



# Europe's Ageing Demography

ILC-UK 2014 EU Factpack

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POPULATION PATTERNS  
Seminar Series





# Europe's ageing demography

Europe is going grey. As part of the ILC-UK population patterns series, supported by Partnership, *Europe's Ageing Demography* explores the changing pattern of ageing across Europe, and examine the implications of this for both individuals and governments.

While it is currently the Northern and Western European countries which have the oldest populations, by 2060 many of the countries in the East will have the highest proportions over the age of 65. While the rest of Europe will see their populations rise, or at least remain constant, due to emigration and low birth rates the population of Eastern Europe is actually projected to fall by almost 20% in the next 50 years.

Europe as a whole must adapt to a new world where it is projected that almost 1 in 3 people will be over 65, and more than 1 in 10 will be over the age of 80.

This accessible pack of statistics, supported by the specialist insurer Partnership, illustrates the reality of what it means to be old in Europe today and the demographic changes Europe will experience over the next half century.

This factpack sets out the evidence on a number of areas including **health and life expectancy**, with men born in Western Europe today expected to live for 67.5 years in good health. It also includes a focus feature on **pensioner poverty** with evidence showing that over 70% of Bulgarian pensioners living in material deprivation. And it looks at the **employment and retirement** prospects of older workers, where it finds that on average, only 1 in 2 55-64 year olds are employed across the region.

The factpack also investigates the costs of ageing, comparing **spending on pensions, health and long term care** across Europe. Here it finds that while Denmark spends over €5,000 euros per person on social protection in old age, Latvia, Romania and Croatia spend only one tenth of this.

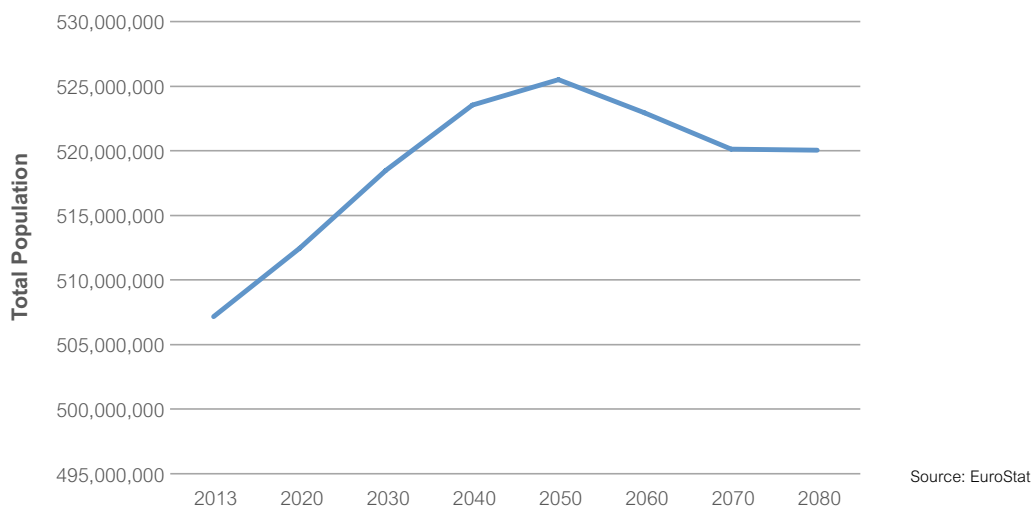
Europe's ageing population poses challenges for society, governments and businesses. This factpack provides the hard evidence which will be crucial for guiding the responses of both national governments and the European Parliament to Europe's demographic challenges. We have not produced a lengthy commentary on the analysis. But rather, this factpack sets the scene for further work on this important area.

**The ILC-UK Population Patterns Seminar Series considers the evidence base of our changing demography and explores how policy makers need to respond to demographic change. Thanks to Partnership, in particular Richard Willets, Jim Boyd and Caroline Jackson for their support for the #populationpatterns seminar series.**

# The European population is a growing population...

- In 2013 the population of the EU (28 countries) was roughly 507 million.
- Projections show a rise in the European population of over 18 million (3.6%) in the next 35 years, with the population peaking in 2050 at 525.5 million.
- Europe's population will then decline slightly and stabilise at 520 million towards the end of the century.

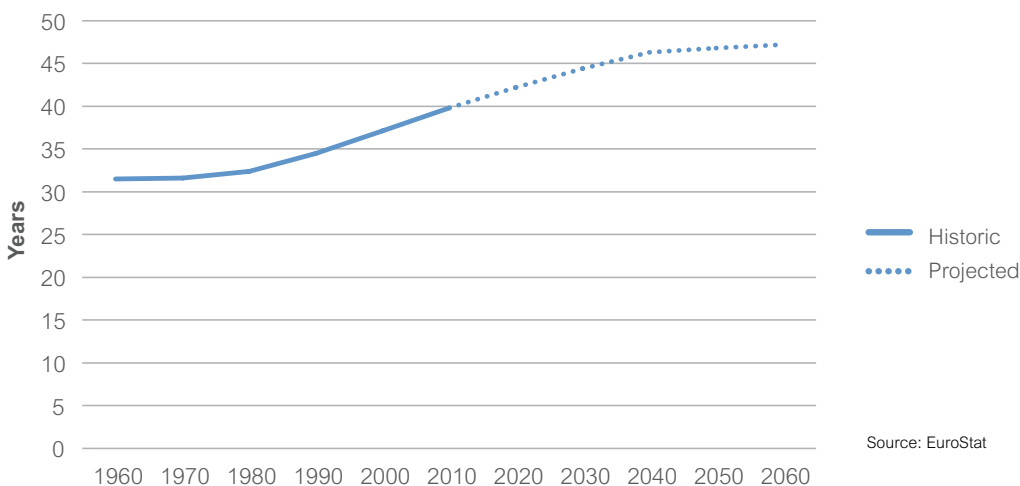
**Figure 1:** Projected population of the EU (28 countries)



## ...and an ageing population

- The median age in Europe has risen by 8.3 years in the last half a century, from 31.5 in 1960 to 39.8 in 2010. It is projected to rise by another 7.4 years, to 47.2, by 2060.
- The percentage of Europeans aged over 65 is projected to rise from 16.0% in 2010 to 29.3% in 2060.
- The European population aged over 80 is set to rise significantly. In 1960 just 1.4% of Europeans were over 80. This figure reached 4.1% in 2010 and is projected to increase to 11.5% by 2060.

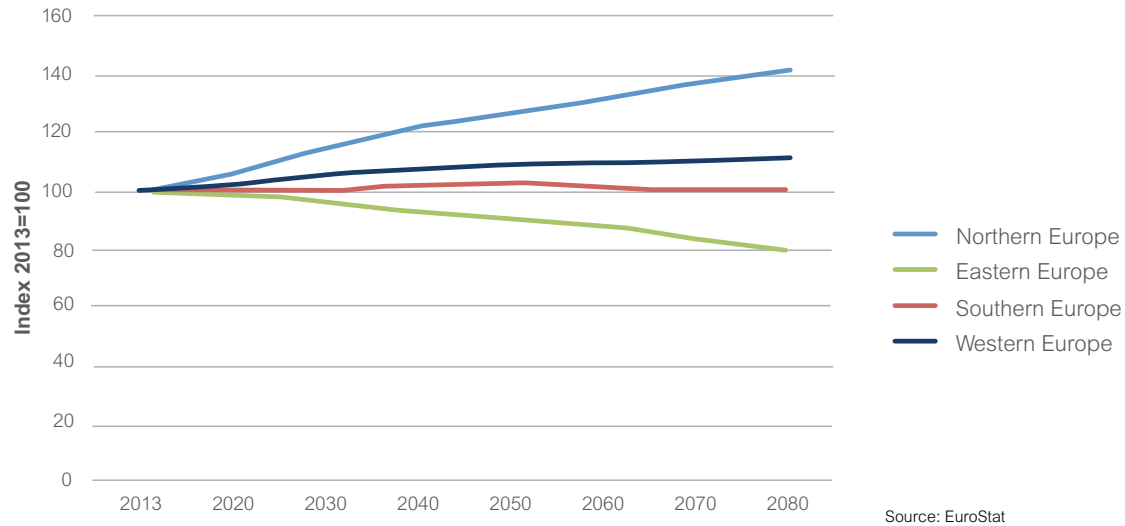
**Figure 2:** The median age in Europe (1960-2060)



