lived at each age (L_x) by the activity rate of the annual cohort in question (a_x). Then, labour force expectancy is calculated in the same way as life expectancy. The value for expected years outside the labour force is obtained by calculating the difference between life expectancy and labour force expectancy (^re_x).

All of the calculations in this study concern the number of expected years of life at age 15. These expected remaining years of life are considered from several points of view by dividing the total life expectancy (or the expected years of life from age 15 to the exact age of 75) into different

[1] For practical reasons our calculation table concerns only the age range from age 15 to the exact age of 75, the total expected years of life for 15-year-olds were extracted from the Eurostat data base.

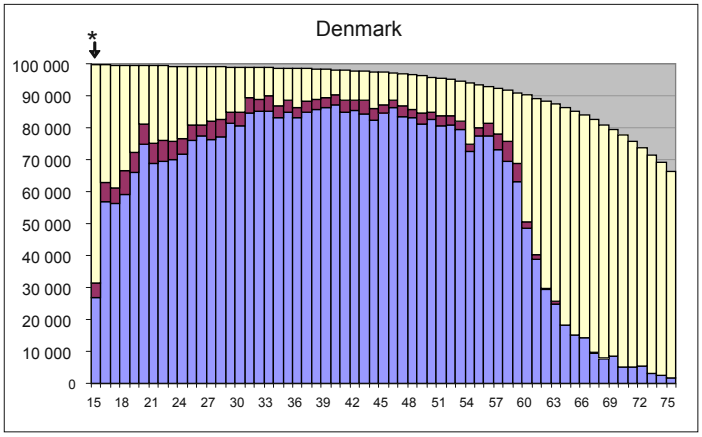
states of life according to the age-specific prevalence rates of populations living at each investigated state. The states of life taken into consideration are years spent in the labour force, in employment and outside the labour force. Years spent in and outside the labour force are in some cases proportioned further according to participation in education, i.e., to what extent participation in the labour force and participation in formal or informal training overlap with each other during the life course.

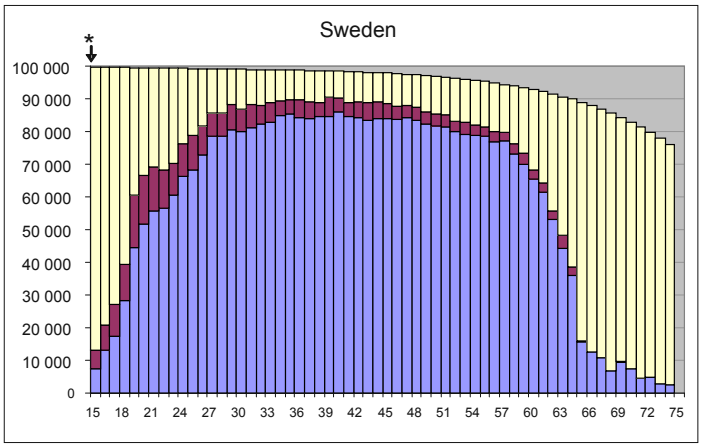
Exemplifying further the analytical approach of this study, Figure 1 presents the interplay of mortality levels and labour market participation in 6 countries representing different mortality and labour market participation levels (Denmark, Sweden, Finland, France, Hungary and Italy). The different profiles of survival curves and age-related labour market participation in the 6 countries hints at a variety of factors which it might be important to consider when interpreting our results. Firstly, public health and expected years of life are important factors influencing the time horizon both of individual choices and of public life course policies. Secondly, from the international perspective the age-dependent labour market behaviour is shaped to a great extent by characteristics of welfare state and labour law regulations as well as by the macroeconomic situation in the country (see OECD 2007).

3.3 Data

The data used in the study are based on the Eurostat data bases. Data on the probabilities of dying at different ages and data on mortality and total life expectancies are derived through Eurostat website. The data on labour market participation rates, employment rates and participation in education by one-year age groups based on the European labour force surveys were delivered by Eurostat expressly for the purpose of this study.

Figure 1. Survival curves of 15-year-olds from age 15 to the exact age of 75 and the person years lived at each age divided into years spent in and outside the labour market in six European countries 2005.





D_x = years lost through death at age x

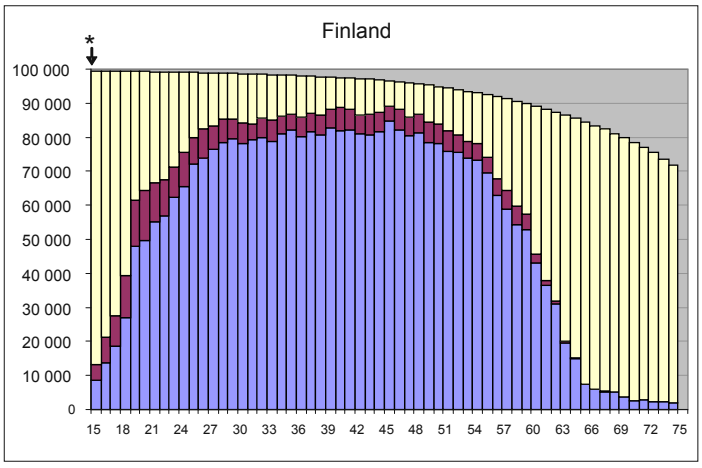
${}^{r}L_x$ = years outside the labour force

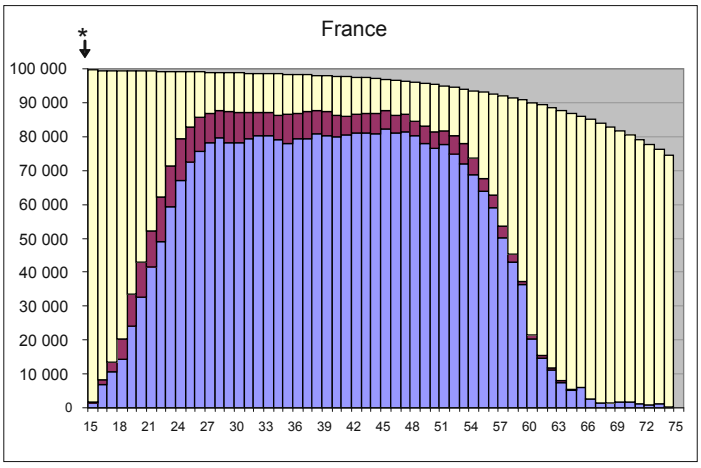
${}^{a1}L_x$ = years in the labour force at age x

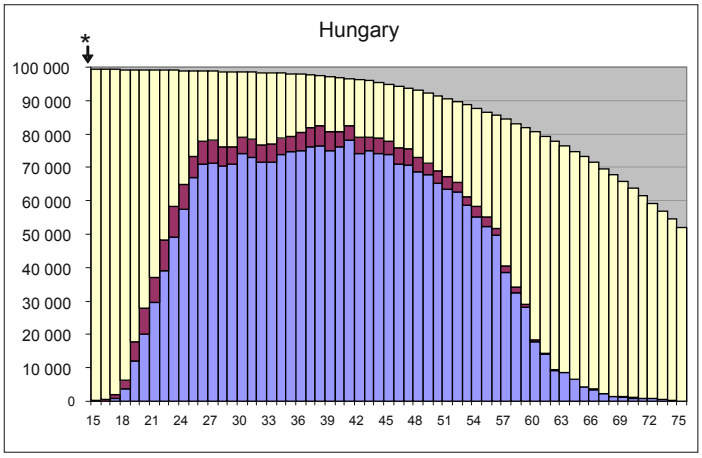
${}^{a2}L_x$ = years in employment at age x

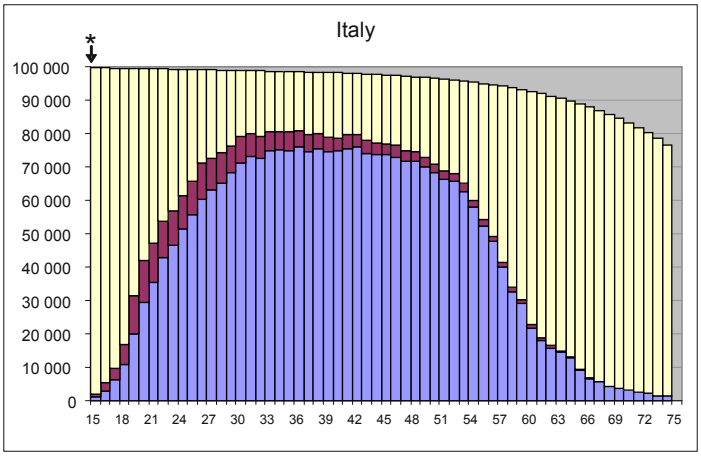
* Number of persons reaching the exact age of x out of an artificial cohort of 100 000 newborns.

See calculation formulas in appendix table 1.









4 Results

4.1 Overview of labour market expectations at age 15 in 2005 – three points of reference for cross country comparison (both sexes)

In the following the results of calculations using Sullivan's method are presented in three different ways taking into account the two-dimensional character of the method reflecting both mortality and labour market participation levels. In the first phase of analysis, the labour market expectancies are presented in absolute numbers of years at age 15 in the investigated populations. In the second phase the labour market expectancies are adjusted by differences in mortality levels taking into account lost years of life between ages 15 to 75. Thus, labour market life expectancies are counted as a share of expected years of life from age 15 onward before age 75. Finally, in the third phase of analysis the labour market expectancies are counted as a proportion of the total life expectancy at age 15.

Adjustments of labour market expectancies to different mortality levels or total life expectancies in the investigated populations are needed for several reasons. Firstly, years spent in the "risk population" with respect to participation in the labour market are obviously determined by mortality rates within the same age brackets (15–74). Secondly, different mortality levels of the working age population most likely also reflect morbidity and health conditions at the same ages and therefore may have a direct effect on people's working capacities and opportunities to earn a living in the labour market. Thirdly, the initial question why we need these calculations concerns first and foremost the growing discrepancy between the total length of life and the years spent in the labour market. Hence, it may be justified to expect longer working lives even if it were the case that the years gained from postponed death were mainly concentrated in the highest ages well above the upper limit of the conventional definitions of working age. An overview of the results covering the above mentioned three points of reference for cross country comparison is presented in figures 2–5 and in appendix table 2a–c.

Looking at the results from our first reference point, the expected labour market years in absolute numbers, the ranking order of the EU member states resembles to a great extent the order of total participation rates in proportion to the working age population aged 15 to 74 (appendix table 2a). Labour market life expectancy at age 15 is highest, among the EU member states, in Denmark, Sweden, the Netherlands and the United Kingdom (39.0, 38.8, 37.4 and 37.0 respectively). The lowest figures for expected years in the labour market were found in Malta, Hungary, Italy, Bulgaria and Luxembourg (28.1, 28.4, 29.4, 29.5 and 30.3 respectively).

Figure 3 shows the countries ranked according to our second point of reference, the mortality adjusted labour market expectancies for 15-year-olds. After standardization of mortality levels the ranking order changes to some extent from figure 2. The Baltic countries show the most substantial change: Estonia rises to the same level as Finland and also in Latvia and in Lithuania do the labour market expectancies rise above the median value for the EU (represented by Ireland, where expected years in the labour market covered 60.9 percent of the expected total years of life from age 15 to 74). Considering the notable changes in the ranking order of countries in the middle of the scale it is interesting to see that the same countries hold the highest and lowest places both in figures 2 and 3. The proportion of labour market years to the expected years of life between ages 15 and 74 is highest in Denmark, Sweden, Netherlands and the United Kingdom (69.3, 67.8, 65.7 and 65.4), and lowest in Malta, Italy, Hungary, Luxembourg and Bulgaria (49.1, 51.4, 53.0, 53.6 and 54.7).

Our third comparative point of reference, describing the labour market expectancies as a share of the total life expectancy at age 15, is presented in figures 4 and 5. According to figure 4 the interplay between total life expectancy and labour market life expectancy is far from straightforward in the European Union. Some of the countries with the lowest labour market expectancies belong to the highest group in terms of total life expectancy (Italy, Malta and Luxembourg) and, conversely, among the countries with the highest working life expectancies Denmark to some extent deviates from the other high performance countries in terms of total life expectancy.

In figure 5, which presents the expected years in the labour market as a share of total life expectancy, the order of the countries is changed radically, compared to the expected absolute numbers of labour market years, with the result that most of the new member states move up in the ranking. That is, their "performance" approaches that of the top countries in the EU taking into account the expected total length of life at age 15. Labour market expectancies as a share of total life expectancy at age 15 were highest in Denmark, Sweden, Latvia and Estonia (61.2, 58.7, 58.5 and 58.1 percent respectively) while at the other end of the scale the respective share of active years of life was lowest in Malta, Italy, Luxembourg, Hungary and Greece, with shares of active years varying from 43.3 to 48.7 percent in relation to expected total years of life.

Figure 2. Expected years of life in different labour market states and years lost through death from age 15 to the exact age 75, European Union 2005, both sexes.

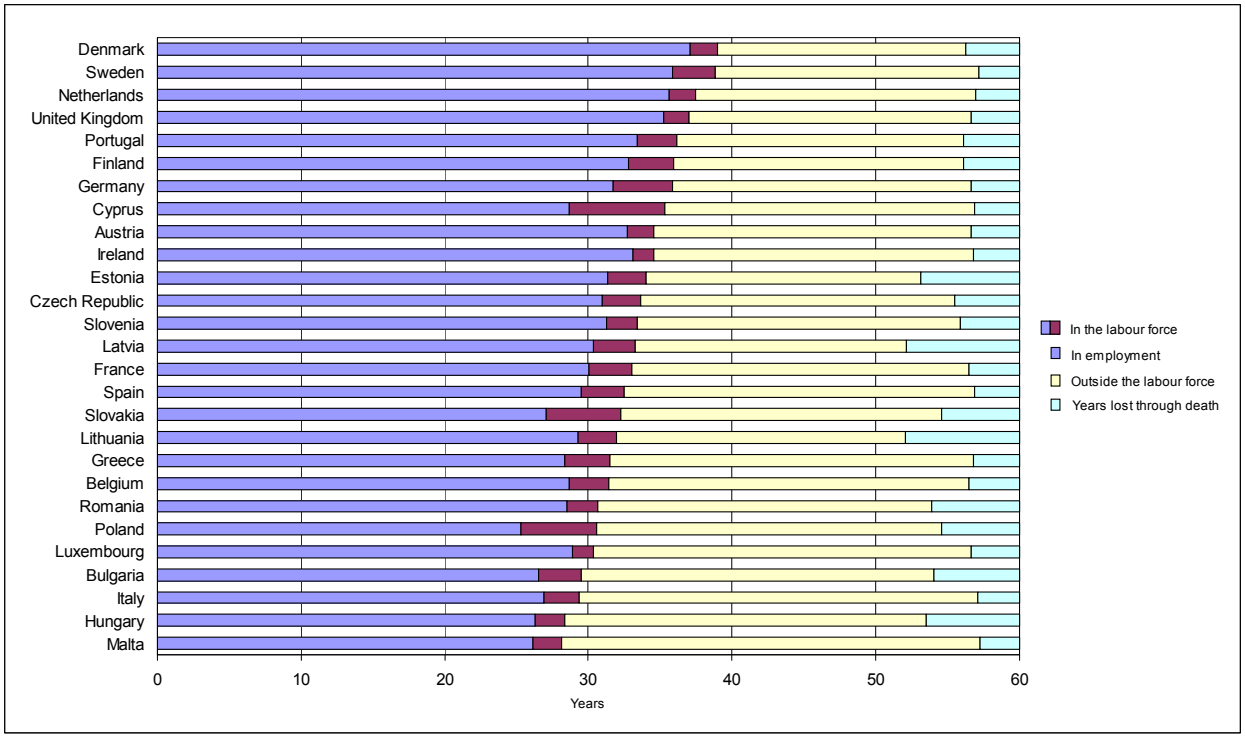


Figure 3. Expected years of life in different labour market states as a percent of expected total years of life from age 15 to the exact age 75, European Union 2005, both sexes.

