



**1000 billion Euros at stake:
How boosting employment can address
demographic change and public deficits**

EPC ISSUE PAPER No.72

NOVEMBER 2012

By Erik Türk, Josef Wöss and Fabian Zuleeg

The EPC's Programme on Europe's Political Economy

The Europe's Political Economy (EPE) programme monitors and analyses current economic, social and environmental issues which are topical in the EU policy debate. The current focus is on five long-running themes:

- *The euro crisis and its implications for economic governance and the European integration process, which will continue to dominate the European debate. The focus is on two critical issues: what does banking, fiscal and political Union mean – and how can it be achieved in practice while also ensuring European action has sufficient legitimacy – and how can the economic and social crisis be overcome which is still hitting Europe hard and leading to a downward spiral in the crisis countries.*
- *Europe's economic future and the development of the Single Market. Europe is facing a long term growth crisis, not only as a result of the current economic crisis but also because of long term challenges, including globalisation, demographic trends, inequalities, resource competition and the need to tackle climate change. Finding sustainable ways out of this growth crisis, including the further development of the Single Market, is one of the most pressing issues for the EU. There is also a focus on the Single European Labour Market, which analyses why, despite freedom of movement being one of the key principles of the EU, very few workers move from one country to another in Europe and what can be done to incentivise people's mobility.*
- *The EU budget and the debate on the next EU Multi-Annual Financial Framework. At a time when the interinstitutional negotiations on the future MFF are going to enter their final phase, the EPC continues to provide analysis on the state of play of the negotiations, the future structure of the EU budget, the interplay between the crisis and the budget and its impact on the EU principle of solidarity.*
- *Health and well-being, with the EPC being the only Brussels-based think tank with a major focus on this topic. We will continue our long-running analysis of 'Social Europe' and the sustainability of Europe's public services in the face of Europe's long term socio-economic challenges. CHES, the Coalition for Health, Ethics and Society, will continue to involve a wide-range of European stakeholders in topical debates on European health issues.*
- *Climate change, resource efficiency and energy, including a focus on climate change mitigation and adaptation, as well as resource efficiency. Energy policy and its importance not only for climate change but also for competitiveness and security continues to play a major role.*

Table of Contents

<i>Executive summary</i>	<i>iv</i>
1. Introduction	1
2. The scale of the demographic challenge	3
3. Measuring dependency differently	5
4. Real dependency	7
5. The relationship between population ageing and the labour market	11
6. The impact of better labour market performance on growth and public finances	13
7. Conclusions and policy implications	19
<i>Appendix</i>	<i>21</i>
<i>Endnotes</i>	<i>23</i>

About the authors

Erik Türk is an economist, pension expert and member of staff in the social policy unit of the Austrian Chamber of Labour, Vienna.

Josef Wöss is head of the social policy unit at the Austrian Chamber of Labour, Vienna.

Fabian Zuleeg is Chief Economist at the European Policy Centre, where he heads the Europe's Political Economy Programme.

Contact

In case of questions or comments please contact:

Fabian Zuleeg: F.Zuleeg@epc.eu

Josef Wöss: josef.woess@akwien.at

Erik Türk: erik.tuerk@akwien.at

Executive Summary

The results presented in this paper confirm that **improving employment rates is “the best strategy with which countries can prepare for population ageing”** (European Commission, Demography Report 2008). Demographic change is one of the greatest challenges that EU societies and economies will face in the coming decades. Against a background of a fast-increasing number of older people and a shrinking number of people of working age, decisive actions for ensuring the long-term sustainability of social security systems, especially pensions, cannot be postponed.

Achieving the **Europe 2020 employment target would help to reduce the economic dependency ratio** (defined as the number of unemployed people and pensioners relative to the number of people in employment): from 65% in 2010 to only 57% in 2020. However, if employment rates remain at 2010 levels, the economic dependency ratio will reach 74% by 2020.