# A Pan European perspective hides regional differences

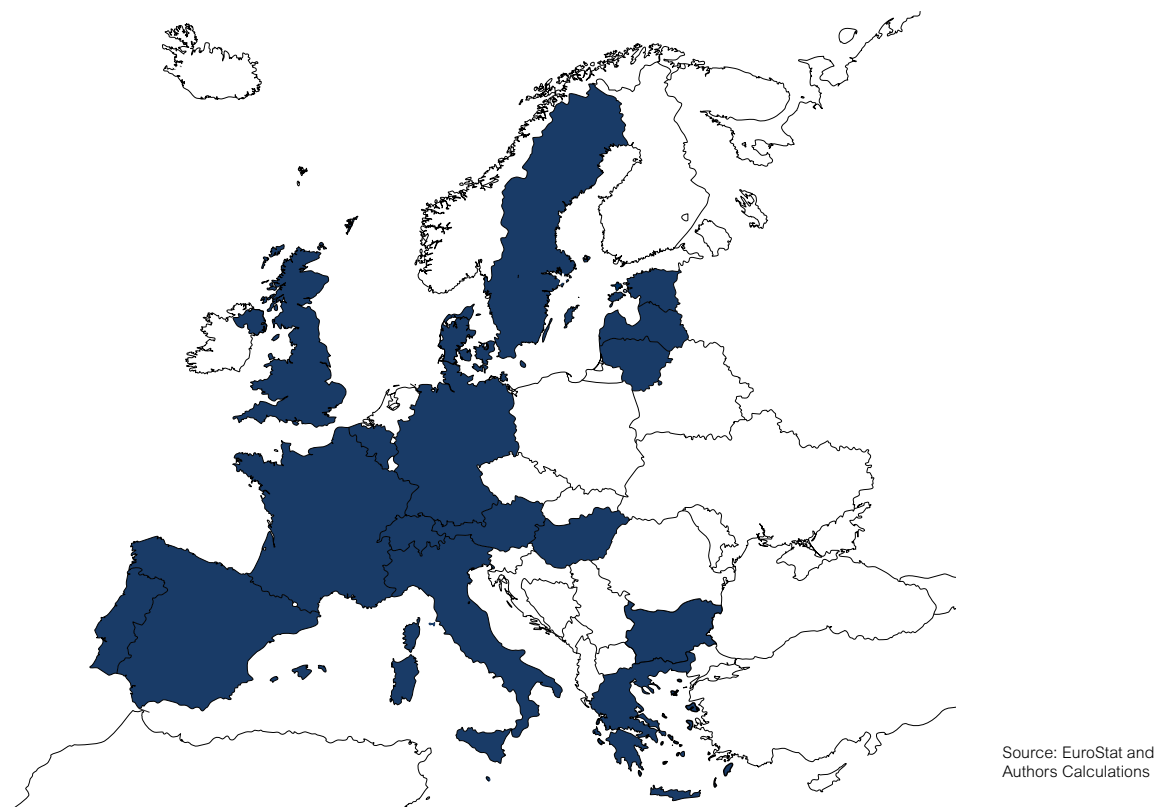
- The population of Northern Europe is projected to rise most sharply, increasing by 8% in the years up to 2030.
- Eastern Europe's population is actually projected to fall, by up to 20% over the next 65 years.

**Figure 3:** Regional population changes in Europe, 2013=100

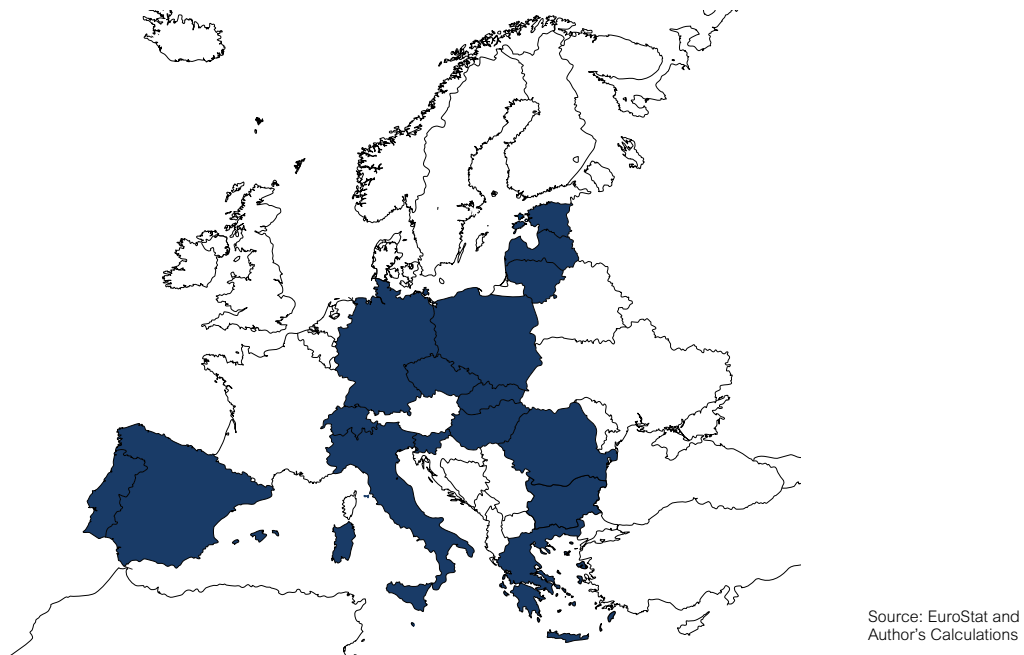


- The pattern of ageing in Europe is changing.
- In the 20<sup>th</sup> century it was Western and Northern Europe that had the oldest populations, but by 2060 this will be almost reversed, with the oldest populations in Eastern and Southern Europe.
- In 2010 the percentage over 65 was highest in Germany (20.7%) but by 2060 it will be highest in Latvia (35.7%).

**Figure 4:** Countries with proportions of over 65s above the EU average in 2010.



**Figure 5:** Countries projected to have proportions of over 65s above the EU average in 2060.



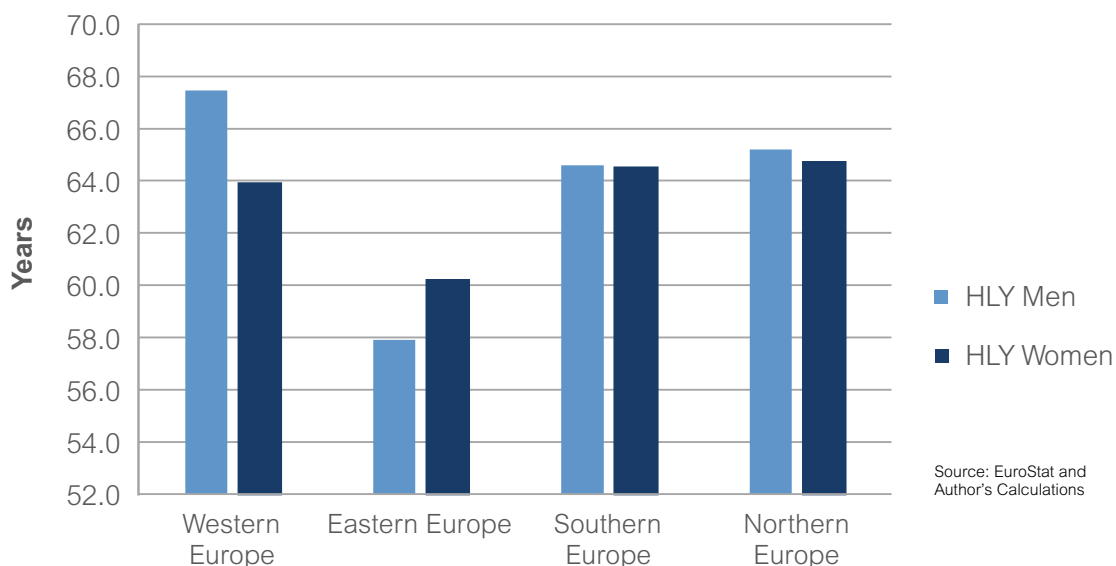
## A longer, healthier life?

- In Europe, in 2012, life expectancy at birth was 77.5 for men and 83.1 for women<sup>2</sup>.
- Life expectancy ranged from 68.4 for men in Lithuania to 85.5 for women in Spain.

A healthy life year (HLY) is defined as a year lived in full health. Life expectancy stated in terms of healthy life years gives a better indication of individuals' quality of life.

- In 2012 European men could expect to live for 61.2 healthy years and European women for 61.9 healthy years<sup>3</sup>.
- Thus while women in Europe tend to live significantly longer than men, many of their extra years are spent in ill-health.
- Regionally<sup>4</sup> we can see that Eastern Europe significantly lags behind in terms of health life years. Men in Eastern Europe can expect just 58 healthy years whereas men in Western Europe can expect close to 68.