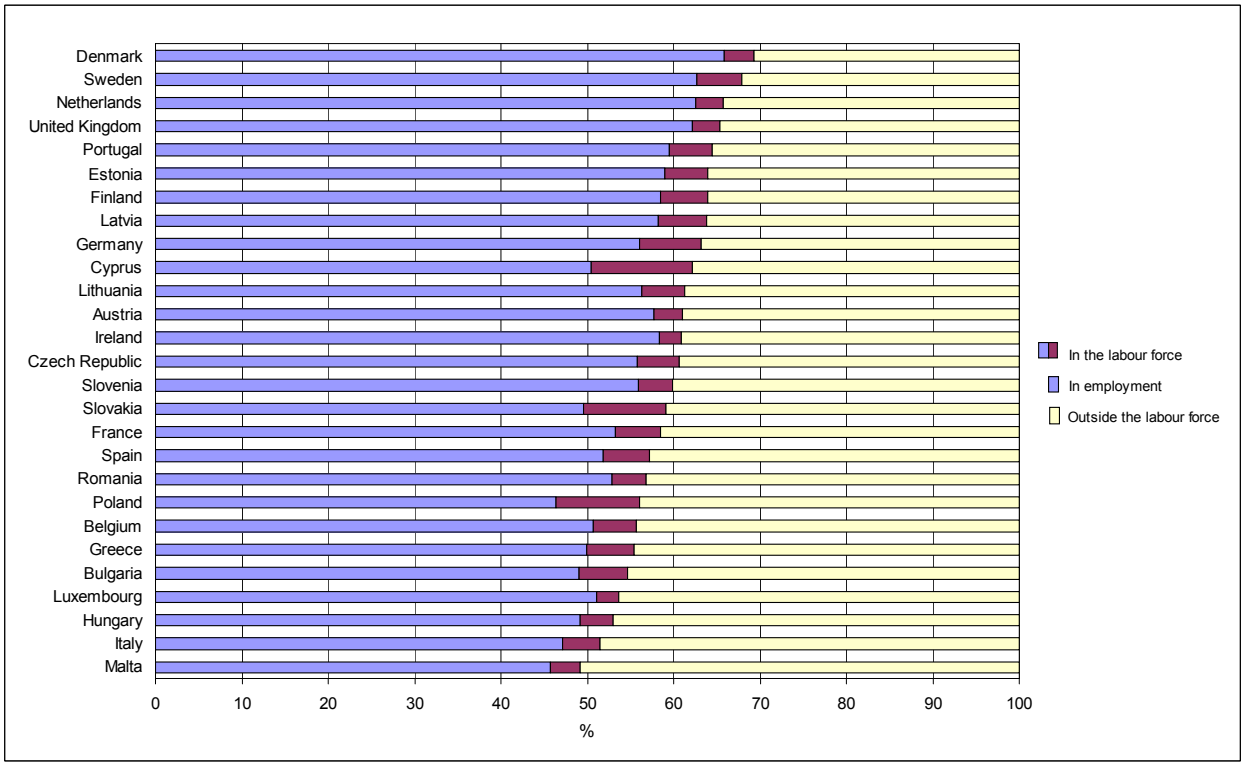


Figure 4. Total life expectancy and expected years in the labour market at age 15 in the member states, European Union 2005, both sexes.

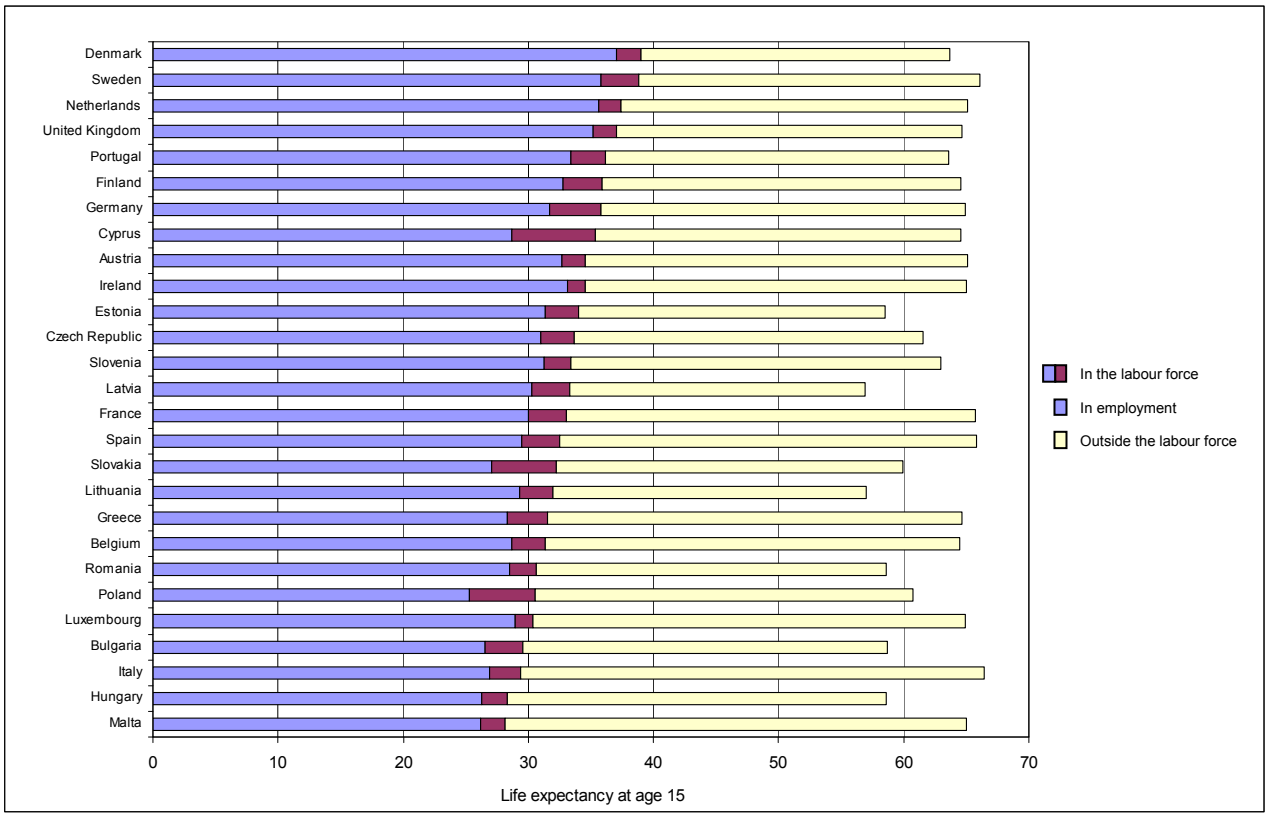
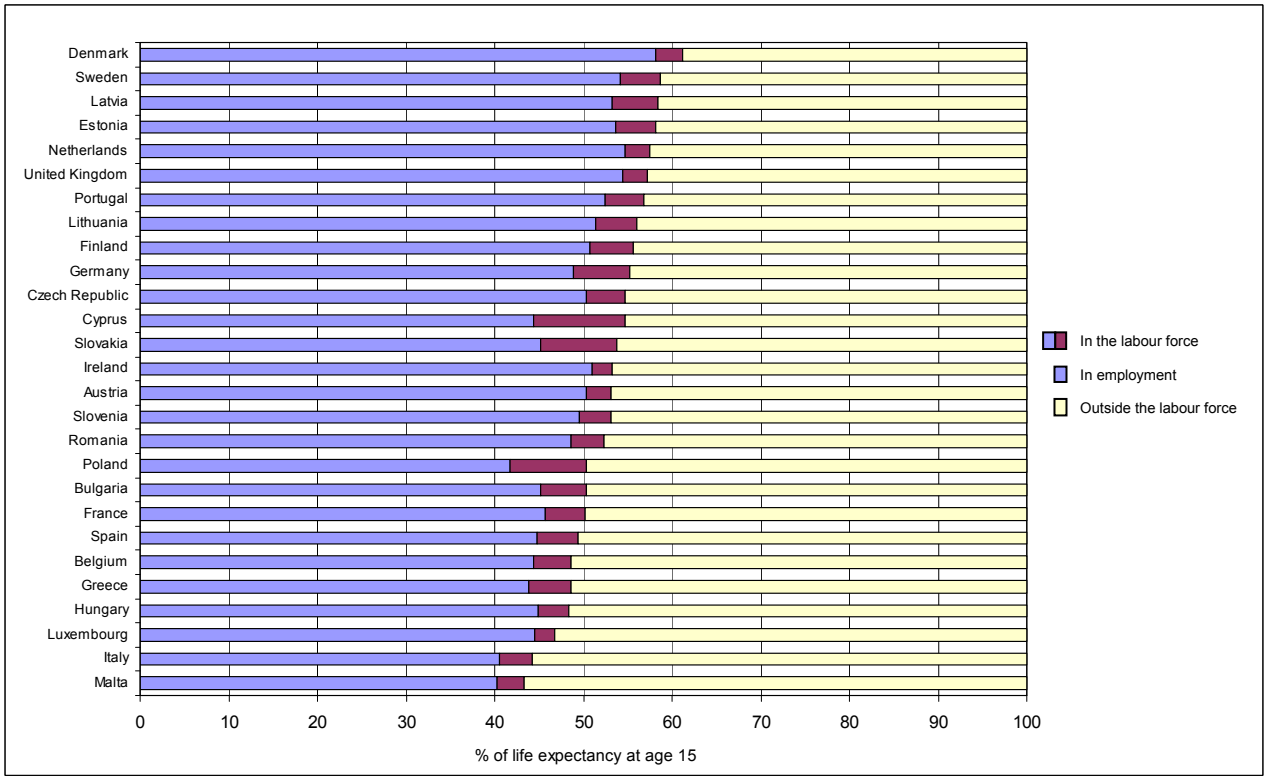


Figure 5. Total life expectancy and expected years in the labour market at age 15 in the member states, European Union 2005, both sexes, %.



4.2 Differences by gender – the role of family models *vs.* mortality levels

It is a well known fact that differences in life expectancies between the European countries are greater for men than for women, whereas the differences in terms of labour market participation rates are greater for women. Given this, it may not be surprising that our results show substantial differences when applying our three points of reference separately for men and women (figures 6–9). This can be expected even from the overall statistics in appendix tables 2b and 2c on the range of variation in total life expectancy at age 15 and in total activity rates (15–74). While the total life expectancy at age 15 for men varied from Lithuania's 51.2 years to the 63.8 years in Sweden, the corresponding range of variation for women extended 62.1 years in Romania to 69.2 years in Italy. In contrast to the gender gap in expected average length of life, the gap in total labour force participation rates (15–74) was far wider for women than for men. For women the range of variation amounted from 32.7% (Malta) to 67.8% (Sweden), whereas the corresponding range of variation for men was from 59.4% (Bulgaria) to 76.4% (Denmark).

In general, figures 6–9 reveal great gender differences in the expected length of working life and suggest some main sources for the differences. For men, the length of working life is strongly correlated with mortality levels, which is a reflection, largely, of boundaries between former Eastern and Western Europe. For women, the variation in mortality is smaller and instead, the differences in labour force participation and in the reconciliation of family life and paid work in various parts of Europe play a significant role.

With respect to the expected absolute number of years in the labour market, the life-time working careers of men were longest in Denmark, the Netherlands, Cyprus, the United Kingdom and Sweden (40.8–40.0 years), and lowest in Hungary, Bulgaria, Lithuania, Poland and Romania (30,7–33.2 years). For women, highest ranked in terms of the absolute number of years were Sweden and Denmark with 37.4 and 37.1 years of life respectively in the labour force, followed by Finland (35.3 years) and by the Netherlands, the United Kingdom, Portugal and Estonia (34.5–33.5 years) Interestingly, Hungary was the only former Eastern European country at the lower end of the labour market expectancy scale for women in terms of the absolute number of years. Expected years in labour force were lowest in Malta (18.1) and Italy (23.7) followed by Greece, Hungary and Luxembourg with female labour market expectancies between 25.8–26.2 years of life at age 15.

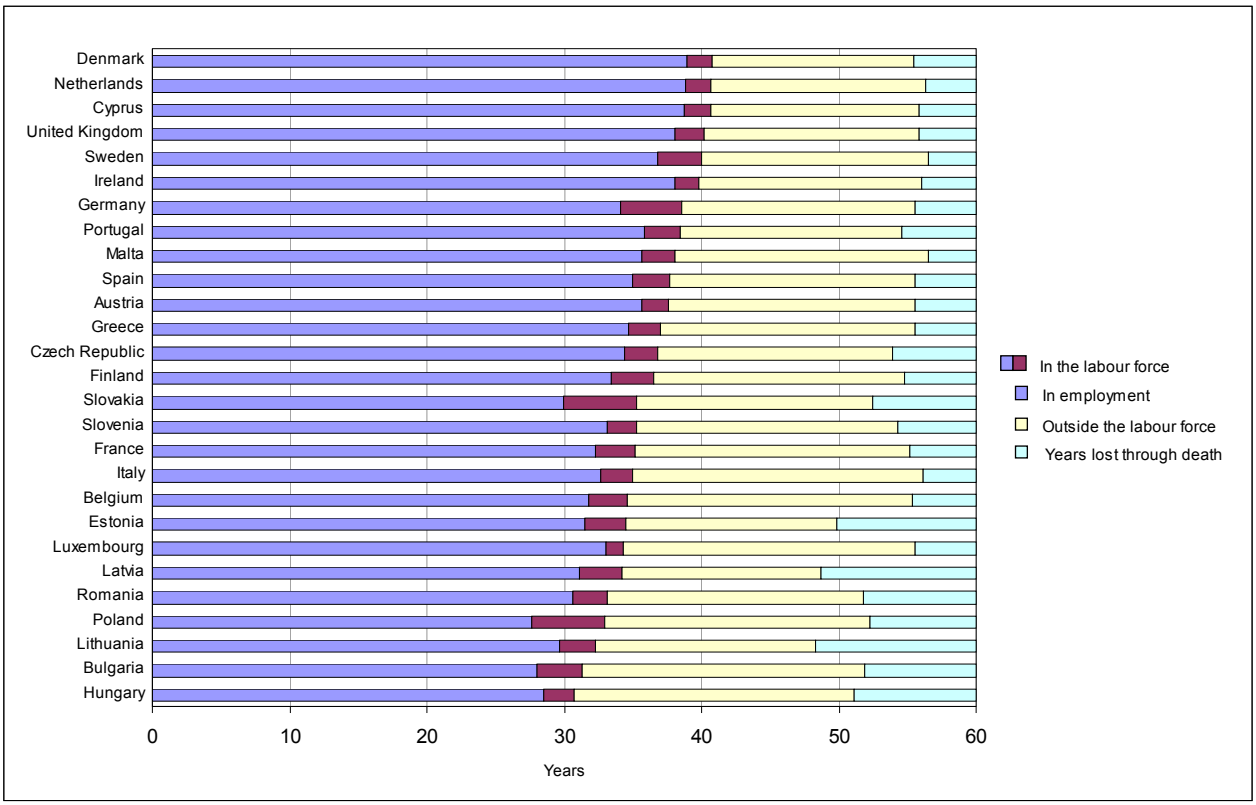
Looking at the gender specific results from the second and third points of reference of our approach (see above) the analysis reveals remarkable differences between genders in terms of how the order of countries is affected by standardization of mortality levels or by presenting the

labour market expectancies in relation to the total life expectancy at age 15 (figures 7 and 9). In the case of men, the biggest relative changes were again seen in the position of the Baltic countries where the male mortality rates are notably high. In 2005, the working life of men in proportion to the total expected length of life was highest in Latvia (66.7 percent). Other high-ranking countries in this respect were Denmark (66.3%), Cyprus (65.1%) and Estonia (65.0%). Interestingly, Sweden, with the highest life expectancy for 15-year-old males, fell behind not only the Baltic countries but Slovakia and the Czech Republic and some Western European and Mediterranean countries as well. On the other hand, a comparison between Sweden and Finland gives longer working lives for Swedish men than for Finns regardless of whether the comparison is made in absolute terms or proportionally. The difference in the male labour market expectancies between these two countries is bigger (3.5 years) than the difference in the total life expectancies of males at age 15 (2.7 years), which points to a notable difference also in the length of working life in proportion to the total years of life (62.6 and 59.8 percent respectively).