But the results presented in this paper go much further. **Europe’s budgetary situation would be significantly improved by achieving the employment target of the Europe 2020 strategy: the estimates presented in this paper suggest that a staggering €1000 bn by 2020 is at stake.**

Compared to a 2020 scenario with employment rates remaining at their very low 2010 level, the assumption of **an employment rate of 75% in the age group 20-64 entails much higher public revenue, and much lower pension and unemployment expenditure, by increasing GDP growth and reducing the number of people dependent on social benefits.** Moreover, additional relief for public finances comes from the substantially reduced debt-to-GDP ratio.

Unfortunately, **in many strategies the most promising option from both an economic and social point of view is not addressed: improving labour market integration across all age groups** with more and better jobs, and this “not just in the higher age groups, but also for groups with lower employment rates such as women, migrants and youths” (EU Commission, White Paper on Pensions 2012).

Of course, raising employment rates is not an easy process, especially in the current economic climate. Frequently, short-term investment by the public purse is required, with labour market improvements only happening further down the line. **To avoid negative effects, such investments have to be highly targeted and, as far as possible, counter-balanced by reductions in public spending in other areas, or an increase in public revenue.**

But what this paper suggests is that the short-term public finance argument should not be over-emphasised. The scale of the positive mid-term impact of higher employment both on public budgets and on the ageing challenge should allow some flexibility. **Finance ministries should therefore look at labour market policy differently: not as a social outlay, but as an investment in the future which will provide significant returns.**

INTRODUCTION

Europe is mired in a deep crisis, which is threatening not only Economic and Monetary Union (EMU) but even the European integration process itself. Ever more frequently, European governments have to intervene, with crisis-hit banks and governments requiring more and more money. The unsustainable public finance situation in many European countries, coupled with low growth performance (in part created by the austerity policy response) and a balance of payments crisis, is creating a downward spiral in the crisis economies. This is leading to aggravated social and political crises, with unemployment in the euro zone rising to 11.3% in July 2012. The situation is especially dramatic for young people, with youth unemployment reaching 22.6%.¹

The need to respond to such an immediate crisis has almost pushed every other challenge off the agenda. Little attention is paid to Europe's other, more long-term environmental, economic and social challenges. But Europe is facing some very fundamental challenges to its economic and social model, whether through globalisation, resource competition, climate change, rising inequalities or demographic change. These long-term challenges are aggravated by the current crisis and require urgent policy attention, but they are at risk of being marginalised in the current environment.²

One key societal trend where there is a significant risk that decisive action will be postponed is demographic change. It is undoubtedly one of the greatest challenges that EU societies and economies will face over the next couple of decades. In 2050 nearly one in three European citizens will be 65 or older³. Not only does this imply that public expenditure will be under pressure, especially with regard to health, social care and pensions, but that there will be ever more people receiving support from our social systems and - if there is no substantial progress in employment rates - fewer paying in. It also implies that our economies will grow at a much slower pace unless policy can intervene effectively. Even with effective intervention, our societies will look very different to how they do now: society will be centred on older people, with fewer children and young people.

The EU has recognised the challenge of ageing populations, which is reflected in the EU's growth strategy, Europe 2020⁴, which notes the urgency of increasing labour market participation to deal with ageing populations: it counts achieving an employment rate of 75% for the age group 20-64 among its five headline targets.

2012 is the European Year of Active Ageing and Solidarity between Generations, which aims, among other goals, to 'give older workers better chances in the labour market.'⁵ The EU has recognised that population ageing can significantly challenge future public welfare provision, for example in the area of pensions: 'An ageing population presents a major challenge to pension systems in all Member States. Unless women and men, as they live longer, also stay longer in employment and save more for their retirement, the adequacy of pensions cannot be guaranteed as the required increase in expenditure would be unsustainable.'⁶

The importance of dealing with ageing populations has also been recognised in the emerging economic governance system at EU level, especially with regard to the impact on public finances. The Annual Growth Survey 2012 notes the importance of ‘pursuing the reform and modernisation of pension systems, respecting national traditions of social dialogue to ensure the financial sustainability and adequacy of pensions, by aligning the retirement age with increasing life expectancy, restricting access to early retirement schemes, supporting longer working lives, equalising the pensionable age between men and women and supporting the development of complementary private savings to enhance retirement incomes. This modernisation should be coupled with a reform of health systems aiming at cost-efficiency and sustainability.’⁷

Raising the effective retirement age – or more precisely the effective labour market exit age – is of course an important issue in that context, but focusing purely on retirement age and private savings runs the risk of ignoring the fact that a much broader approach is needed to tackle the challenges ahead effectively.