**Figure 6:** Expected health life years at birth in European regions, 2012

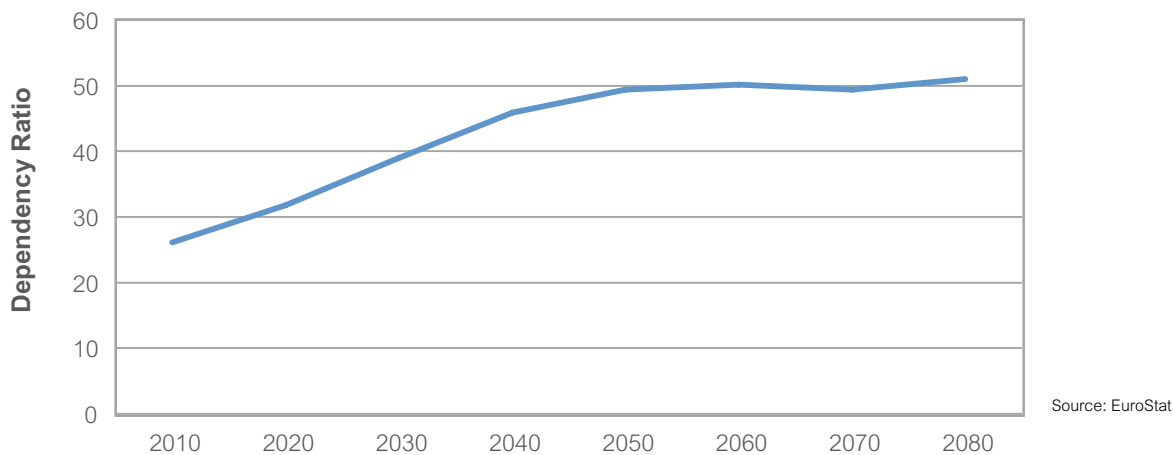


## The European dependency ratio is set to almost double in the next fifty years.

A dependency ratio aims to measure how many people there are working to support those who are too old, or too young, to work. It is typically calculated by dividing the number of people who are under 16 or over 65, by the number of people who are of 'working age', 16-64.

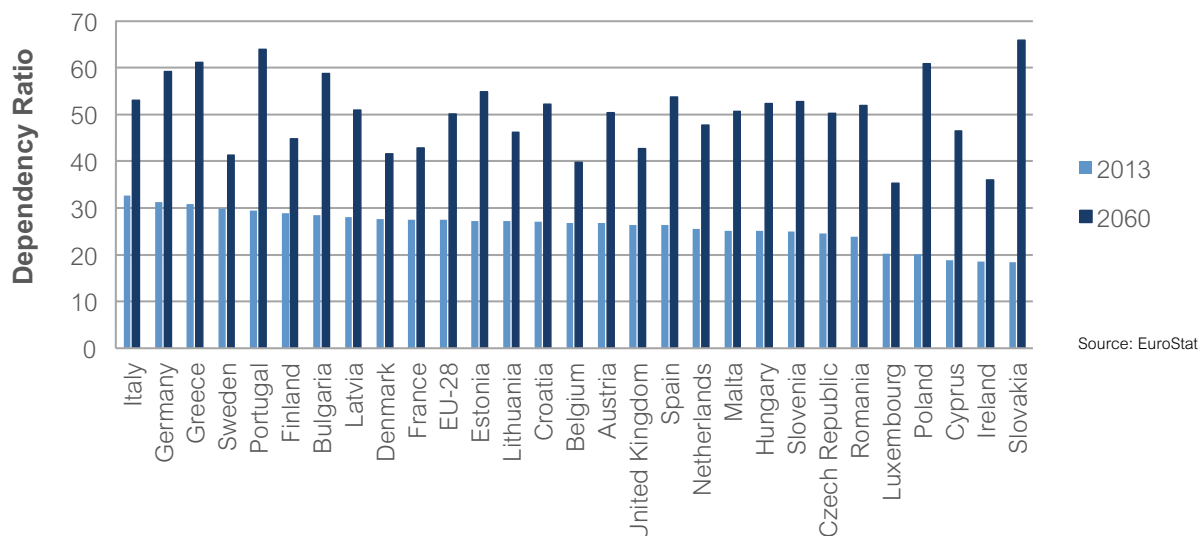
- Europe's dependency ratio was 26.1 in 2010. This meant there were roughly 4 working age adults per dependent.
- By 2060, Europe's dependency ratio is projected to reach 50.2. This means there will be just 2 working age adults per dependent.

**Figure 7:** Europe's dependency ratio (2010-2080)



- Dependency ratios in individual countries have a wide range. Italy and Germany with their current ratios of 32.5 and 31.3 have roughly 3 working age adults per dependent. Slovakia, Ireland, Cyprus, and Montenegro, have dependency ratios below 20 and over 5 working age adults per dependent.

**Figure 8:** European dependency ratios in 2013 and 2060

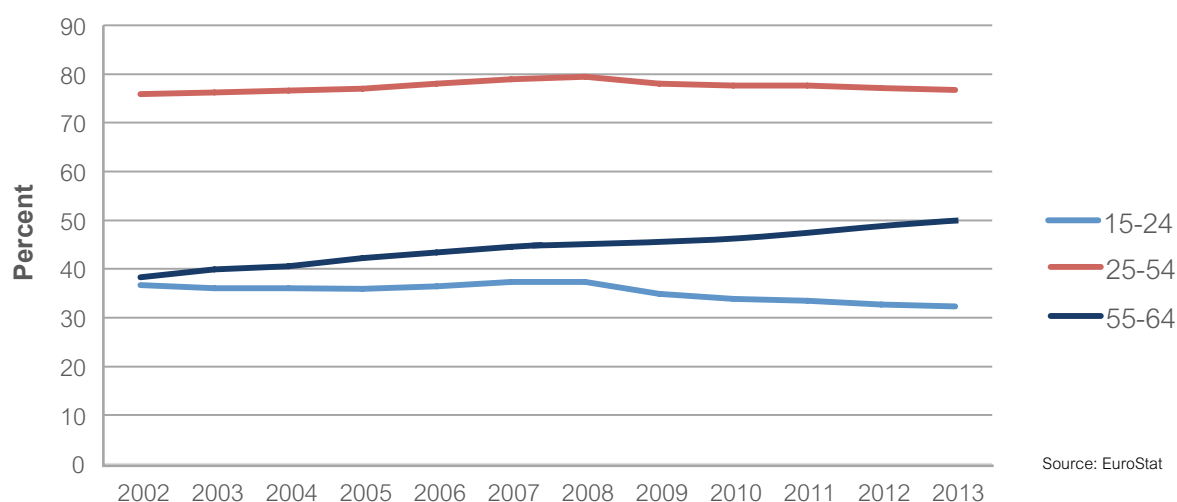


- Changes in the pattern of ageing in Europe will alter the pattern of dependency ratios. By 2060 it is expected that Slovakia, Portugal, Greece and Poland will have the highest ratios. These countries will have dependency ratios of over 60, which means there will be less than two working adult per dependent.
- This represents a tripling of the dependency ratios in Poland and Slovakia.

# Older people are working longer

- In 2013 the EU finally reached its target to have 50% of those aged 55-64 employed<sup>5</sup>.
- There has been a 10.2% increase in employment of older workers (55-64) in the EU in the last 10 years<sup>6</sup>.
- Despite this, the employment rates of older workers still lag significantly behind the rest of the population.
- A high percentage of people aged 25-54 across Europe are in employment (76.8% in 2013) although there is variation across countries (employment ranges between 61.5% in Greece and 85.4% in Sweden).
- Employment is much lower among younger and older workers with just 32.3% of those aged 15-24 and 50.1% of those aged 55-64 employed in 2013.

**Figure 9:** Employment rates of different age groups EU (28 countries)



- 21.6% of older workers in Europe are self-employed<sup>7</sup>.
- 22% of older workers in Europe work part time compared to 16% in of those age 25-54<sup>8</sup>.
- Older workers are predominantly employed in manufacturing (14%), human health and social work activities (11%), education (9%) and public administration (9%). They are overrepresented in farming and the public sector<sup>9</sup>.

## The Best and the Worse for Older Workers

- Some countries have always had a relatively high proportion of older people working; Sweden, Norway and Switzerland already had over 60% of those aged 55-64 in employment in 2002.
- Countries such as the UK, Denmark and Portugal also have a history older workers, all of these countries saw employment rates of older people reaching 50% or more as early as the 1990's.
- Cyprus, Portugal and Greece, have seen a decline in the employment of older workers in the past ten years. Cyprus and Portugal have only seen small declines, and from reasonably high levels, leaving them with 49.6% and 46.7% of those aged 55-64 in employment in 2013.



- The country which saw the biggest fall in employment of people aged 55-64, Greece, did not start from such a high level. In 2003 Greece had an employment rate of 41.3% among those aged 55-64. This fell to 35.6% by 2013.
- Such a decline can be attributed to the economic difficulties Greece has faced in recent years and is unsurprising given that the overall unemployment rate in Greece increased from 9.7% to 27.5% over the same period.

## When does Europe retire?

- The age at which individuals are entitled to receive the state pension in the EU ranges from 60 (Malta) to 67 (Norway).
- In 2010 the average age of exit from the labour market across the 27 EU countries was 61.5 years.
- Greater longevity combined with early exit from the labour force has meant that retirement represents an increasing proportion of an individual's life.