In contrast to the results concerning males, the relative position of countries in the results concerning the female labour market expectancies is rather similar with respect to our three points of reference for cross country comparison. The ranking order of countries is not affected much whether we compare the female labour market expectancies with respect to the absolute numbers of years to the expected years of life from age 15 to 75 or to the total life expectancy at age 15. This result was expected on the grounds of smaller differences in female than male mortality between the countries.

Figure 6. Expected years of life in different labour market states and years lost through death from age 15 to the exact age 75 by gender, European Union 2005.

Males



Females

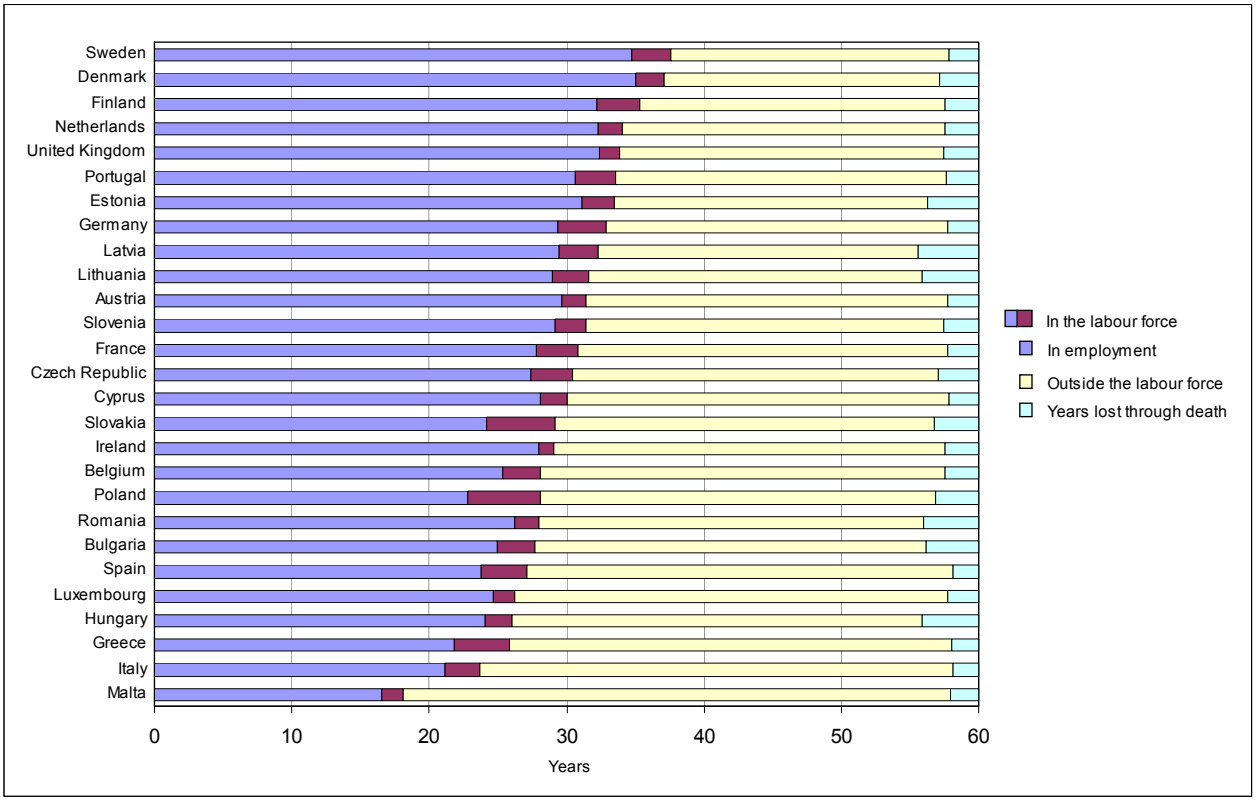
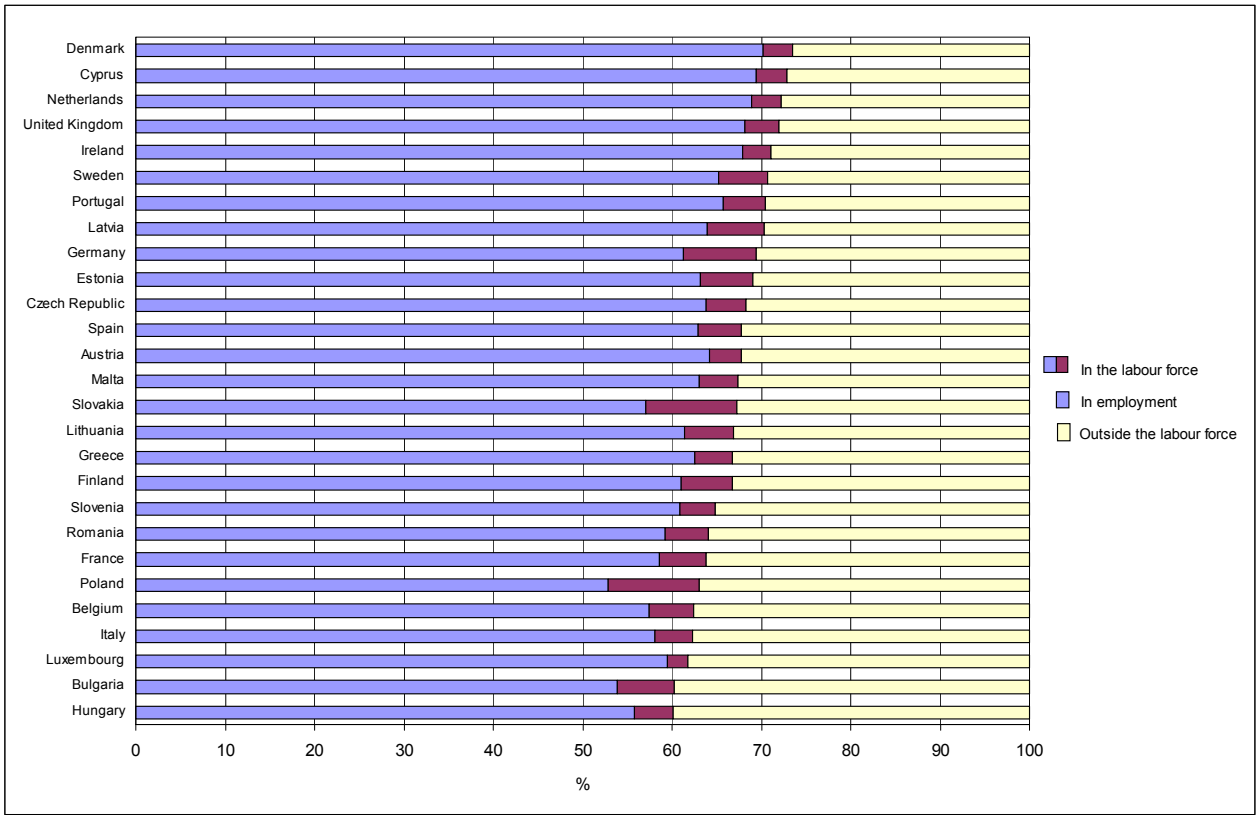


Figure 7. Expected years of life in different labour market states as a percent of expected total years of life from age 15 to the exact age 75 by gender, European Union 2005.

Males



Females

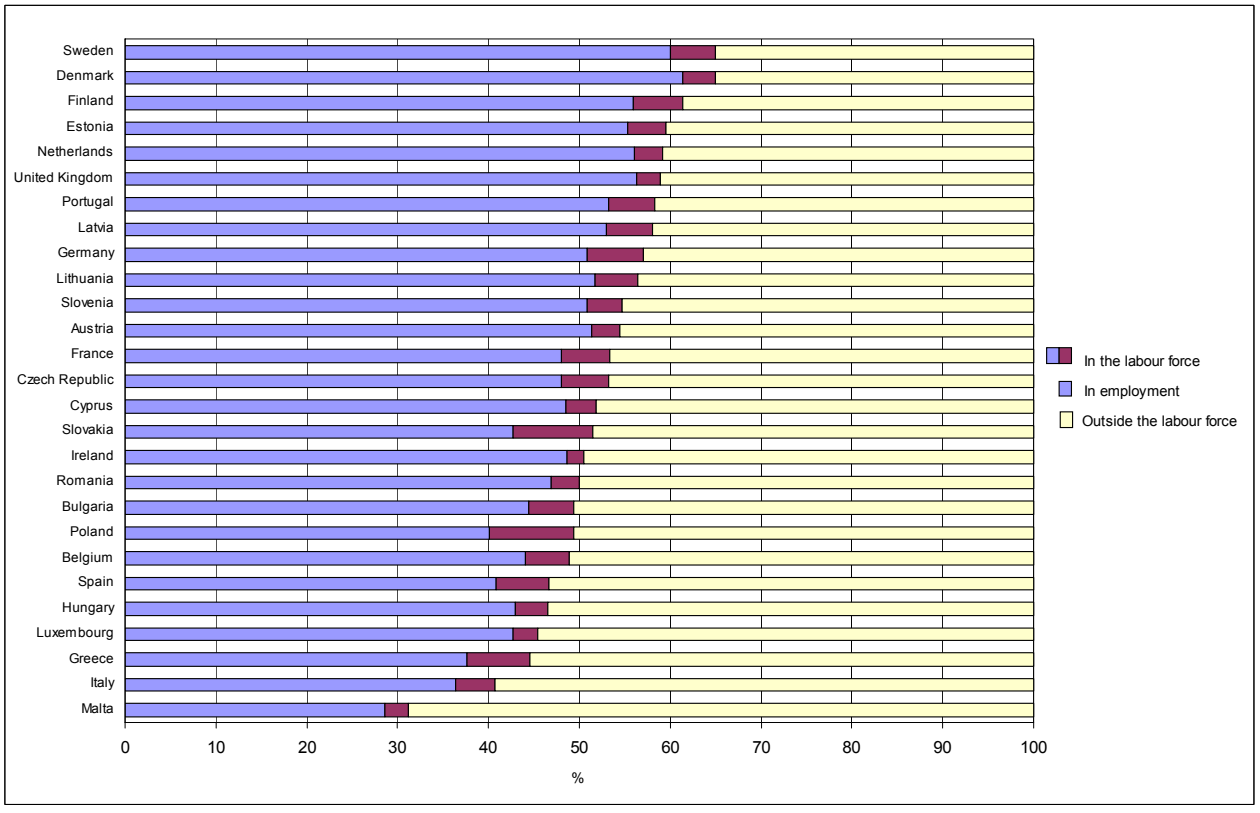
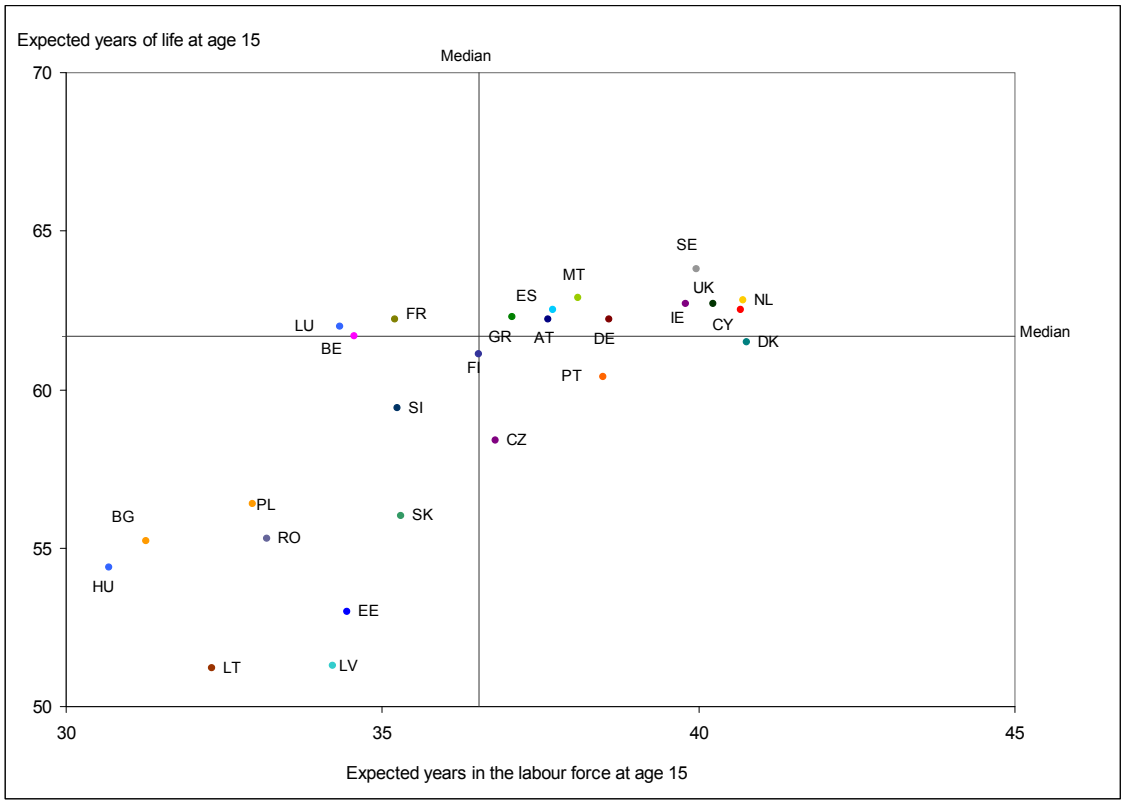


Figure 8. Expected years of life at age of 15 vs. expected years in the labour force by gender, European Union 2005.