The key issue to address, not just for older age groups but across society, is the low level of labour market participation. Higher participation across all age groups helps to reduce public costs, increases tax revenue and maintains growth, as well as keeping people happy: ‘exiting the labour market does, in general, lower individuals’ well-being as well as having a detrimental impact on the rest of the economy.’⁸

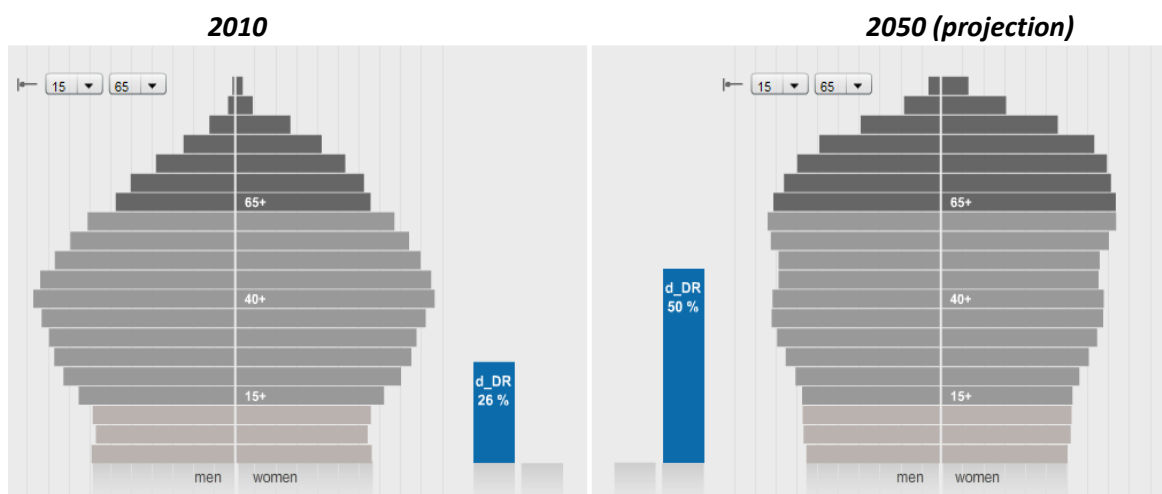
The recently agreed Compact for Growth and Jobs notes that “boosting employment, for both women and men, in particular for young people and the long-term unemployed, is a clear priority. The Council will swiftly examine and decide on the proposals contained in the Commission’s ‘Employment package’, putting emphasis on quality job creation, structural reform of labour markets and investment in human capital. It is crucial to address youth unemployment, in particular through the Commission’s initiatives on youth guarantees and the quality framework for traineeships. It is also important to promote the reactivation of older workers.”⁹

But despite this high-level commitment and reforms in many member states, overall action on employment still lags behind what is needed to effectively tackle the challenge of demographic change. This is especially regrettable, because tackling employment can also help to address the public finance crisis, as demonstrated later in this paper. The paper uses more realistic measures of the economic impact of ageing to analyse the effect of higher employment rates on public expenditure, directly and indirectly, through economic growth. It aims to answer one central question: can higher employment rates be an effective solution not only to population ageing, but also to the public finance crisis facing Europe?

THE SCALE OF THE DEMOGRAPHIC CHALLENGE

Despite the well-known facts of population ageing, it still can come as a surprise to see its sheer scale. A common way to depict the age structure of an economy is by using a population pyramid, which shows the proportion of the population in each age group. The graphs below show the population pyramids for the EU 27 in 2010 and the projection¹⁰ for 2050 (the population is structured in five-year age brackets, with women on the right and men on the left).