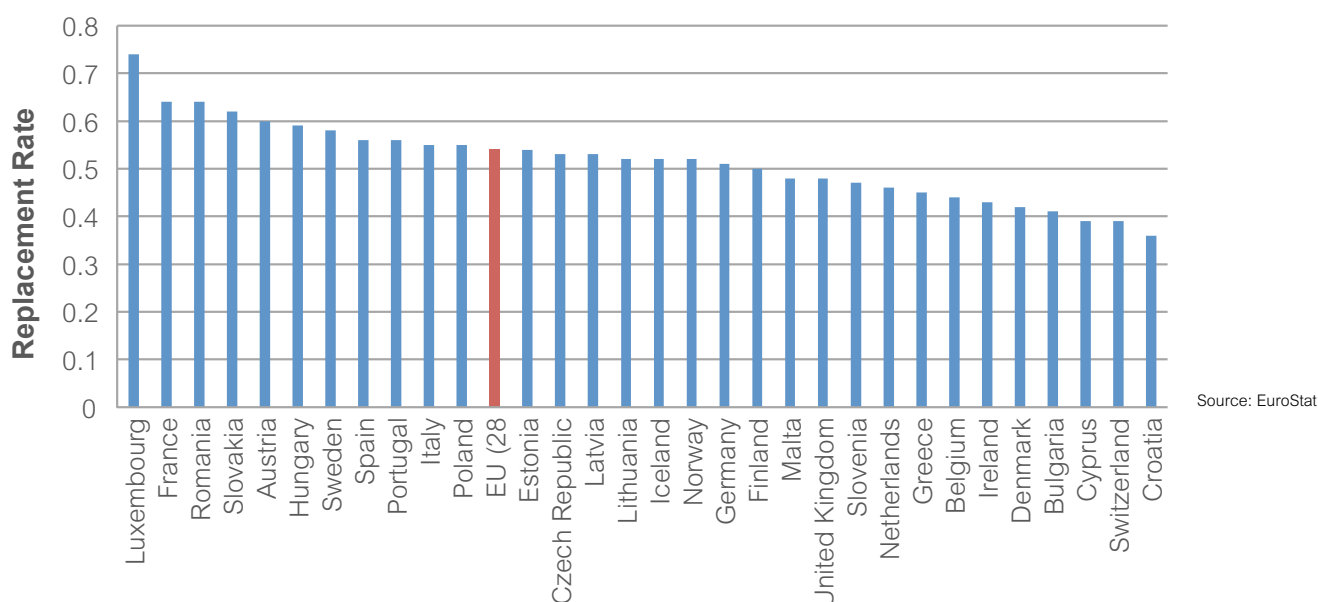
## And what is its replacement rate?

The replacement rate measures the percentage of a worker's pre-retirement income which is maintained by their pension upon retirement and other old age benefits.

The aggregate replacement rate is calculated as the rate of the median pension of those aged 65-74 (including old age benefits) to the median earnings of people aged 50-59.

- In Europe the replacement rate is, on average, 0.54.
- It ranges from 0.74 in Luxembourg to 0.36 in Croatia.

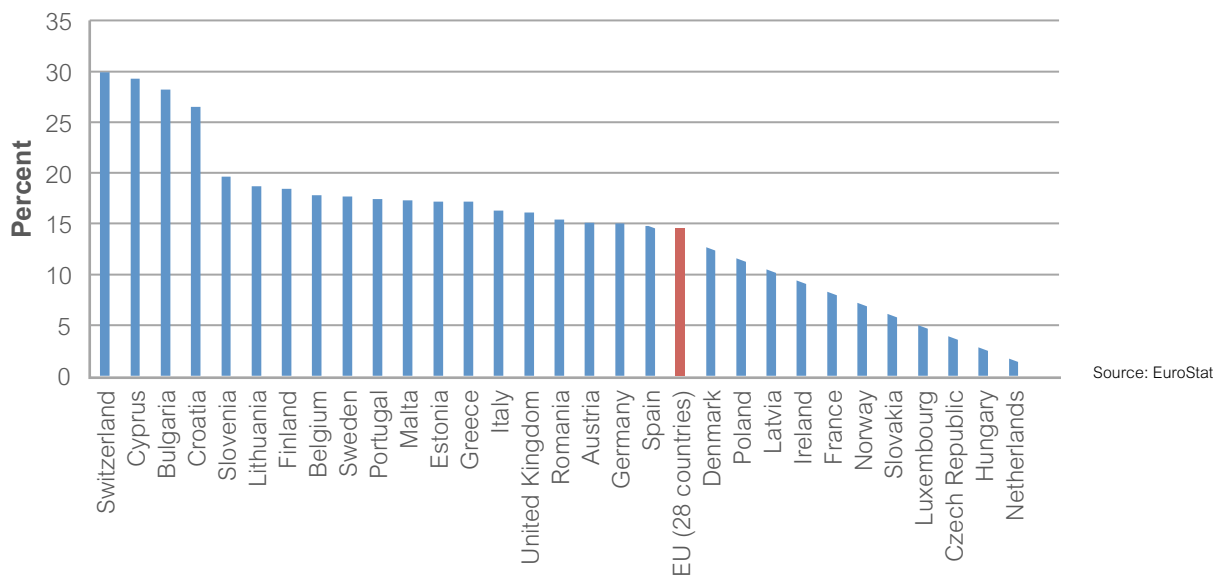
**Figure 10:** Aggregate replacement rate across Europe, 2011



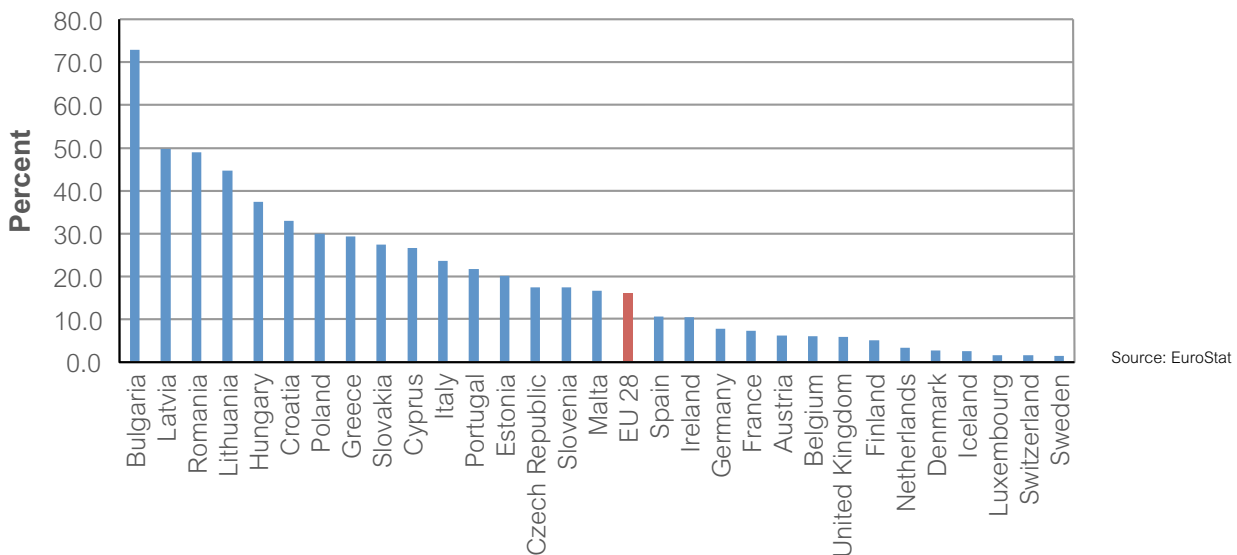
# The pensioner poverty problem

- In 2012, 17 million Europeans over 65 were defined as at risk of poverty and 14 million were materially deprived.
- Both measures of poverty show substantial variation across different European countries. The proportion of older people at risk of poverty ranges from 30% (Switzerland) to 6% (Netherlands). Material deprivation rates range from 72.9% (Bulgaria) to 1% (Sweden).