Males



Females

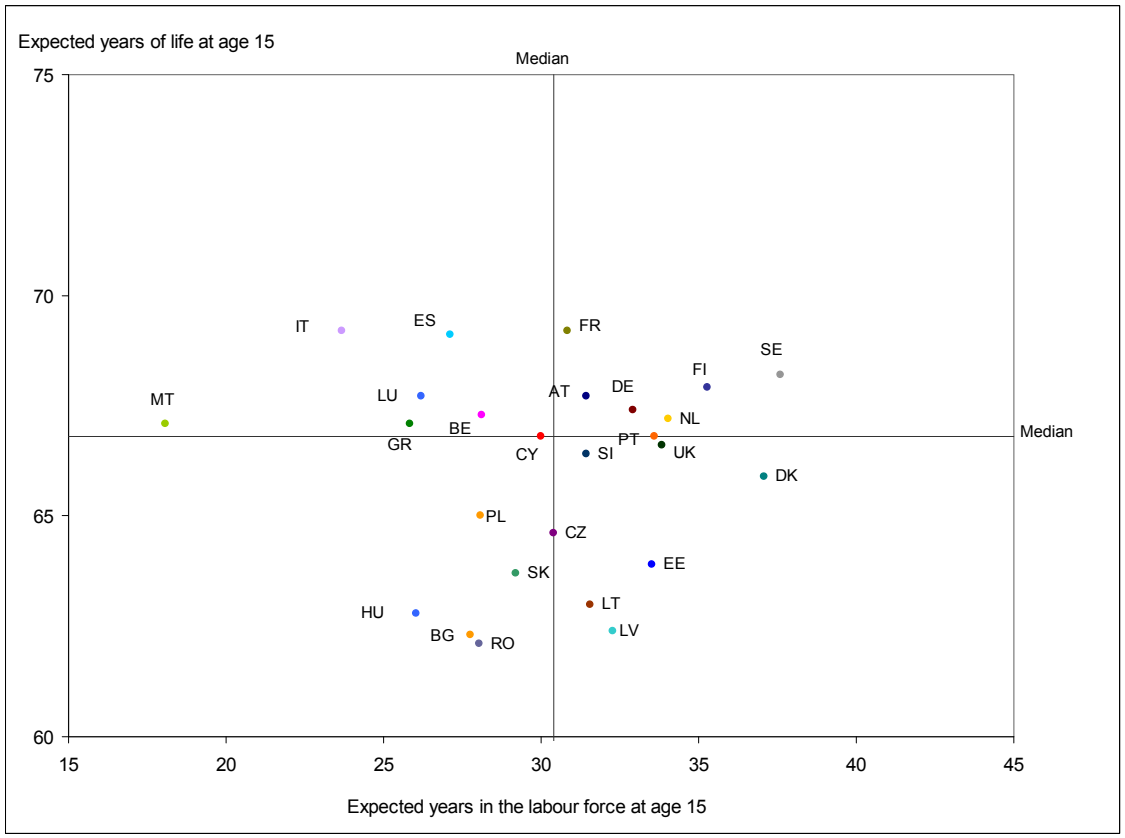
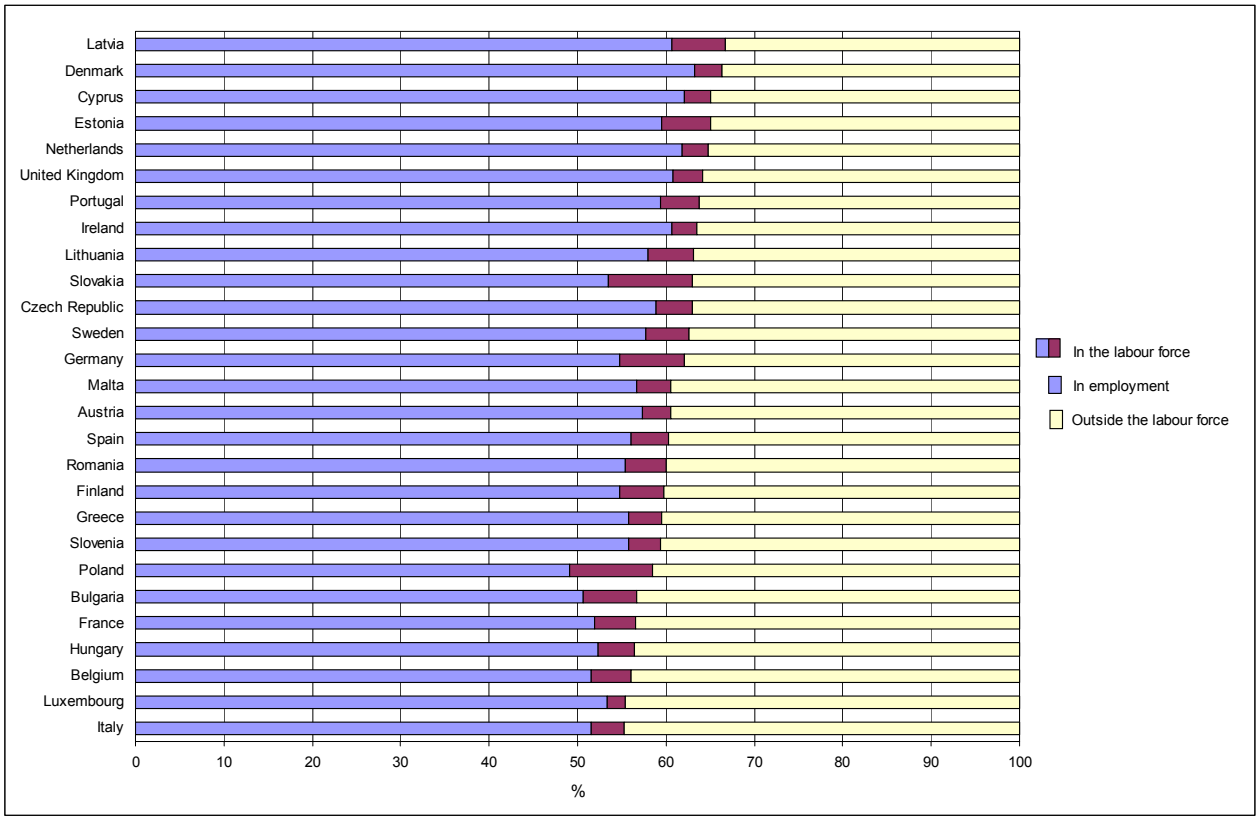
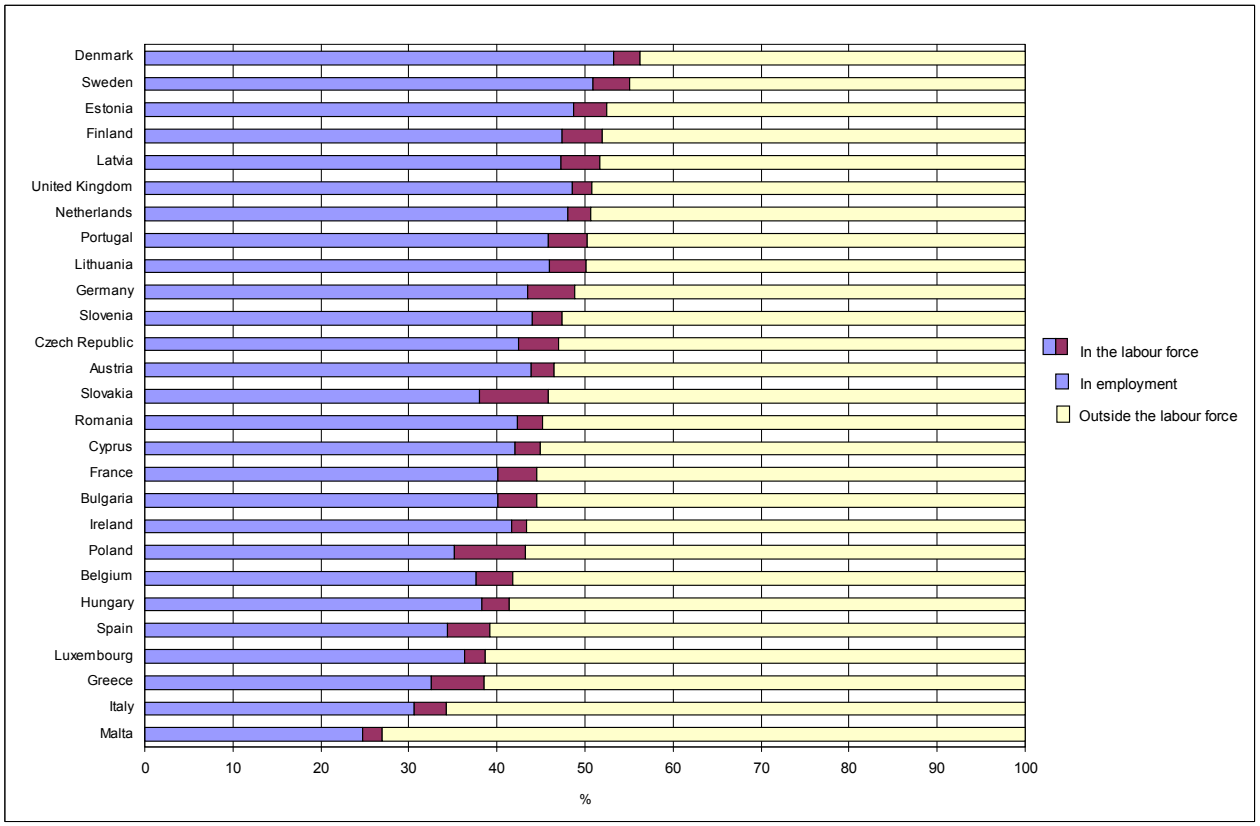


Figure 9. Expected years of life in different labour market states as a percent of total life expectancy at age 15, European Union 2005.

Males



Females



4.3 Changes in labour market expectancies from the year 2001 to the year 2005

Comparability over different time periods and calendar years is one important feature of the life table based indicators of the length of working life used in this study. It may be, however, difficult to decide which one of the different points of reference – changes in absolute numbers of expected years or changes in the proportion of expected labour market years to the expected total years of life – would be the most suitable and fruitful basis for comparisons. In the following, we have chosen the most straightforward one of them, changes in labour market expectations and life expectations presented in absolute numbers of expected years. Table 1 and figure 10 show comparisons between EU member states with respect to developments between 2001 and 2005. The main question in the comparison is whether labour market expectations of 15-year-olds have been increasing or decreasing between the investigated years and how the development in labour market expectations is related to the changes in total life expectancy at age 15 and the changes in expected years of life from age 15 to age 75.

Figure 10. Changes of total life expectancy and labour market life expectancy at age 15 in the European Union from the year 2001 to the year 2005.

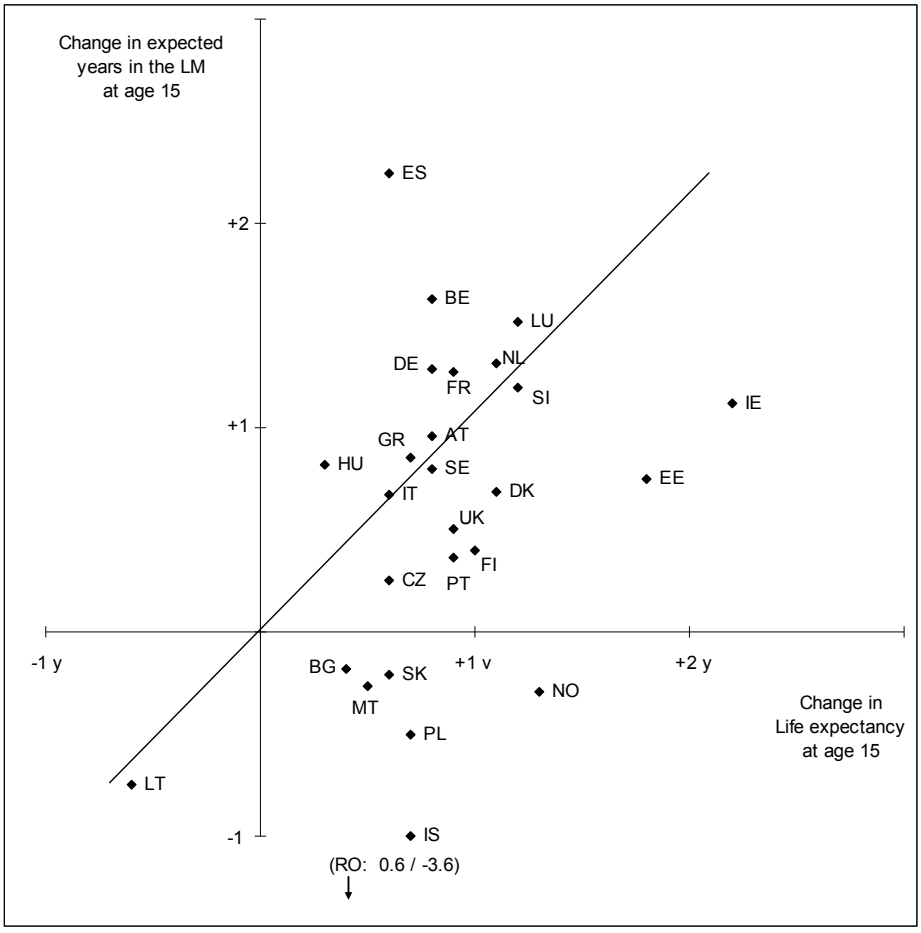


Table1. Changes in total life expectancy and expected years in the labour market at age 15 in the European Union from the year 2001 to the year 2005.

Country		Expected years of life at age 15			Expected years from 15 to 74			Expected years in the labour force		
		2001	2005	2005 –01	2001	2005	2005 –01	2001	2005	2005 –01
AT	Austria	64.3	65.1	0.8	56.3	56.6	0.3	33.6	34.6	1.0
BE	Belgium	63.7	64.5	0.8	56.1	56.5	0.4	29.8	31.4	1.6
BG	Bulgaria	58.3	58.7	0.4	53.9	54.0	0.1	29.7	29.5	–0.2
CY	Cyprus	..	64.6	..	56.7	56.8	0.1	34.8	35.3	0.6
CZ	Czech Republic	60.9	61.5	0.6	55.1	55.5	0.3	33.4	33.7	0.3
DE	Germany	64.1	64.9	0.8	56.3	56.6	0.4	34.5	35.8	1.3
DK	Denmark	62.6	63.7	1.1	55.8	56.3	0.5	38.3	39.0	0.7
EE	Estonia	56.7	58.5	1.8	51.9	53.1	1.3	33.3	34.0	0.7
ES	Spain	65.2	65.8	0.6	56.6	56.9	0.3	30.3	32.5	2.2
FI	Finland	63.6	64.6	1.0	56.0	56.1	0.1	35.5	35.9	0.4
FR	France	64.8	65.7	0.9	56.1	56.5	0.4	31.7	33.0	1.3
GR	Greece	64.0	64.7	0.7	56.6	56.8	0.2	30.6	31.5	0.9
HU	Hungary	58.3	58.6	0.3	53.3	53.5	0.2	27.5	28.4	0.8
IE	Ireland	62.8	65	2.2	56.1	56.8	0.7	33.5	34.6	1.1
IT	Italy	65.8	66.4	0.6	57.0	57.1	0.1	28.7	29.4	0.7
LT	Lithuania	57.6	57	–0.6	52.3	52.1	–0.3	32.7	31.9	–0.8
LU	Luxembourg	63.7	64.9	1.2	56.1	56.6	0.5	28.8	30.3	1.5
LV	Latvia	..	56.9	..	..	52.1	..	..	33.3	..
MT	Malta	64.5	65	0.5	57.1	57.3	0.2	28.4	28.1	–0.3
NL	Netherlands	64.0	65.1	1.1	56.5	56.9	0.4	36.1	37.4	1.3
PL	Poland	60.0	60.7	0.7	54.3	54.6	0.3	31.1	30.6	–0.5
PT	Portugal	62.7	63.6	0.9	55.6	56.1	0.5	35.8	36.1	0.4
RO	Romania	58.0	58.6	0.6	53.4	53.9	0.5	34.2	30.6	–3.6
SE	Sweden	65.3	66.1	0.8	57.0	57.2	0.2	38.0	38.8	0.8
SI	Slovenia	61.8	63	1.2	55.2	55.9	0.7	32.2	33.4	1.2
SK	Slovakia	59.3	59.9	0.6	54.3	54.6	0.3	32.5	32.2	–0.2
UK	United Kingdom	63.8	64.7	0.9	56.3	56.6	0.3	36.5	37.0	0.5

Sources: Appendix tables 2a and 4.