Graph 1 - Age structure of the population in 2010 and 2050, EU 27



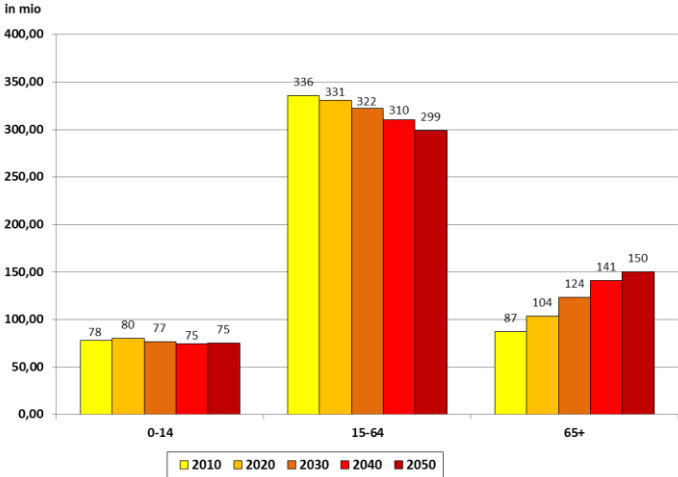
Source: Eurostat (europop 2010); Dependency Ratio Calculator

The working-age population (15-64 years old) has started to decline and, by 2050, it is expected to drop by 11% from 336 million people to 299 million in the EU 27 (see graph 2 below). This age group will constitute a substantially smaller share of the total population, shrinking from 67% to 57%. At the same time, the 65+ population is expected to increase from 87 million people to 150 million. The share of this age group will rise from 17.4% to 28.7%. This is due to the combination of the arrival of the 'baby boomers' born in the 1950s and 1960s in this age group (see the huge cohorts in the middle of the age pyramid of 2010) and further gains in life expectancy.

As a result the demographic old-age dependency ratio, defined as people aged 65+ relative to people aged 15-64, is projected to increase from 26% to 50% (see dark blue bars in graph 1). This entails that instead of four working-age people for every person aged 65+ in 2010, there would only be two by 2050.

Graph 2 illustrates the expected evolution of the population in the EU 27 divided into the age groups 0-14, 15-64 and 65+.

Graph 2 – EU-27 population projection 2010-2050 (age groups 0-14, 15-64, 65+)



Source: Eurostat (europop 2010)

Of course, the current situation and demographic projections among individual EU Member States are far from uniform. Old-age dependency ratios currently range from around 17% (Ireland, Slovakia) to around 31% (Germany, Italy); the projected values for 2050 from about 40% (Ireland, U.K.) to around 58% (Germany, Greece). The variation of the projected increase of the old-age dependency ratio ranges from less than 60% (Sweden, U.K.) to 183% (Poland) or even 206% (Slovakia).

But even in countries with the comparatively smallest changes in age structure, there will be significant population ageing, with profound policy implications. The substantial change in the age structure of the population will considerably challenge the structure of the European economy, through its impacts on labour markets, welfare systems, public finances and the structure of demand, as well as potentially affecting the national rate of saving and capital accumulation.

MEASURING DEPENDENCY DIFFERENTLY

The old-age dependency ratio is an important demographic indicator and is often used to estimate the budgetary impacts of demographic trends, especially on welfare systems. However, purely demographic ratios have a significant important flaw: they only measure the demographic profile of each country or region, and do not capture the fact that many people of working age are not actually working, often being dependent on social/public benefits.

The validity of the old-age dependency ratio as a dependency indicator is thus quite limited. A suitable dependency indicator has to take labour market participation and the economic status of the population into account: as noted in the EU White Paper on Pensions, the real issue is not the numerical relationship between age groups but the economic dependency ratio, defined as the ratio of unemployed and pensioners to those actually in work.¹¹

This approach is used in the Dependency Ratio Calculator developed by the Austrian Chamber of Labour (AK-Wien).