**Figure 11:** Over 65s at risk of poverty after social transfers in 2012

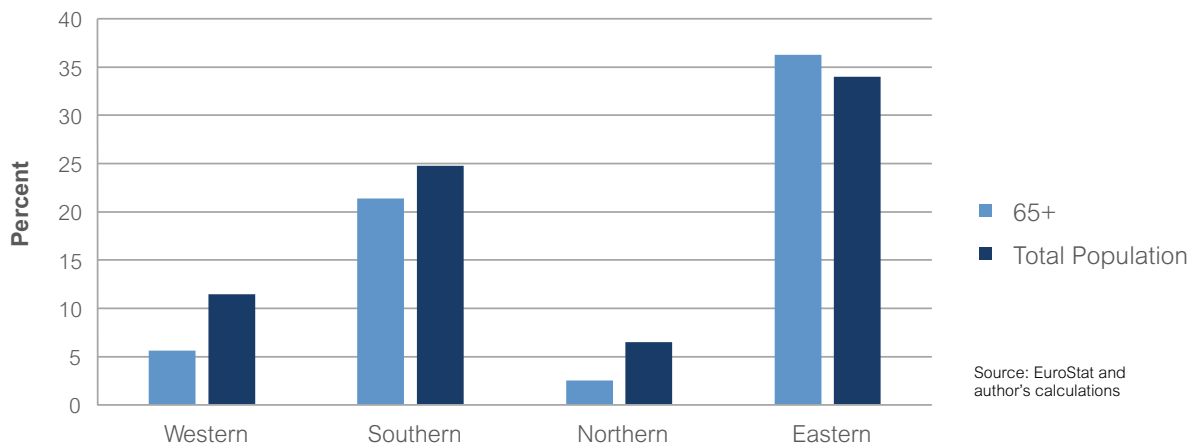


**Figure 12:** Material deprivation rates among the over 65s in 2012



- Material deprivation among the over 65s is concentrated in Eastern and Southern Europe.
- The regional pattern of deprivation among the over 65s is similar to the regional spread of material deprivation among the total European population. However, in everywhere except Eastern Europe, material deprivation is lower among the over 65s.

**Figure 13:** Material deprivation rates in different European regions



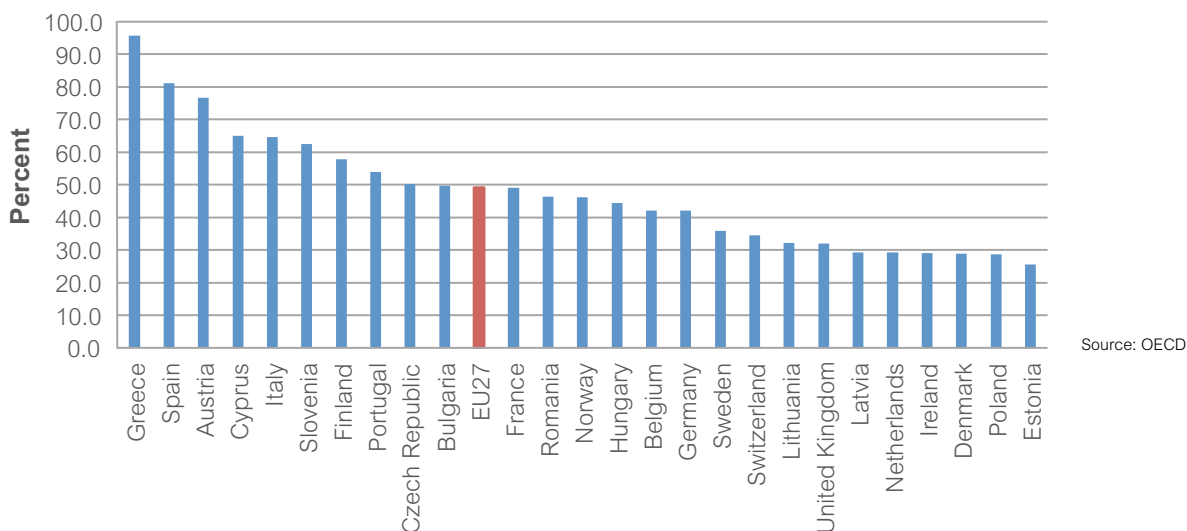
### How do we define poverty?

- The EU has two measures of poverty; income poverty and material deprivation.
- The EU defines a person as being 'at risk of poverty', or income poor, if their income is less than 60% of the national median income. This is a relative definition of poverty and has no regional pattern across Europe. Among older people, by definition, it correlates strongly with replacement rates.
- Material deprivation is an absolute definition of poverty. An individual is considered to be materially deprived if they do not 'possess the goods and services and/or engage in activities that are ordinary in the society or that are socially perceived as 'necessities'.<sup>10</sup> Material deprivation is concentrated in the parts of Europe where incomes are lowest.

### State pension adequacy

- The gross replacement rate provided by the state pension, to those who were average earners, varies hugely between European countries.
- The average earner in Greece can expect to receive close to 100% of their previous income from the state upon retirement, while in Estonia the average earner receives just one quarter<sup>11</sup>.
- However, in addition to the state pension, many retirees are also supported by private pensions and social security benefits.

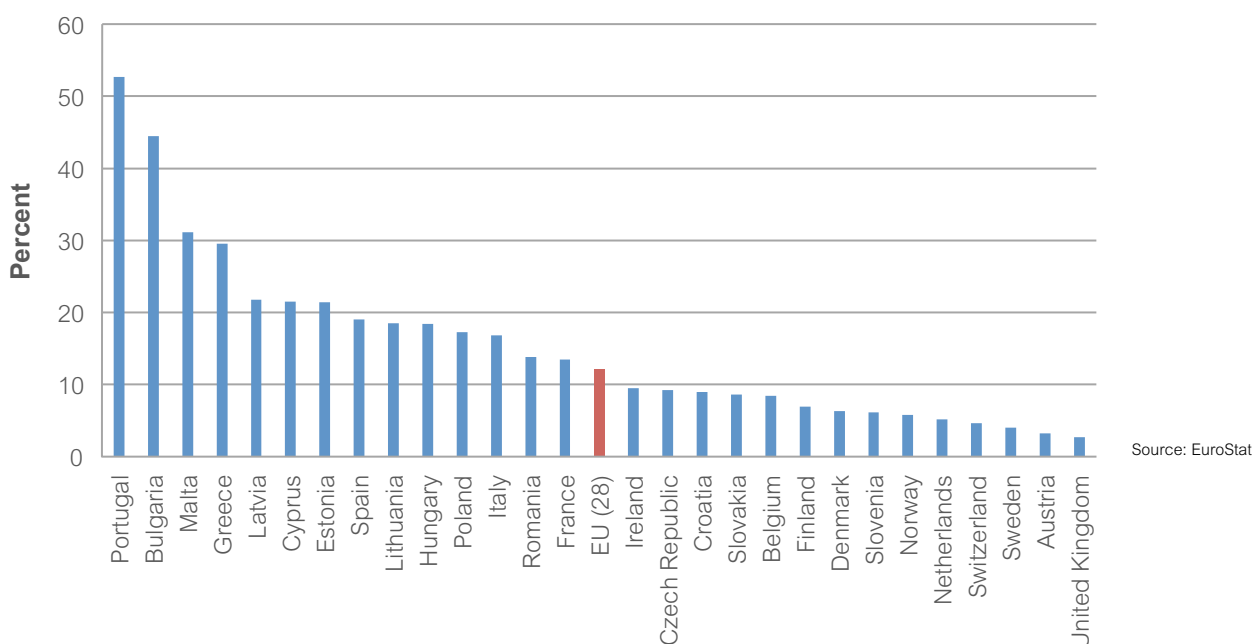
**Figure 14:** Gross replacement rates provided by the state pension to the average earner, 2012



## Housing inadequate, yet expensive, for millions of older people

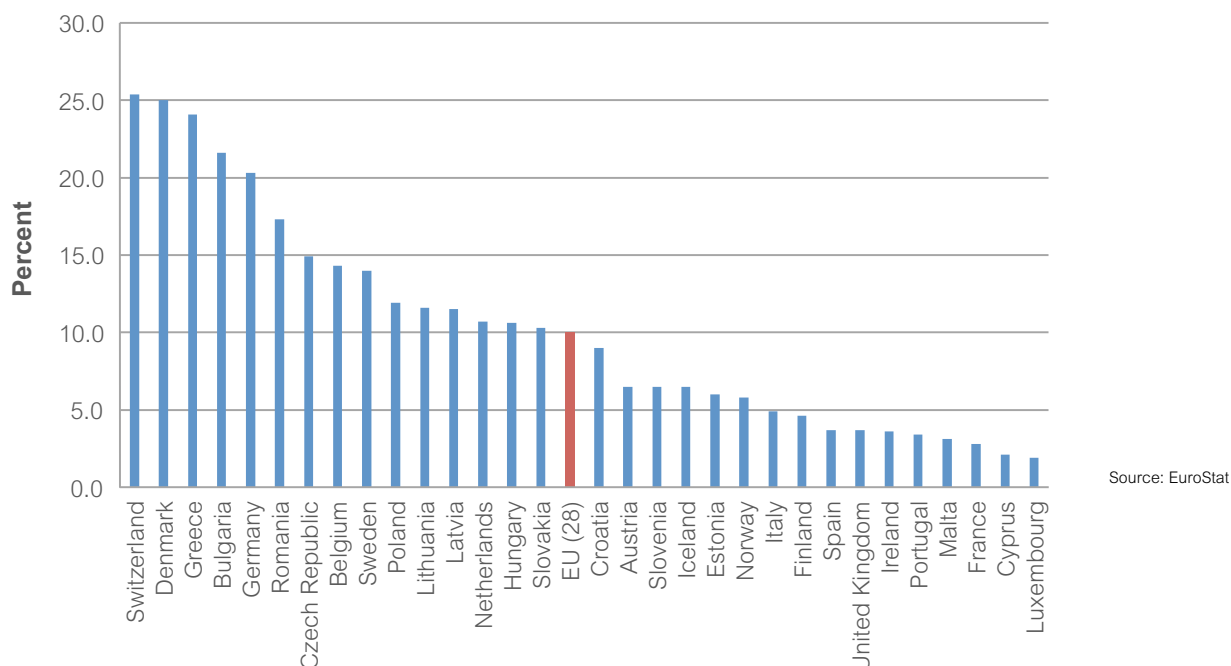
- In the EU roughly 1 in 8 of those over 65 said their house was not comfortably warm during winter.
- Over 1 in 6 said they had difficulty accessing groceries.
- 1 in 6 had difficulty accessing public transport.
- Pensioners in Portugal and Bulgaria were particularly cold with 52.7% and 44.5% respectively living in cold dwellings.