Table 1 and figure 10 show wide differences between European countries with respect to how the two basic dimensions of our analyses – the total years of life and the years spent in the labour market – have developed between the investigated years 2001 and 2005. The comparison covered only 25 member states due to missing information on Latvia and Cyprus concerning the year 2001. Amongst the investigated countries there were 19 states showing an increase both in labour market expectancies and in total life expectancies at age 15. In 10 of them, the years spent in the labour force had increased faster than the total years of life. The development had been most favourable in Spain, which showed a 2.2-year increase in the expected labour force years and an 0.6-year increase in the total life expectation. Spain was followed by Belgium, Luxembourg, the Netherlands and France, all of which displayed both a growth of more than one year in labour

market expectancy and a notable rise in total life expectancy as well. On the other hand, remarkable positive development with respect to total life expectancy was seen in Ireland, Estonia and Denmark, displaying an increase of 2.2, 1.8 and 1.1 years respectively in expected total years of life and an increase of 1.1–0.7 years in labour market life expectancy.

The development from 2001 to 2005 was least favourable in some new member states or candidate countries experiencing noticeable transitions in their economies, namely in Lithuania, Romania, Poland, Malta, Slovakia and Bulgaria. Lithuania was the only country where both the total life expectancy and the average expected years in the labour market decreased (–0.6 and –0.8 years respectively). In Romania the change in labour market expectancy at age 15 was far more dramatic than in any other country (–3.6). After Romania the development of labour market life expectancy was least favourable in Lithuania (–0.8 years) and in Poland (–0.5 years).

4.4 The contribution of various age groups to the expected total number of years in the labour market

As described above, the main idea of the life course approach to work, insofar as it concerns search for full employment and longer working lives, is to take the entire life span into consideration and to focus on the individual phases of life instead of concentrating only on problems at the beginning or end of working careers. When working life expectancies are compared internationally, it is therefore important to describe the role of different age groups representing approximately different phases of life. How are the years of life spent in the labour market distributed over the life span and what is the contribution of each age group to the total working life expectancy? In this chapter we have divided the labour market expectancies at age 15 into four different parts according to the sum of person years spent in age groups 15–24, 25–49, 50–64 and 65–74[2]. These comparisons might help us to frame further questions about the underlying institutional structures and mechanisms which create or support the observed differences between the countries in the age-related labour market participation models.

Figure 11 presents the ranking order of the EU member states according to the expected years in the labour market at age 15 and the distribution of total labour market expectancy between years spent in various age groups (see also appendix table 3a–c). It is well known that participation in the labour market tends in every country to concentrate in the prime ages 25–49 years whereas activity rates at both ends of the age scale differ substantially between individual countries. In

[2] Note that the divisor for the person years spent at every broad age represents the number of persons in the artificial cohort who reached the exact age of 15.

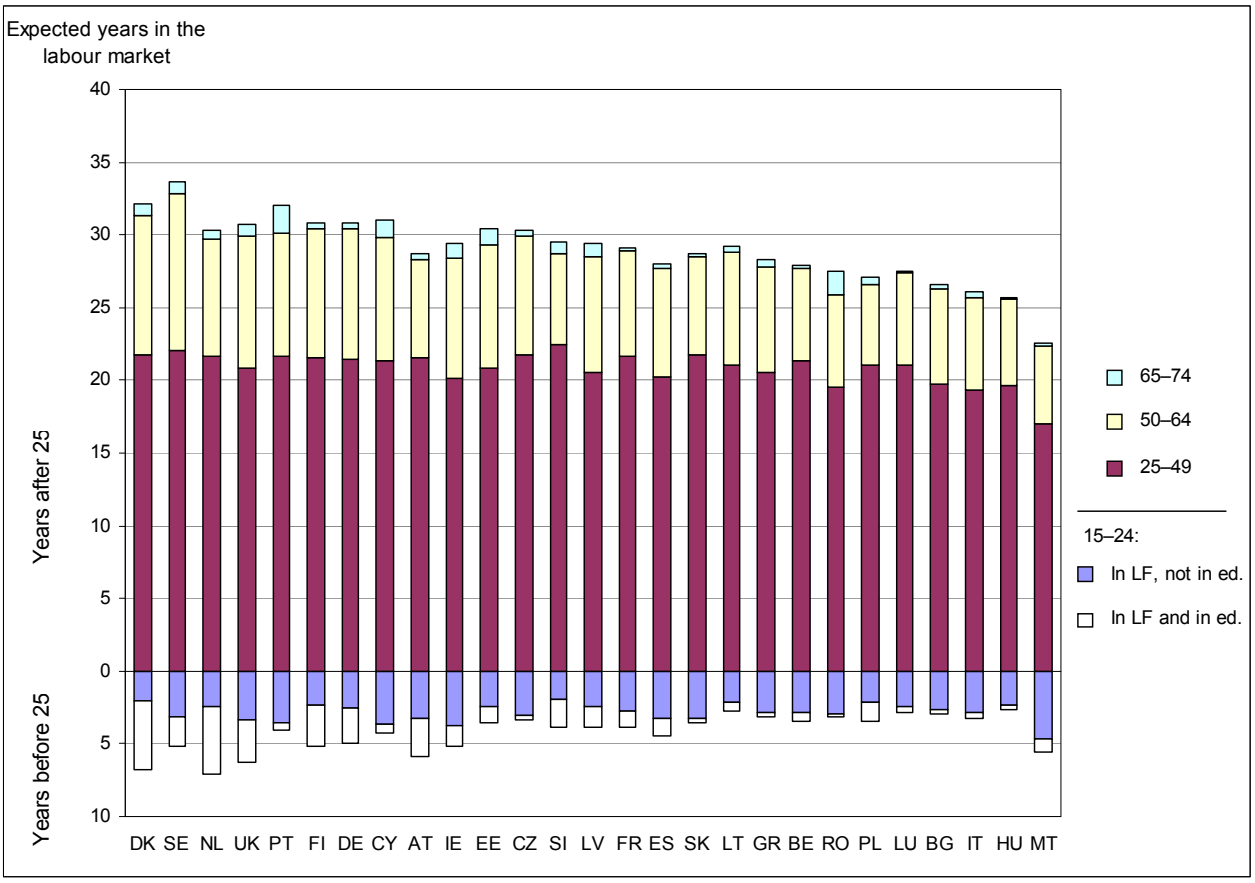
order to clarify the role of the youngest and oldest age-groups in the formation of the total expected length of working life we have presented the average number of labour market years of 15 to 24 year-olds under the x-axis and the number of years spent in the labour market in other age-groups above the x-axis. The total length of the column under and above the x-axis represents the average expected years in the labour market for each country. One interesting question for the youngest age-group is to what extent the average number of years spent in the labour market represents early entry to the labour market and to what extent it might reflect students earning extra money in the labour market.

Figure 11 clearly confirms the above mentioned rule that the range of variation with respect to contribution to the expected total labour market years is smallest in the prime ages 25–49. Excluding Malta, the range of variation extends from 19.4 years in Italy to 22.5 years in Slovenia. This similarity in the work effort of people in the prime ages also means that differences in the total labour market expectancies at age 15 are to a great extent created through contribution of the youngest and oldest age groups to the total length of working lives.

In 8 of 27 member states the contribution of the youngest age group (15–24) to the total working life expectancy was 5 years or more. With the exception of Malta these countries belong to the top ten countries with respect to the total labour market life expectancy. Another feature common to these 7 countries is that the high contribution of young people to the total length of working life consisted of a mixture of labour force participation combined with study.

The contribution of the oldest age groups to the total working life expectancy was by far the highest in Sweden. Out of a total working life expectancy of 38.8 years, 11.7 years were contributed by the elderly population 50+. By and large, the high performance of the elderly population in the labour market seems to concentrate to the same countries as the high working life performance of the younger age groups, i.e., the Nordic countries, the Netherlands, the United Kingdom, Germany and Austria. There are, however, some interesting exceptions, such as Portugal, Cyprus and Estonia, where the input of the youngest age groups to the working life expectancy was only at the medium level but the contribution of the elderly ranked near the top in the EU. One special feature of the last mentioned countries is that the impact of the age group 65–74 is exceptionally high, which might be explained by possible shortages of pension incomes for the older cohorts. At the end of the scale (Luxembourg, Bulgaria, Italy, Hungary and Malta) it is noticeable that the labour market performance of the youngest age groups was very low and there was hardly any overlap of labour market participation and education.

Figure 11. Expected years in the labour force and the impact of various age groups to the total years in the LF from age 15 to the exact age 75, European Union 2005, both sexes.



Ed. = participation in education within four weeks (either formal or informal).

4.5 Contribution of working time models to the expected total number of years in the labour force

The role of part-time work in policies aimed at lengthening life-time employment is far from straightforward. Part-time work can be considered as one aspect of increasingly diverse working time patterns and as a response to needs for flexibility in different phases of the life course, such as reconciliation of work and family life or gradual retirement. From the point of view of social cohesion and inclusion, part-time work can be a tool to provide opportunities to disadvantaged groups, including people with disabilities, migrants, ethnic minorities, single parents and older workers, to participate in the labour market. This kind of positive assessment, however, can only be made on the condition that the labour market regulations and social security schemes are designed to support social inclusion and career promotion of part-time workers. A high

incidence of part-time work can equally as well be a sign of a lack of opportunities and exclusive mechanisms preventing full-time participation.

Table 2 and figure 12 show that the four top performance countries in the EU with respect to expected years in employment are at the same time those where the share of part-time work of total life time employment is largest. Another feature common to these four countries (Denmark, Sweden, Netherland and the United Kingdom) is that part-time work plays a significant role, not only in women's, but also in men's expected life-time employment. In general, however, the association between expected total years in employment and years in part-time work is not very clear in the case of men. In most of the Mediterranean countries and in many of the new member states the male life-time employment consists almost exclusively of full-time work.

With respect to women, the top performance countries in expected employment are the same as in the case of men (Denmark, Sweden, Netherlands and the United Kingdom). Also Finland is among the countries with high female working life expectation. Similarly with the results for men, the share of part-time employment was very high in the top four countries. In Finland, however, the share of part-time employment is considerably lower (19.5 %) compared to the other Nordic countries (Denmark 34.3% and Sweden 38.2%) or to the Netherlands (74.7%). In addition to the North-West European countries where long life-time employment is associated with a high share of years spent in part-time work, part-time employment plays a significant role also in many Middle and Southern European countries. In these countries, however, the expected average length of women's working life is either in the middle range or short, and the share of part-time work is quite high (Austria, Germany, France, Belgium, Luxembourg, Spain, Italy and Malta). The expected years in part-time employment in proportion to total years in employment is lowest in Bulgaria, Slovakia and Hungary (2.4–5.9%) where also the total expectation of years in employment was very low.

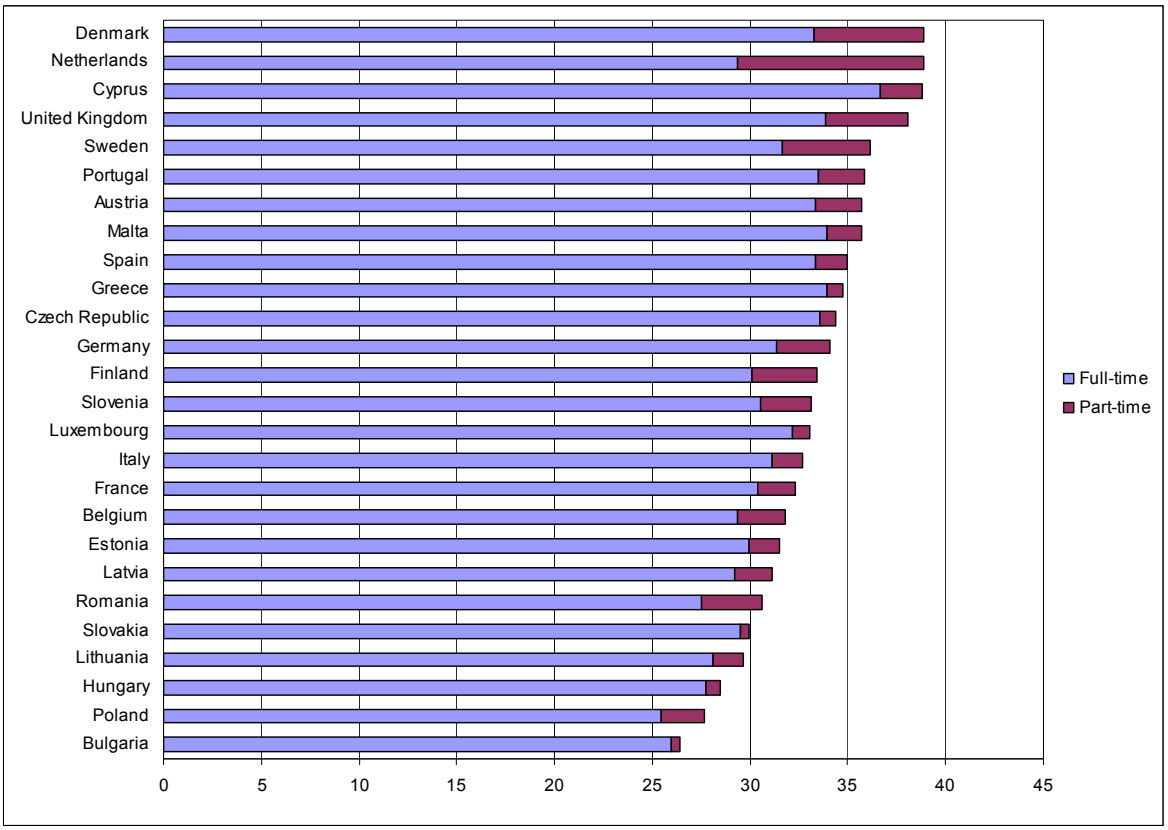
Table 2. Expected years in employment and the share of part-time employment of total years in employment by gender, European Union 2005.[a]

Country		Both sexes		Males		Women	
		Expected years in employment	Part-time, %	Expected years in employment	Part-time, %	Expected years in employment	Part-time, %
DK	Denmark	37.0	23.6	38.9	14.4	35.1	34.3
SE	Sweden	35.8	24.5	36.9	12.2	34.7	38.2
NL	Netherlands	35.6	46.9	38.9	24.3	32.3	74.7
UK	United Kingdom	35.2	25.6	38.1	10.9	32.4	42.5
PT	Portugal	33.4	11.2	35.9	6.6	30.6	16.2
IE	Ireland	33.1	4.4	38.0	1.6	28.0	8.2
FI	Finland	32.8	14.5	33.4	9.9	32.2	19.5
AT	Austria	32.7	20.8	35.7	6.5	29.7	38.3
DE	Germany	31.7	23.6	34.1	8.0	29.3	42.1
EE	Estonia	31.4	7.7	31.5	4.9	31.1	10.5
SI	Slovenia	31.2	9.5	33.1	7.7	29.2	11.6
CZ	Czech Republic	31.0	5.1	34.4	2.3	27.4	8.6
LV	Latvia	30.3	8.2	31.1	6.2	29.5	10.3
FR	France	30.0	17.2	32.3	6.0	27.8	30.1
ES	Spain	29.5	12.5	35.0	4.7	23.8	24.5
LT	Lithuania	29.3	7.2	29.7	5.2	28.9	9.2
LU	Luxembourg	28.9	17.0	33.0	2.6	24.6	37.0
CY	Cyprus	28.7	11.1	38.8	5.4	28.1	14.8
BE	Belgium	28.7	21.8	31.8	7.8	25.4	40.0
RO	Romania	28.5	10.4	30.6	10.1	26.3	10.8
GR	Greece	28.3	5.1	34.7	2.4	21.8	9.5
SK	Slovakia	27.1	2.7	29.9	1.4	24.2	4.3
IT	Italy	26.9	12.8	32.7	4.8	21.1	25.4
BG	Bulgaria	26.5	2.0	28.0	1.6	25.0	2.4
HU	Hungary	26.3	4.2	28.5	2.7	24.0	5.9
MT	Malta	26.2	9.8	35.7	4.8	16.6	21.0
PL	Poland	25.3	11.0	27.7	8.1	22.8	14.5