The Dependency Ratio Calculator¹² is a graphic and calculation programme, which allows us to illustrate and calculate:

- demographic change;
- dependency ratios (demographic, economic), and;
- the impact of labour markets on economic dependency ratios, pension and unemployment expenditure, benefit levels, GDP, etc.

Calculations by the tool are quoted in the EU White Paper on Pensions.

Another useful indicator – the labour market adjusted dependency ratio (LMADR) – is derived by calculating the proportion of people who are not in work as a proportion of the total population.¹³

Using current employment performance together with labour market projections can help to demonstrate how labour market performance influences overall dependency over time. It also allows us to make ‘what if’ calculations, for example by showing how the situation would improve if countries were to increase their labour market participation to the EU average or to that of the best-performing country.

REAL DEPENDENCY

Taking the labour market participation and economic status of the population into account makes a big difference. Nowadays, about 120 million people aged 15-64 are not in employment. The main factors underlying this are:

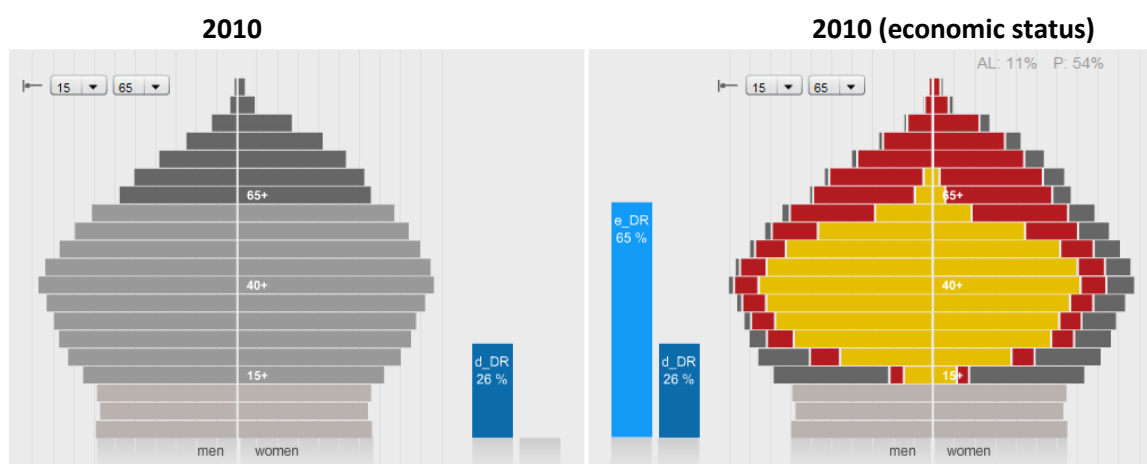
- involuntary unemployment;
- being discouraged (i.e. people who, while willing and able to engage in a job, have ceased to seek work);
- difficulties entering the labour market among the young;
- early retirement;
- difficulties reconciling employment and family life;
- health problems, often work-related;
- skills mismatch;
- research and transaction costs, and;
- geographical mismatch.

In addition, the overall macroeconomic situation – for example, if there is low labour demand in a cyclical downturn – also influences the aggregate employment rate.

Employment rates often differ among population groups: for example, they are significantly lower among certain groups, such as females or those with a migration background.

Graph 3 shows the impact of using an alternative measure of dependency, contrasting the current demographic (old age) and economic dependency ratios, derived from AK Wien's Dependency Ratio Calculator.

Graph 3 – Demographic and economic dependency ratios



Source: Eurostat (europop 2010); Labour Force Survey; The Ageing Report 2012; Dependency Ratio Calculator

In the picture on the right, the population aged 15+ is divided into three categories¹⁴:

- people in employment (yellow areas);
- unemployed and pensioners, including disability and early retirement (red areas);
- others, such as students, housewives/-husbands, mothers/fathers caring for their children, etc. (dark grey areas).