**Figure 15:** Percentage of over 65s living in uncomfortably cold dwellings in 2012



- The European Commission classifies an individual as 'overburdened' if their total housing costs represent more than 40 % of their disposable income (net of housing allowances).
- In Europe, 10% of those over 65 are overburdened.

**Figure 16:** Percentage of those aged over 65 who were overburdened in 2012



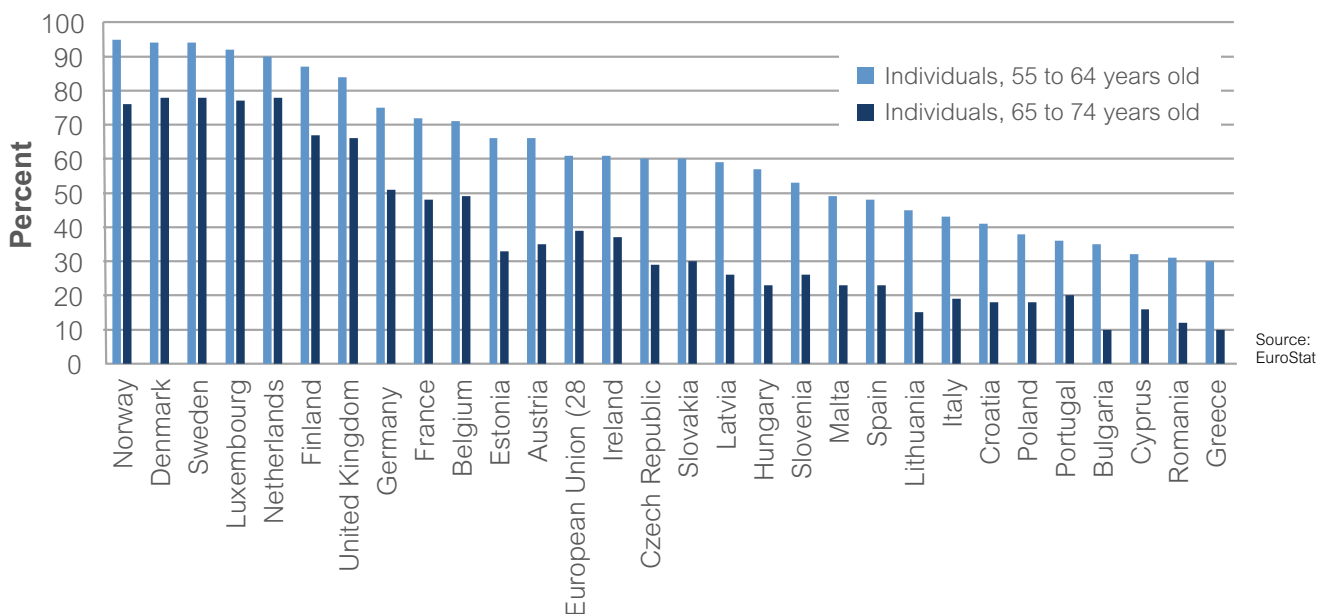
## Overburdening among older people

- Older people can become overburdened when their rents rise but they are unwilling or unable to move, or if when they retire their pension provides only a very low replacement rate.
- Overburdening means older people have to divert spending to housing from other areas.
- Overburdening is particularly high in Switzerland, Denmark, Greece and Bulgaria. The reason for the higher proportion of overburdening in these countries is partly to do with the numbers of older people renting, rather than owning, their homes, and partly to do with the low replacement ratios in these countries.

## Nordic pensioners are silver surfers

- Roughly 60% of Europeans aged 55-64 had accessed the internet in the last year. Among those aged 65 to 74 just 40% had accessed the internet.
- Internet access figures, for those aged 55-64, ranged between 95% in Norway and 30% in Greece. For those aged 65 to 74 access ranged between just 78% in Denmark, Sweden and the Netherlands and just 10% in Bulgaria.
- In 2013, while 42% of Europeans used the internet to interact with their public authority, only 20% of Europeans over 65 did so.

**Figure 17:** Internet access in the last year by older people, 2013

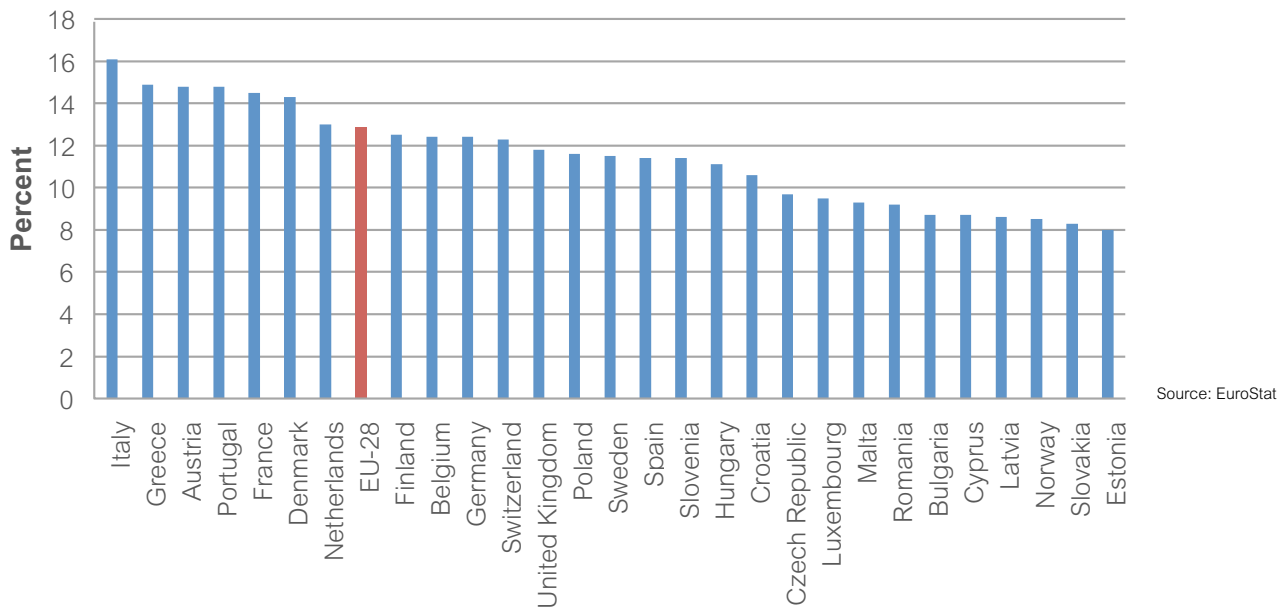


# What are the costs of an ageing society?

## Pensions

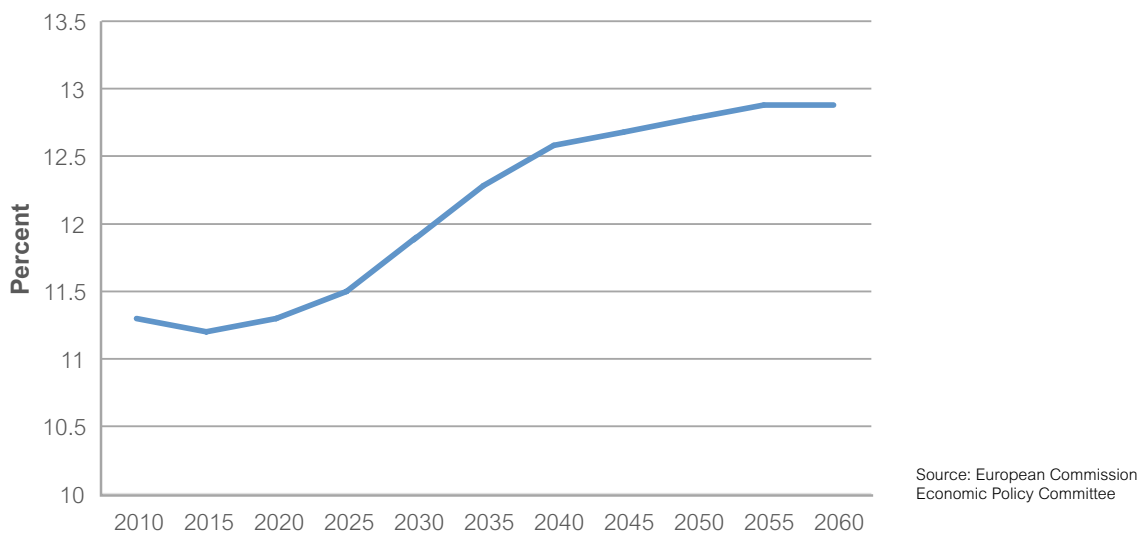
- Pension expenditure<sup>12</sup> currently ranges from 8% of GDP in Estonia to 16% in Italy. This variation stems both from differences in the proportion of pensioners between countries and from differences in the generosity of pensions.