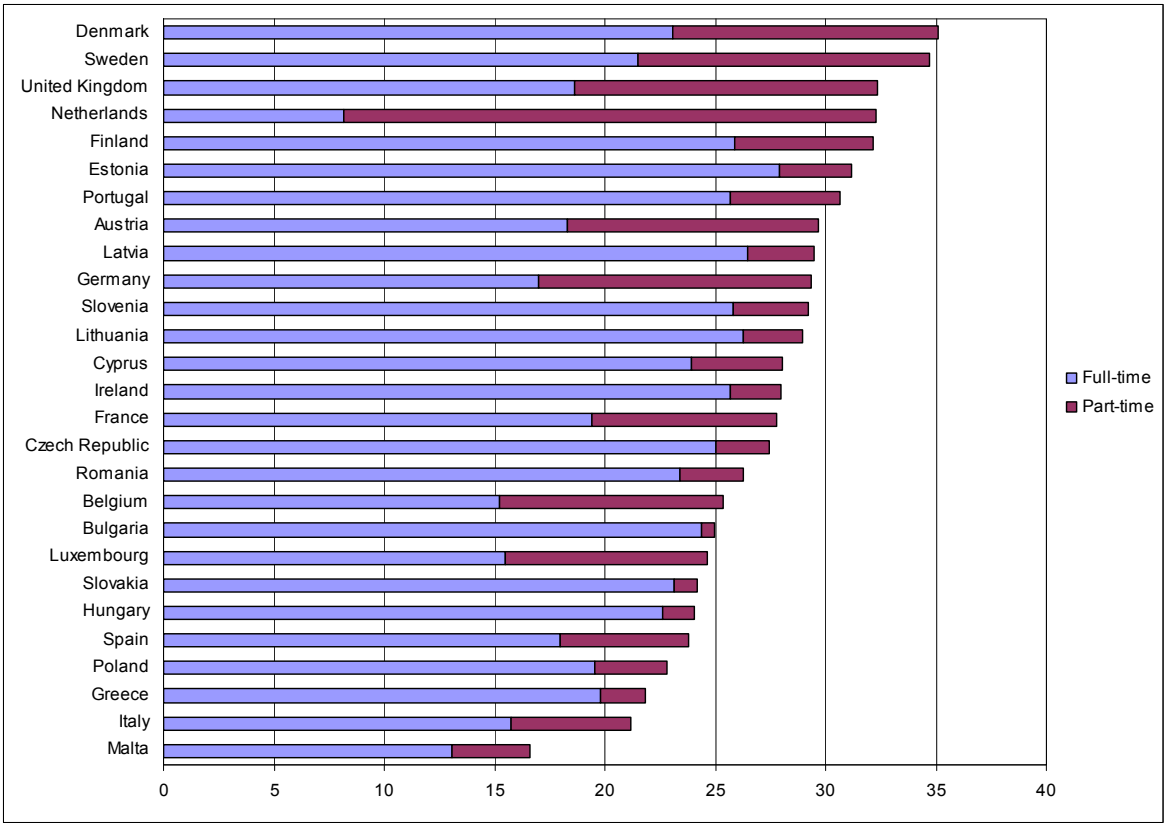
[a] Ireland was excluded from the analysis due to unexceptional share of missing values in the data on males.

Figure 12. Expected years in employment at age 15 broken down to full-time and part-time, European Union 2005.

Males



Females



4.6 Expected years in lifelong learning

In the European employment strategy lifelong learning is considered to be an important tool to increase adaptability and flexibility and to avoid segmentation of the labour markets (Employment in Europe 2006, 124–125). This in turn presupposes a better balance between flexibility on one hand and quality of working life and a high-level social security network on the other.

In the statistical indicator system developed for monitoring the targets of employment strategy lifelong learning is defined as participation in education or training over four weeks prior to the reference week of a labour force survey. All kinds of education, including labour market training and voluntary attendance of evening classes, etc., are included in the concept. In general, statistics on participation in lifelong learning cover age-groups from 25 to 64. According to Employment in Europe 2006 (p. 125) the average lifelong learning participation rate of the European Union in 2005 was 10.8% of the population aged 25 to 64. The relatively high participation rate was, however, largely due to the good performance of a few member states (DK, FI, NL, SE, SL and the UK).

In table 3 we have transformed the lifelong learning participation rates into the life course approach analyses applied in this study; i.e., we have calculated the expected years in lifelong learning by applying the life table based Sullivan method. The analysis is made separately for studies overlapping with the time spent in the labour force and outside the labour force.

According to table 3 the range of variation in average expected life time spent in lifelong learning extends from 0.5 years in Romania and Bulgaria to 10.6 years in Denmark. Besides Denmark, the other top performance countries with more than 5 years spent in lifelong learning were Finland (8.7 years), Sweden (8.2), the United Kingdom (8.0), the Netherlands (6.2), Slovenia (5.8) and Austria (4.9). In 7 member states the average expected time spent in lifelong learning was below 2 years. In proportion to the expected total years of life the time spent in lifelong learning varied from Bulgaria's and Romania's 1.4% to 27.6% in Denmark.

Table 3 highlights interesting differences between the countries in terms of how participation in lifelong learning overlaps with the time spent in and outside the labour market. In Denmark and in Sweden the proportion of time spent in lifelong learning was about the same both in and outside the labour market (DK: 27.8–26.5%; SE 20.9–22.3%) while in the other top performance countries the coverage of lifelong learning is much lower in regard to time spent outside the

labour market than concerning the overlap with time spent in the labour market. One explanation for this might be a high participation rate in labour market training among those outside the labour force.

Table 3. Lifelong learning as a part of expected years of life from 25 to 64: total years of life in life-long learning and overlap of these years with expected years in and outside the labour market.

Country		Expected total years of life from 25 to 64		Expected years in the labour force from 25 to 64		Expected years outside the labour force (25 to 64)		Participation in lifelong learning, % of		
		Total	In lifelong learning	Total	In lifelong learning	Total	In lifelong learning	Expected years of life	LF expec-tation	Expected years ouside LF
DK	Denmark	38.5	10.6	31.4	8.7	7.1	1.9	27.6	27.8	26.5
FI	Finland	38.2	8.7	30.4	7.5	7.8	1.2	22.9	24.7	15.8
SE	Sweden	38.9	8.2	32.9	6.9	6.0	1.3	21.1	20.9	22.3
UK	United Kingdom	38.6	8.0	29.9	7.1	8.7	1.0	20.8	23.6	11.2
NL	Netherlands	38.8	6.2	29.7	5.2	9.0	0.9	15.9	17.6	10.4
SI	Slovenia	38.2	5.8	28.8	5.0	9.4	0.8	15.1	17.3	8.2
AT	Austria	38.5	4.9	28.3	4.1	10.2	0.9	12.8	14.3	8.7
ES	Spain	38.6	3.8	27.8	2.9	10.9	0.9	9.8	10.5	8.0
LU	Luxembourg	38.6	3.2	27.4	2.4	11.2	0.8	8.4	8.8	7.2
BE	Belgium	38.5	3.2	27.7	2.6	10.8	0.6	8.3	9.4	5.3
DE	Germany	38.6	3.1	30.4	2.4	8.2	0.7	8.1	8.0	8.4
LV	Latvia	36.1	2.9	28.5	2.6	7.6	0.3	8.0	9.0	4.4
FR	France	38.4	2.7	29.0	2.3	9.4	0.4	7.1	7.9	4.3
IE	Ireland	38.6	2.5	28.4	1.9	10.2	0.6	6.4	6.6	5.9
LT	Lithuania	36.0	2.2	28.9	1.9	7.1	0.3	6.1	6.4	4.5
EE	Estonia	36.7	2.2	29.4	1.8	7.3	0.4	5.9	6.2	5.0
IT	Italy	38.8	2.2	25.7	1.5	13.1	0.8	5.8	5.7	6.0
CY	Cyprus	38.6	2.1	29.8	1.9	8.8	0.2	5.5	6.5	2.4
CZ	Czech Republic	38.1	2.1	29.9	1.8	8.2	0.3	5.4	5.9	3.6
MT	Malta	39.0	2.0	22.4	1.6	16.6	0.5	5.2	7.1	2.8
PL	Poland	37.5	1.7	26.6	1.5	11.0	0.2	4.6	5.7	1.9
SK	Slovakia	37.7	1.6	28.5	1.4	9.2	0.2	4.4	4.9	2.5
PT	Portugal	38.2	1.5	30.1	1.0	8.1	0.4	3.9	3.4	5.5
HU	Hungary	37.0	1.4	25.5	1.1	11.5	0.4	3.8	4.2	3.1
GR	Greece	38.5	0.7	27.8	0.4	10.8	0.3	1.8	1.4	2.7
RO	Romania	37.3	0.5	25.9	0.3	11.3	0.2	1.4	1.2	1.8
BG	Bulgaria	37.4	0.5	26.3	0.3	11.1	0.3	1.4	1.0	2.4

5 Summary

5.1 Aim of the study

The purpose of this study was to analyse the average length of working lives in the member states of the European Union. At the turn of the decade Europe is facing a new era of unprecedented population ageing. As a response to the historical population change there is widespread agreement in the Member States of the European Union that people will have to stay on at work for longer in order to maintain high employment and to guarantee stable economic growth and the survival and viability of the European social model. For monitoring this overarching aim to lengthen the working lives we need a statistical measure which allows us to analyse the changing age-related labour market behaviour of European populations while taking into consideration the entire life span, independently of changes in population age structures.

5.2 Method and data

The analyses were based on a life table based Sullivan method which was originally developed for population health studies designed to measure disability-free life expectancies in various populations. The main principle of the method is to transform one-year experiences of different age groups in a given population to the life-time experience of an artificial cohort experiencing during its life course the same age-specific mortality and participation rates as the population in the investigated year.

All of the calculations in this study concerned the number of average expected years of life at age 15. These expected remaining years of life were considered from several points of view by dividing the total life expectancy (or the expected years of life from age 15 to the exact age of 75) into different states of life according to the age-specific prevalence rates of people living at each state in the investigated year. The states of life taken into consideration were years spent in the labour force, in employment and outside the labour force. Years spent in and outside the labour force were in some cases proportioned further according to participation in education, i.e., to what extent participation in the labour force and participation in formal or informal training overlap with each other during the life course.

The data of the study were based on official mortality statistics and labour force surveys, both obtained from the Eurostat data bases. Most of the analyses concerned the year 2005. In addition the changes in labour market expectations from 2001 to 2005 were analysed briefly.

5.3 Results

The results of calculations using Sullivan's method were presented in three different ways taking into account the two-dimensional character of the method reflecting both mortality and labour market participation levels. In the first phase of analysis, the labour market expectancies were presented as the absolute number of years at age 15 in the investigated populations. In the second phase the labour market expectancies were counted as a share of expected years of life from age 15 onward before age 75, so as to adjust the expected years in the labour market in relation to the different mortality levels of European populations. In the third phase of analysis the labour market expectancies were counted as a proportion of the total life expectancy at age 15.

The results obtained from our first reference point resembled to a great extent the well-known differences between the member states in the total labour force participation rates of the working age population. Labour market life expectancy at age 15 was highest in Denmark, Sweden, the Netherlands and the United Kingdom (39.0, 38.8, 37.4 and 37.0 respectively). The lowest figures for expected years in the labour market were found in Malta, Hungary, Italy, Bulgaria and Luxembourg (28.1, 28.4, 29.4, 29.5 and 30.3 respectively).

After standardization of mortality levels – our second point of reference – the ranking order of countries changed to some extent, the Baltic countries showing the most substantial change by rising above the median value for the EU. The position of countries changed even more radically when comparisons were made from our third comparative point of reference, presenting the labour market expectancies as a share of the total life expectancy at age 15. In these comparisons most of the new member states moved up in the ranking to the extent that their "performance" in many cases approached that of the top countries in the EU. Labour market expectancies as a share of total life expectancy at age 15 were highest in Denmark, Sweden, Latvia and Estonia (61.2, 58.7, 58.5 and 58.1 percent respectively) while at the other end of the scale the respective share of active years of life was lowest in Malta, Italy, Luxembourg, Hungary and Greece, with shares of active years varying from 43.3 to 48.7 percent in relation to expected total years of life.

Gender

From the gender perspective the analyses revealed remarkable differences especially with respect to our second and third points of reference. For men, the length of working life was strongly correlated with mortality levels, which was a reflection, largely, of sharp differences between former Eastern and Western Europe. For women, the variation in mortality was smaller and instead, the differences in labour force participation and in the reconciliation of family life and paid work in various parts of Europe seemed to play a significant role.
In the case of men, the most dramatic relative changes, while looking at the labour market expectations in relation to the total life expectancy instead of expected absolute number of labour market years, were again observed in the Baltic countries, where the male mortality rates are notably high.

In contrast to the results concerning males, the relative position of countries in the results concerning the female labour market expectancies was rather similar with respect to our three points of reference.

Changes from 2001 to 2005

Changes from one calendar year to another were analysed only very briefly for the period from the year 2001 to the year 2005. The analyses showed wide differences between European countries with respect to how the two basic dimensions of our analyses – the total years of life and the years spent in the labour market – had developed between the investigated years. According to the analyses covering 25 member states 19 states showed an increase both in labour market expectancies and in total life expectancies at age 15. In 10 of them, the years spent in the labour force had increased faster than the total years of life. The development from 2001 to 2005 was least favourable in some new member states or candidate countries experiencing noticeable transitions in their economies.

The contribution of various age groups

A comparison of countries in terms of the contribution of various age groups to total labour market expectancy at age 15 confirmed our assumption that the range of variation in labour market years would be smallest in the prime ages 25–49. This means that differences in the total labour market expectancies at age 15 are to a great extent created through the contribution of the

youngest and oldest age groups to the total length of working lives. In 8 of 27 member states the contribution of the youngest age group (15–24) to the total working life expectancy was 5 years or more and in 7 out of them the large contribution of young people to the total length of working life consisted of a mixture of labour force participation combined with study.

The contribution of the oldest age groups to the total working life expectancy was by far the highest in Sweden. By and large, the high performance of the elderly population in the labour market seemed to concentrate to the same countries as the high working life performance of the younger age groups.

Contribution of working time models

While considering the role of part-time work in policies aimed at lengthening the life-time employment our starting point was that the relationship between these two phenomena is far from straightforward. Part-time work can be considered as one aspect of increasingly diverse working time patterns and as a response to needs for flexibility in different phases of the life whereas in some cases a high incidence of part-time work can equally well be a sign of a lack of opportunities and exclusive mechanisms preventing full-time participation.

An interesting result of the analyses was that the four top performance countries in the EU with respect to expected years in employment are at the same time those where the share of part-time work of total life time employment was largest (Denmark, Sweden, Netherland and the United Kingdom). The important role of part-time work in lengthening the total labour market expectations in these countries looks even more plausible taking into account that part-time work played a significant role, not only in women's, but also in men's expected life-time employment.

Lifelong learning

As the last aspect of our analyses we examined the overlap of lifelong learning with the expected years in and outside the labour market. The results seemed to be consistent with strategies considering lifelong learning as a tool to increase adaptability and flexibility of the labour markets so as to avoid segmentation of labour markets and exclusion of disadvantaged groups. According to the results the range of variation in average expected life time spent in lifelong learning extended from 0.5 years in Romania and Bulgaria to 10.6 years in Denmark. Interesting

differences between the countries were found in terms of how participation in lifelong learning overlapped with the time spent in and outside the labour market in the top performance countries: in Denmark and in Sweden the proportion of time spent in life long learning was about the same both in and outside the labour market, while in other top performance countries (Finland, the Netherlands, Slovenia and the United Kingdom) the coverage of lifelong learning was noticeable lower with regard to time spent outside the labour market.

Final conclusion

As a final conclusion from the results it may perhaps be argued that efforts to extend working lives should to a large degree be considered as part and parcel of policies aimed at health promotion, better reconciliation of family and working lives, flexible working arrangements especially for elderly workers and, in general, supportive institutional structures combining social security and labour market regulations in a coherent way that allows for individual adjustments in different phases of life.

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Appendix table 1. Expected years of life from age 15 to exact age 75 and the division of total years of life into years spent in and outside the labour market (Sullivan method). Finland 2005, both sexes.

Age	Number alive at exact age x (l_x)	Years lived in the age interval (L_x)	Years lived at age x and beyond until exact age 75 (T_x)	Expected years of life from age x to exact age 75 (e_x)	Activity rate (a_x)	Years in the labour force at age x (${}^aL_x$)	Years in the labour force at age x and beyond until exact age 75 (${}^aT_x$)	Expected years of life in the labour force (${}^ae_x$)	Expected years of life outside the labour force (${}^re_x$)
0	100 000	99 883	7 081 161	70.8	0.000	0	3 574 408	35.7	35.1
15	99 528	99 517	5 585 985	56.1	0.134	13 326	3 574 408	35.9	20.2
16	99 505	99 491	5 486 469	55.1	0.215	21 381	3 561 083	35.8	19.3
17	99 477	99 456	5 386 978	54.2	0.278	27 635	3 539 702	35.6	18.6
18	99 435	99 410	5 287 522	53.2	0.396	39 405	3 512 067	35.3	17.9
19	99 385	99 357	5 188 112	52.2	0.620	61 588	3 472 662	34.9	17.3
20	99 329	99 302	5 088 755	51.2	0.649	64 478	3 411 074	34.3	16.9
21	99 275	99 244	4 989 453	50.3	0.672	66 678	3 346 596	33.7	16.5
22	99 213	99 187	4 890 209	49.3	0.681	67 519	3 279 918	33.1	16.2
23	99 161	99 124	4 791 022	48.3	0.719	71 260	3 212 399	32.4	15.9
24	99 087	99 056	4 691 898	47.4	0.763	75 546	3 141 139	31.7	15.7
25	99 025	98 996	4 592 842	46.4	0.806	79 756	3 065 593	31.0	15.4
26	98 967	98 940	4 493 846	45.4	0.833	82 429	2 985 837	30.2	15.2
27	98 913	98 883	4 394 906	44.4	0.844	83 430	2 903 408	29.4	15.1
28	98 852	98 814	4 296 023	43.5	0.865	85 456	2 819 978	28.5	14.9
29	98 775	98 746	4 197 210	42.5	0.865	85 378	2 734 522	27.7	14.8
30	98 717	98 678	4 098 464	41.5	0.854	84 277	2 649 144	26.8	14.7
31	98 638	98 593	3 999 786	40.6	0.850	83 782	2 564 867	26.0	14.5
32	98 547	98 496	3 901 194	39.6	0.868	85 490	2 481 085	25.2	14.4
33	98 445	98 403	3 802 698	38.6	0.864	85 036	2 395 595	24.3	14.3
34	98 361	98 322	3 704 295	37.7	0.878	86 288	2 310 559	23.5	14.2
35	98 282	98 216	3 605 973	36.7	0.884	86 837	2 224 271	22.6	14.1
36	98 150	98 092	3 507 757	35.7	0.876	85 906	2 137 433	21.8	14.0
37	98 034	97 969	3 409 665	34.8	0.889	87 083	2 051 527	20.9	13.9
38	97 903	97 838	3 311 697	33.8	0.883	86 378	1 964 445	20.1	13.8
39	97 772	97 699	3 213 859	32.9	0.904	88 319	1 878 067	19.2	13.7
40	97 625	97 544	3 116 161	31.9	0.911	88 844	1 789 748	18.3	13.6
41	97 463	97 378	3 018 617	31.0	0.905	88 140	1 700 903	17.5	13.5
42	97 292	97 201	2 921 239	30.0	0.889	86 432	1 612 763	16.6	13.4
43	97 110	97 006	2 824 038	29.1	0.894	86 755	1 526 331	15.7	13.4
44	96 902	96 779	2 727 032	28.1	0.904	87 484	1 439 576	14.9	13.3
45	96 656	96 517	2 630 253	27.2	0.924	89 165	1 352 092	14.0	13.2
46	96 378	96 247	2 533 736	26.3	0.915	88 109	1 262 927	13.1	13.2
47	96 116	95 967	2 437 489	25.4	0.894	85 797	1 174 818	12.2	13.1
48	95 817	95 643	2 341 523	24.4	0.906	86 656	1 089 021	11.4	13.1
49	95 468	95 288	2 245 880	23.5	0.886	84 393	1 002 365	10.5	13.0

Age	Number alive at age x (l_x)	Years lived in the age interval (L_x)	Years lived at age x and beyond until exact age 75 (T_x)	Expected years of life from age x to exact age 75 (e_x)	Activity rate (a_x)	Years in the labour force at age x (${}^aL_x$)	Years in the labour force at age x and beyond until exact age 75 (${}^aT_x$)	Expected years of life in the labour force (${}^ae_x$)	Expected years of life outside the labour force (${}^re_x$)
50	95 108	94 898	2 150 592	22.6	0.885	84 023	917 971	9.7	13.0
51	94 687	94 467	2 055 695	21.7	0.867	81 933	833 948	8.8	12.9
52	94 246	94 014	1 961 228	20.8	0.857	80 616	752 015	8.0	12.8
53	93 781	93 531	1 867 215	19.9	0.843	78 813	671 399	7.2	12.8
54	93 280	93 013	1 773 684	19.0	0.839	78 053	592 585	6.4	12.7
55	92 746	92 469	1 680 671	18.1	0.803	74 254	514 533	5.5	12.6
56	92 191	91 881	1 588 203	17.2	0.738	67 805	440 279	4.8	12.5
57	91 571	91 254	1 496 322	16.3	0.707	64 474	372 474	4.1	12.3
58	90 937	90 587	1 405 068	15.5	0.659	59 658	308 000	3.4	12.1
59	90 237	89 827	1 314 481	14.6	0.640	57 450	248 342	2.8	11.8
60	89 416	89 066	1 224 654	13.7	0.512	45 633	190 892	2.1	11.6
61	88 715	88 270	1 135 589	12.8	0.431	38 055	145 259	1.6	11.2
62	87 825	87 350	1 047 319	11.9	0.366	31 984	107 204	1.2	10.7
63	86 875	86 423	959 969	11.0	0.234	20 192	75 220	0.9	10.2
64	85 971	85 520	873 546	10.2	0.178	15 235	55 028	0.6	9.5
65	85 069	84 520	788 026	9.3	0.088	7 438	39 792	0.5	8.8
66	83 970	83 444	703 506	8.4	0.071	5 945	32 355	0.4	8.0
67	82 918	82 356	620 062	7.5	0.065	5 374	26 410	0.3	7.2
68	81 794	81 173	537 706	6.6	0.063	5 145	21 036	0.3	6.3
69	80 551	79 910	456 534	5.7	0.048	3 850	15 891	0.2	5.5
70	79 269	78 558	376 624	4.8	0.032	2 542	12 041	0.2	4.6
71	77 847	77 084	298 066	3.8	0.039	2 971	9 499	0.1	3.7
72	76 320	75 476	220 982	2.9	0.031	2 377	6 528	0.1	2.8
73	74 632	73 698	145 506	1.9	0.030	2 192	4 151	0.1	1.9
74	72 763	71 809	71 809	1.0	0.027	1 959	1 959	0.0	1.0
75	70 854	69 794	0	0.0	0.000	0	0	0.0	0.0

l_x = survival figures from 2005 life table

a_x = activity rate

$L_x = (l_x + l_{x+1})/2$

${}^aL_x = a_x * L_x$

$T_x = \sum_{i=x}^{\infty} L_i$

${}^aT_x = \sum_{i=x}^{74} {}^aL_i$

$e_x = T_x/l_x$

${}^ae_x = {}^aT_x/l_x$

${}^re_x = ex - {}^ae_x$

Source:
Eurostat. Population statistics and Labour force survey 2005.

Appendix table 2a. Total life expectancy and expected years in the labour market at age 15 and participation rates of 15–74 year-old population, European Union 2005, both sexes.

Country		Expected years at age 15, absolute numbers				Labour market years % of total e15		Participation rates, % of 15–74 year-olds	
		Expected years of life at age 15	Expected years of life from age 15 to exact age 74	Active years	In employ-ment	Active years	In emp-loyment	Activity rate	Employ-ment rate
BE	Belgium	64.5	56.5	31.4	28.7	48.7	44.4	58.9	53.9
BG	Bulgaria	58.7	54.0	29.5	26.5	50.3	45.2	54.1	48.7
CZ	Czech Republic	61.5	55.5	33.7	31.0	54.7	50.4	63.8	58.7
DK	Denmark	63.7	56.3	39.0	37.0	61.2	58.2	72.1	68.6
DE	Germany	64.9	56.6	35.8	31.7	55.2	48.9	64.4	57.3
EE	Estonia	58.5	53.1	34.0	31.4	58.1	53.6	63.3	58.3
IE	Ireland	65.0	56.8	34.6	33.1	53.2	51.0	65.8	63.0
GR	Greece	64.7	56.8	31.5	28.3	48.7	43.8	58.3	52.6
ES	Spain	65.8	56.9	32.5	29.5	49.4	44.8	62.0	56.3
FR	France	65.7	56.5	33.0	30.0	50.2	45.7	62.5	57.0
IT	Italy[a]	66.4	57.1	29.4	26.9	44.2	40.6	54.7	50.4
CY	Cyprus	64.6	56.8	35.3	28.7	54.7	44.4	66.9	63.3
LV	Latvia	56.9	52.1	33.3	30.3	58.5	53.3	62.6	57.0
LT	Lithuania	57.0	52.1	31.9	29.3	56.0	51.4	61.1	56.0
LU	Luxembourg	64.9	56.6	30.3	28.9	46.8	44.6	59.1	56.5
HU	Hungary	58.6	53.5	28.4	26.3	48.4	44.9	54.4	50.5
MT	Malta	65.0	57.3	28.1	26.2	43.3	40.3	52.5	48.7
NL	Netherlands	65.1	56.9	37.4	35.6	57.5	54.7	69.7	66.4
AT	Austria	65.1	56.6	34.6	32.7	53.1	50.3	64.9	61.5
PL	Poland	60.7	54.6	30.6	25.3	50.3	41.7	58.6	48.2
PT	Portugal	63.6	56.1	36.1	33.4	56.8	52.5	67.1	61.9
RO	Romania	58.6	53.9	30.6	28.5	52.3	48.6	57.7	53.6
SI	Slovenia	63.0	55.9	33.4	31.2	53.1	49.6	63.5	59.4
SK	Slovakia	59.9	54.6	32.2	27.1	53.8	45.2	63.1	52.9
FI	Finland	64.6	56.1	35.9	32.8	55.6	50.8	66.7	61.1
SE	Sweden	66.1	57.2	38.8	35.8	58.7	54.2	70.8	65.3
UK	United Kingdom	64.7	56.6	37.0	35.2	57.2	54.4	68.0	64.8

[a] = Mortality data for Italy from 2004.

Appendix table 2b. Total life expectancy and expected years in the labour market at age 15 and participation rates of 15–74 year-old population, European Union 2005, males.

Country		Expected years at age 15, absolute numbers				Labour market years % of total e15		Participation rates, % of 15–74 year-olds	
		Expected years of life at age 15	Expected years of life from age 15 to exact age 74	Active years	In employ-ment	Active years	In emp-loyment	Activity rate	Employ-ment rate
BE	Belgium	61.7	55.4	34.6	31.8	56.0	51.6	66	61
BG	Bulgaria	55.2	51.9	31.3	28.0	56.6	50.7	59.4	53.3
CZ	Czech Republic	58.4	53.9	36.8	34.4	63.0	58.9	72.2	67.6
DK	Denmark	61.5	55.5	40.8	38.9	66.3	63.2	76.4	73
DE	Germany	62.2	55.6	38.6	34.1	62.0	54.8	70.6	62.6
EE	Estonia	53	49.9	34.4	31.5	65.0	59.5	68.2	62.2
IE	Ireland	62.7	56.0	39.8	38.0	63.5	60.7	75.6	72.2
GR	Greece	62.3	55.5	37.0	34.7	59.5	55.7	70.3	66
ES	Spain	62.5	55.6	37.7	35.0	60.3	56.0	72.8	67.7
FR	France	62.2	55.2	35.2	32.3	56.6	51.9	67.9	62.4
IT	Italy[a]	63.4	56.2	35.0	32.7	55.2	51.5	66.3	62.2
CY	Cyprus	62.5	55.9	40.7	38.8	65.1	62.1	77.5	74.1
LV	Latvia	51.3	48.6	34.2	31.1	66.7	60.7	69.1	62.9
LT	Lithuania	51.2	48.3	32.3	29.7	63.1	57.9	66.1	60.7
LU	Luxembourg	62	55.6	34.3	33.0	55.4	53.3	68.3	65.9
HU	Hungary	54.4	51.1	30.7	28.5	56.4	52.4	61.7	57.4
MT	Malta	62.9	56.6	38.1	35.7	60.6	56.7	72.7	67.9
NL	Netherlands	62.8	56.4	40.7	38.9	64.8	61.9	76.6	73.2
AT	Austria	62.2	55.5	37.6	35.7	60.5	57.4	71.8	68.3
PL	Poland	56.4	52.3	33.0	27.7	58.4	49.1	65.7	54.8
PT	Portugal	60.4	54.6	38.5	35.9	63.7	59.4	73.4	68.4
RO	Romania	55.3	51.8	33.2	30.6	60.0	55.4	64.9	59.8
SI	Slovenia	59.4	54.3	35.2	33.1	59.3	55.7	68.9	64.7
SK	Slovakia	56	52.4	35.3	29.9	63.0	53.5	71.2	60.2
FI	Finland	61.1	54.8	36.5	33.4	59.8	54.7	69.3	63.6
SE	Sweden	63.8	56.6	40.0	36.9	62.6	57.8	73.8	67.9
UK	United Kingdom	62.7	55.9	40.2	38.1	64.2	60.8	74.6	70.8

[a] = Mortality data for Italy from 2004.

Appendix table 2c. Total life expectancy and expected years in the labour market at age 15 and participation rates of 15–74 year-old population, European Union 2005, females.