**Figure 18:** Pension expenditure as a proportion of GDP, 2011



- As the EU population ages, the level of expenditure on pensions is set to rise significantly. Pension expenditure as a proportion of European GDP is expected to increase by 14.2% in the years leading up to 2060.

**Figure 19:** Projected pension expenditure as a percentage of GDP in the EU-27



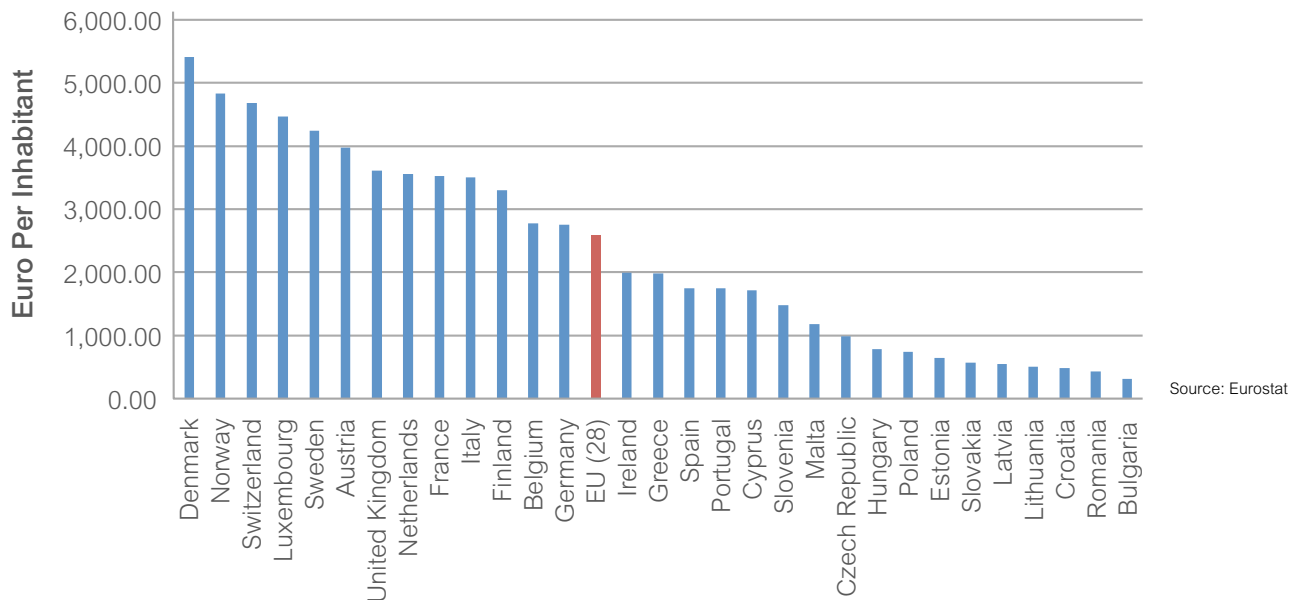
## Healthcare

- In 2010 healthcare expenditure in the EU-27 was around 7% of GDP.
- Projections of healthcare expenditure in the future are very dependent on the assumptions made surrounding demographic, evolution of healthcare costs and technological trends.
- The European Commission's reference scenario puts healthcare spending at 8.2% of GDP in 2050 in the EU-27. Although, based on different scenario's they predict spending could be between 6.7% and 12.6% of GDP<sup>13</sup>.
- In 2012, 20.0% of Europeans over 65 said they had difficulty accessing Primary Healthcare services.
- 33.8% of those over 65 had 'some' self-perceived long-standing limitations in usual activities due to a health problem, while 21.1% stated that this limitation was severe.

## Care in old age

- In 2011 in the EU-28, social protection expenditure<sup>14</sup> devoted to old age amounted to 0.5% of GDP, or €2,585 per inhabitant<sup>15</sup>.
- These costs depend not only on the number of older people in society, but also on the level of benefits governments choose to provide. Thus they are highly variable across different EU countries and their future costs are hard to predict.
- Social protection expenditure on old age currently ranges from over €5,000 per capita in Denmark to less than €500 in Bulgaria.

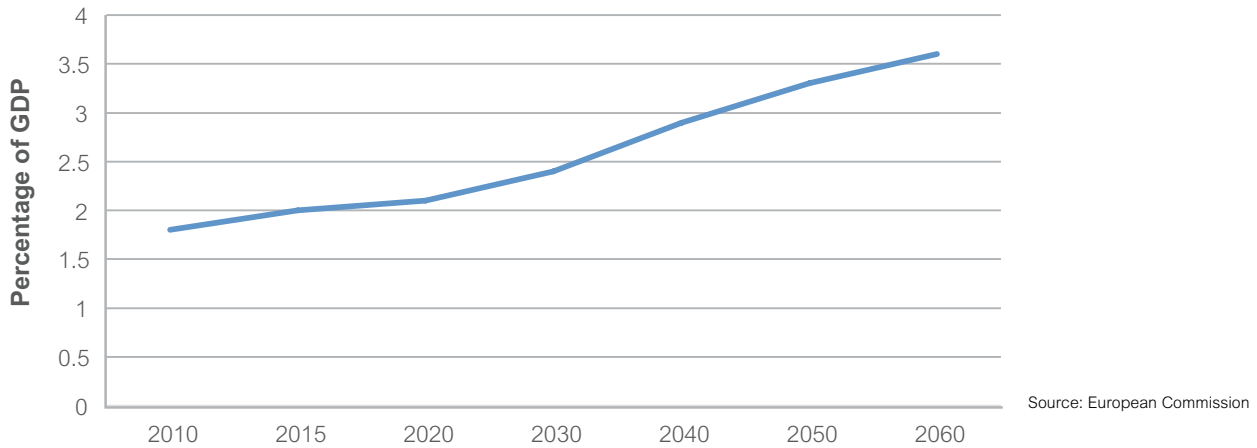
**Figure 20:** 2011 Social protection expenditure on old age care in euros per inhabitant, 2005 prices



## Long-term care

- The European Commission projects that public spending on long term care as a proportion of GDP will rise from 1.8% in 2010 to 3.6% by 2060<sup>16</sup>.
- This is an increase of 94% in the coming 50 years. However a large proportion of this rise in spending is not predicted to occur until after 2030.

**Figure 21:** Projected public expenditure on long term care in the EU-27



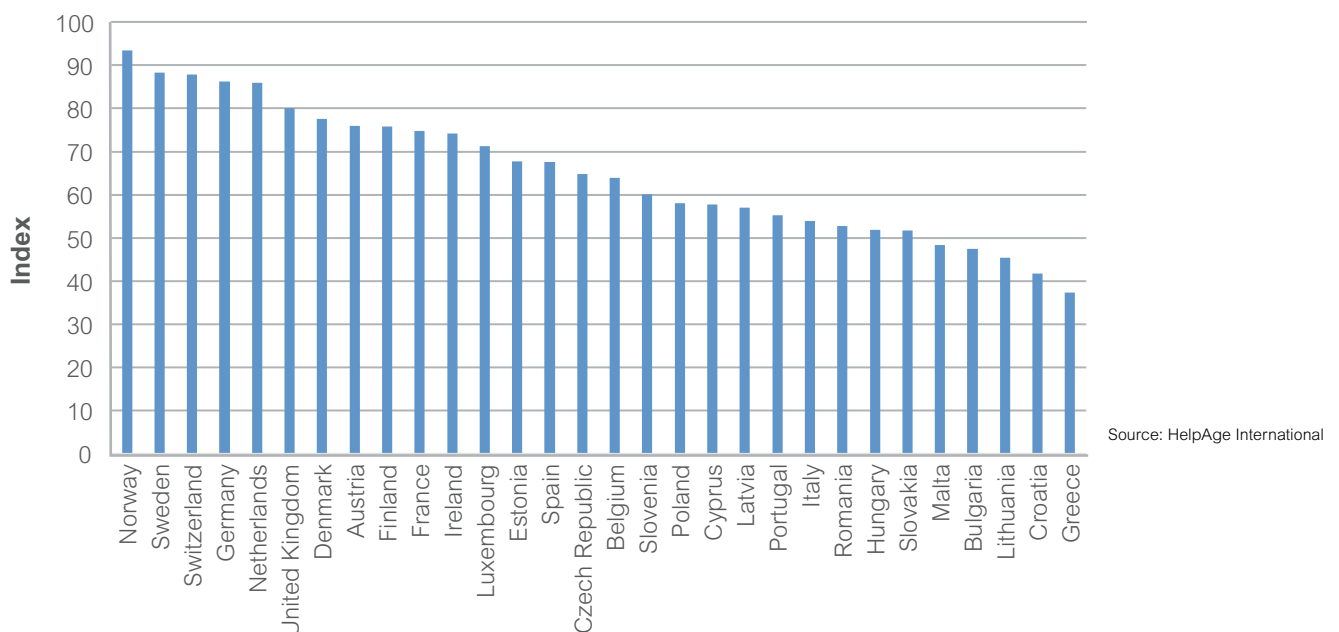
## The big picture

When looking at a number of different statistics in isolation it can be easy to lose track of the bigger picture. By collating a number of statistics, an index is a way of getting a snapshot what it means to grow old in Europe.

### The Global Age Watch Index

- Produced by HelpAge International, this index tries to assess the quality of life of older people.
- It incorporates 13 indicators<sup>17</sup> across 4 domains; income security, health status, education and employment, and an enabling environment.
- It calculates how far a country is from the ideal value for each indicator and then takes the geometric mean.
- Sweden, Norway, Switzerland are ranked as the top three countries in the world according to the Index. Germany and the Netherlands also make the top 10.
- Greece, the lowest ranking country in Europe, ranked 73rd in the world, behind countries such as India, Nepal and Mongolia.

**Figure 22:** The Global Age Watch Index 2014

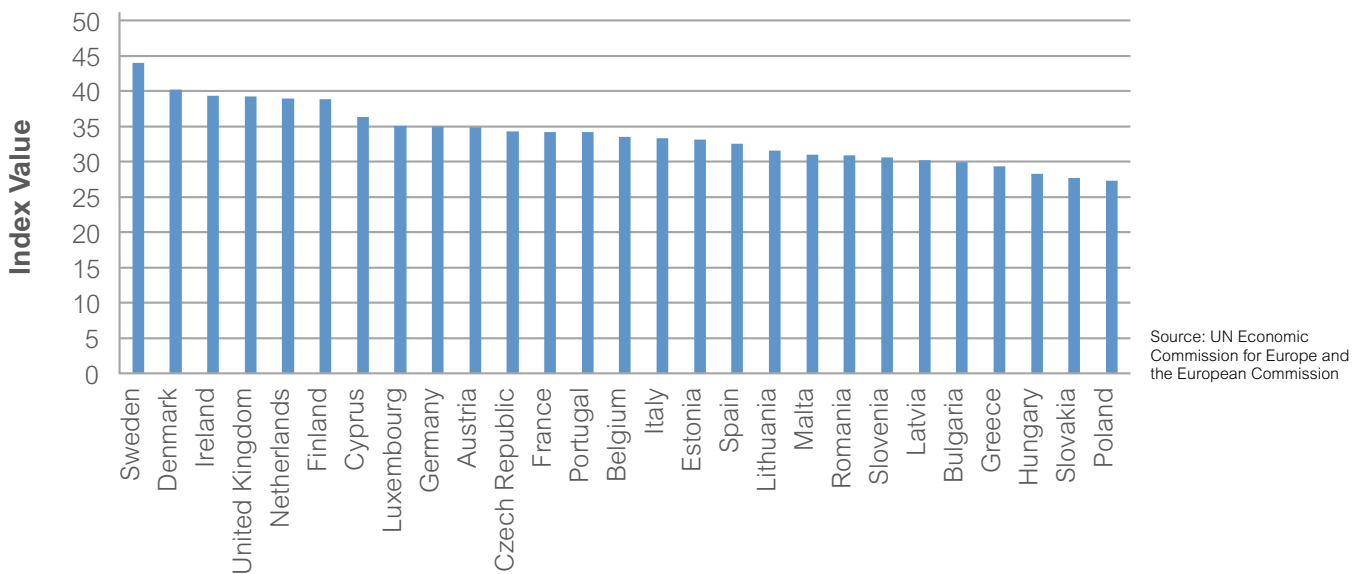




# Active Ageing Index

- Produced by UN Economic Commission for Europe and the European Commission, the Active Ageing Index aims to measure the extent to which older people are employed, live independently, and engage in social activities.
- The index is constructed by combining 22 indicators<sup>18</sup> across these domains.
- Poland scores the worst on this index with a number of other Eastern European countries also performing poorly.
- As with the Global Age Watch index Southern and Eastern European countries tend to rank in the lower half of the European countries, with countries in Northern Europe topping the table.

**Figure 23:** The Active Ageing Index 2012



# References

- 1 EuroStat. All statistics in this pack were taken from EuroStat unless otherwise stated.
- 2 EuroStat Mortality and Life Expectancy statistics
- 3 EuroStat Healthy life years statistics 2014
- 4 HLY data is not available for Portugal in 2012, so these calculations were made using 2011 data for Portugal.'Can I also change the phrasing of the caption to figure 7 so that it says that it is the Projected dependency ratio.
- 5 In 2001 the *European Council of Stockholm* set the target of having an employment rate of 50% for those age 55-64 by 2010.
- 6 Working Longer: An EU Perspective, ILC (UK) 2013
- 7 European Foundation for the Improvement of Living and Working Conditions (2012), Employment trends and policies for older workers in the recession.
- 8 European Foundation for the Improvement of Living and Working Conditions (2012), Employment trends and policies for older workers in the recession.
- 9 European Foundation for the Improvement of Living and Working Conditions (2012), Employment trends and policies for older workers in the recession.
- 10 EuroStat Methodologies and Working Papers (2010) Income poverty and material deprivation in European countries
- 11 OECD Pensions Outlook (2012)
- 12 Pension expenditure is defined as the sum of a number of social benefits, including disability pensions, early-retirement due to reduced capacity to work, old-age pension, partial pension, survivors' pension, early-retirement benefit for labour market reasons.
- 13 B. Przywara (2010) Projecting Future Healthcare Expenditure at European Level: Drivers, Methodology and Results. The European Commission.
- 14 Expenditure on care for the elderly is defined as the share of social protection expenditure spent on old age care. It includes care allowance, accommodation, and assistance in carrying out daily tasks.
- 15 EuroStat, Social Protection Statistics 2013
- 16 Base case scenario, EU-27. B. Lipszyc, E. Sail and A. Xavier (2012) Long-term care: need, use and expenditure in the EU-27 Economic Papers 469
- 17 The HelpAge Index includes: Pension income coverage, Poverty rate in old age, Relative welfare of older people, GDP per capita, Life expectancy at 60, Healthy expectancy at 60, Psychological wellbeing, Employment of older people, Educational status of older people, Social connections, Physical safety, Civic freedom, Access to public transport.
- 18 The Active Ageing Index includes: Employment rate for the age groups 55-59, 60-64, 64-69, 70-74. Percentage of older population aged 55+: providing unpaid voluntary work through the organisations, Care to children, grandchildren or older adults, taking part in the activities of meeting of a trade union, a political party or political action group, undertaking physical exercise or sport at least 5 times a week, who report no unmet need for medical and dental examination or treatment during the last 12 months preceding the survey, who are not worried about becoming a victim of violent crime. Percentage of people aged 75 years and older who live in a single household alone or in a couple household. The relative median income ratio of the median equivalised disposable income of people aged above 65 to the median equivalised disposable income of those aged below 65. Percentage of people aged 65 years and older who are not at risk of poverty. Percentage of people aged 65 years and older who are not severely materially deprived. Percentage of people aged 55 to 74 who stated that they received education or training in the four weeks preceding the survey. Life expectancy at 55 and share of healthy life years in the remaining life expectancy at age 55. Mental well-being (using EQLS 2011 and WHO's ICD-10 measurement). The share of people aged 55 or more that meet socially with friends, relatives or colleagues several times a week or every day. Share of people aged 55-74; using the internet at least once a week, with upper secondary or tertiary educational attainment.

# Appendix

## Regional Classifications

### **Northern Europe**

Norway  
Sweden  
Denmark  
Finland  
Iceland

### **Southern Europe**

Portugal  
Italy  
Spain  
Cyprus  
Greece  
Malta

### **Western Europe**

France  
Germany  
UK  
Ireland  
Belgium  
Netherlands  
Austria  
Monaco  
Luxembourg  
Switzerland

### **Eastern Europe**

Albania  
Bulgaria  
Croatia  
Czech Republic  
Former Yugoslav  
Republic of Macedonia  
Hungary  
Moldova  
Poland  
Romania  
Serbia  
Slovakia  
Slovenia  
Ukraine  
Estonia  
Latvia  
Lithuania



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