Country		Expected years at age 15, absolute numbers				Labour market years % of total e15		Participation rates, % of 15–74 year-olds	
		Expected years of life at age 15	Expected years of life from age 15 to exact age 74	Active years	In employ-ment	Active years	In emp-loyment	Activity rate	Employ-ment rate
BE	Belgium	67.3	57.5	28.1	25.4	41.8	37.7	51.8	46.8
BG	Bulgaria	62.3	56.2	27.7	25.0	44.5	40.1	49.1	44.2
CZ	Czech Republic	64.6	57.1	30.4	27.4	47.1	42.5	55.6	50.1
DK	Denmark	65.9	57.1	37.1	35.1	56.3	53.2	67.7	64.1
DE	Germany	67.4	57.7	32.9	29.3	48.8	43.5	58.2	52
EE	Estonia	63.9	56.3	33.5	31.1	52.5	48.7	59.1	54.9
IE	Ireland	67.2	57.6	29.1	28.0	43.3	41.6	55.9	53.7
GR	Greece	67.1	58.1	25.8	21.8	38.5	32.5	46.8	39.6
ES	Spain	69.1	58.2	27.1	23.8	39.2	34.4	51.1	44.9
FR	France	69.2	57.8	30.8	27.8	44.6	40.1	57.4	51.8
IT	Italy[a]	69.2	58.1	23.7	21.1	34.2	30.6	43.3	39
CY	Cyprus	66.8	57.8	30.0	28.1	44.9	42.0	57	53.3
LV	Latvia	62.4	55.6	32.3	29.5	51.7	47.2	56.9	51.9
LT	Lithuania	63.0	55.9	31.6	28.9	50.1	45.9	56.7	51.9
LU	Luxembourg	67.7	57.7	26.2	24.6	38.7	36.4	50	47.1
HU	Hungary	62.8	55.9	26.0	24.0	41.4	38.3	47.8	44.2
MT	Malta	67.1	58.0	18.1	16.6	26.9	24.7	32.7	29.8
NL	Netherlands	67.2	57.5	34.0	32.3	50.6	48.0	62.8	59.6
AT	Austria	67.7	57.8	31.4	29.7	46.4	43.8	58.1	54.9
PL	Poland	65.0	56.9	28.1	22.8	43.2	35.1	51.9	41.9
PT	Portugal	66.8	57.6	33.6	30.6	50.3	45.9	61.2	55.8
RO	Romania	62.1	56.0	28.0	26.3	45.1	42.3	50.8	47.6
SI	Slovenia	66.4	57.4	31.4	29.2	47.4	44.0	58.2	54.1
SK	Slovakia	63.7	56.8	29.2	24.2	45.8	38.0	55.4	45.9
FI	Finland	67.9	57.6	35.3	32.2	52.0	47.4	64.2	58.6
SE	Sweden	68.2	57.8	37.6	34.7	55.1	50.9	67.8	62.6
UK	United Kingdom	66.6	57.4	33.8	32.4	50.8	48.6	61.6	59

[a] = Mortality data for Italy from 2004.

Appendix table 3a. Expected years in the labour market at age 15 and the impact of various age groups on the total labour market expectation, European Union 2005, both sexes.

County		Expected years of life at age 15	Expected years of life from age 15 to exact age 74	Lost years through death (from 15 to 74)	Expected years in the labour market					Impact of the age-group, % of total years in the LM	
					Total	From age 15 to 24	From age 25 to 49	From age 50 to 64	From age 65 to 74	15–24	50–74
BE	Belgium	64.5	56.5	3.5	31.4	3.5	21.4	6.3	0.2	11.1	20.8
BG	Bulgaria	58.7	54.0	6.0	29.5	3.0	19.7	6.6	0.2	10.0	23.2
CZ	Czech Republic	61.5	55.5	4.5	33.7	3.3	21.8	8.1	0.4	9.8	25.4
DK	Denmark	63.7	56.3	3.7	39.0	6.8	21.8	9.6	0.8	17.5	26.6
DE	Germany	64.9	56.6	3.4	35.8	5.0	21.5	8.9	0.4	14.0	25.9
EE	Estonia	58.5	53.1	6.9	34.0	3.6	20.8	8.5	1.1	10.5	28.3
IE	Ireland	65	56.8	3.2	34.6	5.2	20.2	8.3	0.9	14.9	26.6
GR	Greece	64.7	56.8	3.2	31.5	3.2	20.5	7.3	0.5	10.1	24.8
ES	Spain	65.8	56.9	3.1	32.5	4.5	20.3	7.5	0.3	13.7	23.9
FR	France	65.7	56.5	3.5	33.0	3.9	21.7	7.3	0.2	11.7	22.5
IT	Italy[a]	66.4	57.1	2.9	29.4	3.3	19.4	6.3	0.4	11.2	22.9
CY	Cyprus	64.6	56.8	3.2	35.3	4.2	21.3	8.5	1.2	12.0	27.5
LV	Latvia	56.9	52.1	7.9	33.3	3.9	20.5	7.9	0.9	11.7	26.6
LT	Lithuania	57	52.1	7.9	31.9	2.7	21.1	7.8	0.4	8.5	25.6
LU	Luxembourg	64.9	56.6	3.4	30.3	2.9	21.0	6.4	0.1	9.4	21.3
HU	Hungary	58.6	53.5	6.5	28.4	2.6	19.6	5.9	0.2	9.3	21.5
MT	Malta	65	57.3	2.7	28.1	5.5	17.0	5.4	0.2	19.7	19.9
NL	Netherlands	65.1	56.9	3.1	37.4	7.1	21.7	8.1	0.6	19.0	23.1
AT	Austria	65.1	56.6	3.4	34.6	5.9	21.5	6.8	0.4	17.0	20.7
PL	Poland	60.7	54.6	5.4	30.6	3.4	21.1	5.5	0.6	11.2	19.8
PT	Portugal	63.6	56.1	3.9	36.1	4.0	21.7	8.5	1.9	11.2	28.6
RO	Romania	58.6	53.9	6.1	30.6	3.2	19.6	6.4	1.5	10.4	25.8
SI	Slovenia	63	55.9	4.1	33.4	3.8	22.5	6.3	0.8	11.5	21.1
SK	Slovakia	59.9	54.6	5.4	32.2	3.6	21.7	6.8	0.2	11.1	21.5
FI	Finland	64.6	56.1	3.9	35.9	5.1	21.6	8.8	0.4	14.2	25.7
SE	Sweden	66.1	57.2	2.8	38.8	5.1	22.0	10.9	0.8	13.2	30.1
UK	United Kingdom	64.7	56.6	3.4	37.0	6.2	20.8	9.1	0.8	16.8	26.9

[a] = Mortality data for Italy from 2004.

Appendix table 3b. Expected years in the labour market at age 15 and the impact of various age groups on the total labour market expectation, European Union 2005, males.

Country		Expected years of life at age 15	Expected years of life from age 15 to exact age 74	Lost years through death from 15 to 74	Expected years in the labour market					Impact of the age-group, % of total years in the LM	
					Total	From age 15 to 24	From age 25 to 49	From age 50 to 64	From age 65 to 74	15–24	50–74
BE	Belgium	61.7	55.4	4.6	34.6	3.8	22.9	7.6	0.3	10.9	23.0
BG	Bulgaria	55.2	51.9	8.1	31.3	3.3	20.4	7.3	0.3	10.5	24.3
CZ	Czech Republic	58.4	53.9	6.1	36.8	3.8	23.3	9.1	0.6	10.2	26.4
DK	Denmark	61.5	55.5	4.5	40.8	7.0	22.5	10.1	1.1	17.2	27.6
DE	Germany	62.2	55.6	4.4	38.6	5.3	23.0	9.8	0.5	13.7	26.7
EE	Estonia	53.0	49.9	10.1	34.4	4.1	21.4	7.9	1.0	11.9	25.9
IE	Ireland	62.7	56.0	4.0	39.8	5.5	22.8	10.1	1.4	13.8	29.0
GR	Greece	62.3	55.5	4.5	37.0	3.5	23.3	9.5	0.8	9.4	27.8
ES	Spain	62.5	55.6	4.4	37.7	4.9	22.7	9.7	0.4	13.1	26.6
FR	France	62.2	55.2	4.8	35.2	4.3	23.1	7.6	0.2	12.2	22.2
IT	Italy[a]	63.4	56.2	3.8	35.0	3.8	22.4	8.1	0.7	10.8	25.1
CY	Cyprus	62.5	55.9	4.1	40.7	4.7	23.3	10.8	1.8	11.5	31.2
LV	Latvia	51.3	48.6	11.4	34.2	4.5	21.0	7.7	1.0	13.2	25.3
LT	Lithuania	51.2	48.3	11.7	32.3	3.2	21.0	7.7	0.4	9.8	25.1
LU	Luxembourg	62.0	55.6	4.4	34.3	3.2	23.4	7.6	0.1	9.3	22.5
HU	Hungary	54.4	51.1	8.9	30.7	3.0	21.2	6.2	0.2	9.8	21.0
MT	Malta	62.9	56.6	3.4	38.1	5.7	23.3	8.6	0.4	15.0	23.8
NL	Netherlands	62.8	56.4	3.6	40.7	7.1	23.3	9.5	0.8	17.5	25.4
AT	Austria	62.2	55.5	4.5	37.6	6.3	22.9	7.9	0.5	16.8	22.4
PL	Poland	56.4	52.3	7.7	33.0	3.8	22.2	6.3	0.7	11.5	21.3
PT	Portugal	60.4	54.6	5.4	38.5	4.4	22.6	9.3	2.2	11.4	29.8
RO	Romania	55.3	51.8	8.2	33.2	3.7	21.1	7.0	1.4	11.0	25.4
SI	Slovenia	59.4	54.3	5.7	35.2	4.2	22.8	7.3	1.0	11.9	23.5
SK	Slovakia	56.0	52.4	7.6	35.3	4.0	23.0	8.1	0.2	11.3	23.5
FI	Finland	61.1	54.8	5.2	36.5	5.2	22.3	8.5	0.5	14.2	24.8
SE	Sweden	63.8	56.6	3.4	40.0	5.1	22.7	11.2	1.1	12.7	30.6
UK	United Kingdom	62.7	55.9	4.1	40.2	6.6	22.5	10.1	1.0	16.3	27.8

[a] = Mortality data for Italy from 2004.

Appendix table 3c. Expected years in the labour market at age 15 and the impact of various age groups on the total labour market expectation, European Union 2005, females.

Country		Expected years of life at age 15	Expected years of life from age 15 to exact age 74	Lost years through death from 15 to 74	Expected years in the labour market					Impact of the age-group % of total years in the LM	
					Total	From age 15 to 24	From age 25 to 49	From age 50 to 64	From age 65 to 74	15–24	50–74
BE	Belgium	67.3	57.5	2.5	28.10	3.19	19.82	4.99	0.11	11.4	18.1
BG	Bulgaria	62.3	56.2	3.8	27.75	2.59	19.05	5.94	0.17	9.4	22.0
CZ	Czech Republic	64.6	57.1	2.9	30.41	2.81	20.18	7.09	0.33	9.2	24.4
DK	Denmark	65.9	57.1	2.9	37.08	6.61	20.96	9.08	0.43	17.8	25.6
DE	Germany	67.4	57.7	2.3	32.92	4.71	19.97	7.95	0.28	14.3	25.0
EE	Estonia	63.9	56.3	3.7	33.52	3.01	20.21	9.16	1.15	9.0	30.7
IE	Ireland	67.2	57.6	2.4	29.10	4.81	17.52	6.34	0.43	16.5	23.3
GR	Greece	67.1	58.1	1.9	25.85	2.87	17.66	5.04	0.28	11.1	20.6
ES	Spain	69.1	58.2	1.8	27.12	3.97	17.67	5.29	0.18	14.6	20.2
FR	France	69.2	57.8	2.2	30.83	3.45	20.30	6.92	0.16	11.2	23.0
IT	Italy[a]	69.2	58.1	1.9	23.66	2.76	16.24	4.50	0.17	11.7	19.7
CY	Cyprus	66.8	57.8	2.2	30.01	3.84	19.36	6.18	0.62	12.8	22.7
LV	Latvia	62.4	55.6	4.4	32.29	3.24	20.03	8.23	0.79	10.0	27.9
LT	Lithuania	63.0	55.9	4.1	31.58	2.24	21.12	7.87	0.35	7.1	26.0
LU	Luxembourg	67.7	57.7	2.3	26.19	2.53	18.55	5.06	0.04	9.7	19.5
HU	Hungary	62.8	55.9	4.1	26.02	2.29	17.96	5.65	0.12	8.8	22.2
MT	Malta	67.1	58.0	2.0	18.07	5.36	10.49	2.17	0.05	29.6	12.3
NL	Netherlands	67.2	57.5	2.5	34.03	7.08	20.05	6.59	0.30	20.8	20.3
AT	Austria	67.7	57.8	2.2	31.44	5.42	20.15	5.65	0.23	17.2	18.7
PL	Poland	65.0	56.9	3.1	28.07	3.03	19.95	4.64	0.45	10.8	18.1
PT	Portugal	66.8	57.6	2.4	33.59	3.65	20.67	7.69	1.58	10.9	27.6
RO	Romania	62.1	56.0	4.0	28.03	2.69	17.97	5.74	1.64	9.6	26.3
SI	Slovenia	66.4	57.4	2.6	31.44	3.45	22.22	5.11	0.66	11.0	18.3
SK	Slovakia	63.7	56.8	3.2	29.20	3.14	20.41	5.53	0.12	10.8	19.3
FI	Finland	67.9	57.6	2.4	35.30	5.06	20.82	9.13	0.28	14.3	26.7
SE	Sweden	68.2	57.8	2.2	37.59	5.21	21.32	10.57	0.50	13.9	29.4
UK	United Kingdom	66.6	57.4	2.6	33.85	5.91	19.21	8.10	0.63	17.5	25.8

[a] = Mortality data for Italy from 2004.

Appendix table 4. Total life expectancy and expected years in the labour market at age 15 and participation rates of 15–74 year-old population, European Union 2001, both sexes.

Country		Expected years at age 15, absolute numbers				Labour market years % of total e15		Participation rates, % of 15–74 year-old population	
		Expected years of life at age 15	Expected years of life from age 15 to exact age 74	Active years	In employ-ment	Active years	In emp-loyment	Activity rate	Employ-ment rate
BE	Belgium	63.7	56.1	29.8	27.6	46.7	43.3	55.9	52.4
BG	Bulgaria	58.3	53.9	29.7	24.0	51.0	41.2	55.4	44.4
CZ	Czech Republic	60.9	55.1	33.4	30.7	54.9	50.3	63.6	58.5
DK	Denmark	62.6	55.8	38.3	36.3	61.2	58.0	71.3	68.3
DE	Germany	64.1	56.3	34.5	31.8	53.9	49.6	62.6	57.7
EE	Estonia	56.7	51.9	33.3	28.9	58.7	50.9	62.7	54.9
IE	Ireland	62.8	56.1	33.5	32.0	53.3	50.9	62.9	60.6
GR	Greece	64.0	56.6	30.6	27.5	47.9	43.0	55.5	49.7
ES	Spain	65.2	56.6	30.3	27.1	46.4	41.5	56.7	50.8
FR	France	64.8	56.1	31.7	29.0	49.0	44.7	60.7	55.4
IT	Italy	65.8	57.0	28.7	25.7	43.6	39.1	53.0	47.9
CY	Cyprus	..	56.7	34.8	33.4	..	..	65.4	62.8
LV	Latvia	..	..	..	..	..	..	60.7	52.7
LT	Lithuania	57.6	52.3	32.7	27.2	56.8	47.2	63.2	52.6
LU	Luxembourg	63.7	56.1	28.8	28.3	45.3	44.4	57.4	56.3
HU	Hungary	58.3	53.3	27.5	25.9	47.3	44.4	52.6	49.6
MT	Malta	64.5	57.1	28.4	26.5	44.0	41.1	53.5	49.7
NL	Netherlands	64.0	56.5	36.1	35.3	56.4	55.2	68.7	67.3
AT	Austria	64.3	56.3	33.6	32.1	52.3	49.9	63.4	60.9
PL	Poland	60.0	54.3	31.1	25.7	51.8	42.8	60.1	49.0
PT	Portugal	62.7	55.6	35.8	34.3	57.1	54.7	65.9	63.4
RO	Romania	58.0	53.4	34.2	32.6	59.0	56.3	65.2	60.8
SI	Slovenia	61.8	55.2	32.2	30.2	52.2	48.8	61.1	57.6
SK	Slovakia	59.3	54.3	32.5	26.3	54.7	44.3	64.0	51.6
FI	Finland	63.6	56.0	35.5	32.7	55.8	51.4	68.9	61.8
SE	Sweden	65.3	57.0	38.0	36.3	58.2	55.6	70.3	67.0
UK	United Kingdom	63.8	56.3	36.5	34.5	57.3	54.1	67.2	64.1