By comparing the number of pensioners and unemployed (red fields) with the number of employed (yellow fields), we get the economic dependency ratio, which is one of the main indicators of the degree of dependency within a society, focusing on (earning-replacement) cash benefits from the welfare system. The economic dependency ratio is currently 65%. This means, every three people in employment face two people drawing a pension or being unemployed.¹⁵

Graph 3 demonstrates the enormous difference between demographic and economic dependency ratios, mainly because only 64% of the age group 15-64 is in employment. In addition to unemployment, many millions are completely outside the labour market, for example on disability benefits, receiving pensions (early retirement), in full-time education or training, or those remaining at home due to family or caring responsibilities. Even at prime working age, far from the whole population is actually in employment. As a result, the current economic dependency ratio is 2.5 times higher than the demographic one (65% vs. 26%).

In the age groups above 25, the group outside the labour market is much bigger among women than it is among men. This is clearly owing to difficulties in reconciling employment and family life, with responsibility for caring for children and the elderly falling disproportionately on women. For women above 65, a large number also fall into this group. The quite large dark grey fields among women in these age groups indicate women without pension entitlements, raising salient issues for the pension adequacy debate.

Another indicator, the Labour Market Adjusted Dependency Ratio (which combines old age dependency with labour market performance), also illustrates total dependency within a society, showing the relation of those not in employment to total population (people aged 0-14 are excluded from the analysis). "In 2010, the EU countries had a LMADR of 47.7% on average, meaning that, currently, in the EU, slightly less than half of the population (above 14) is unemployed, retired or

inactive for other reasons. Assuming constant employment rates, the average LMADR in the EU would grow from 47.7% in 2010 up to 56.3% in 2050. In 2010, the Netherlands (36.2%) and Denmark (38.5%) topped the ranking of EU countries, due to their labour market structure rather than their demographic outlook. Countries such as Sweden and Germany also presented a significant improvement of their relative position, as compared to using the old-age dependency ratio. Italy (55.4%), Hungary (55.2%) and Malta (53.8%) were the EU countries with the weakest position.”¹⁶

The LMADR also shows that with current employment performance the situation will be untenable across the EU by 2050: “the ranking will be led by Denmark (44.7%) and Sweden (44.9%), followed by the Netherlands (45.4%), Cyprus (46.7%) and the United Kingdom (47.5%). The United Kingdom is forecast to be the Member State with the lowest proportion of people aged over 65 in 2050: 23% of the total population. All the remaining Member States would record a LMADR above 50%. The situation would be extremely negative in Italy (63.8%), Hungary (63.3%) and Spain (63.1%).”¹⁷

THE RELATIONSHIP BETWEEN POPULATION AGEING AND THE LABOUR MARKET

What becomes quite clear from these more realistic measures of dependency is that the age structure is by far not the only thing that matters: labour market participation has a huge impact, too. Therefore, demographic trends and labour market aspects need to be considered jointly when assessing the impact of population ageing. The crucial question is the extent to which the ageing of the population will translate into an increase of the economic dependency ratio. To a high degree, this is determined by the evolution of the labour market. In simple words: the higher the employment rates, the lower the economic dependency ratio. “If Europe achieves the employment goal of the Europe 2020 strategy of 75% employment rate in the age group 20-64 and further progress is made in the period 2020-2050, the economic dependency ratio will only increase from the current level of 65% to 79% in 2050.”¹⁸

Merely changing administrative thresholds (legal pension ages) will only have a limited effect, reducing expenditure somewhat but not addressing the issues of growth and public finances. The debate on raising the retirement age should thus primarily focus on promoting the participation in the labour market of the older cohorts of the workforce. Moreover, promoting labour market participation must not be restricted to the older cohorts of the workforce but also involve those at risk of exclusion from the labour market, for example people with migration backgrounds or under-represented groups, such as women.

More attention must also be paid to younger people: Europe cannot afford to create a ‘lost generation’ without sufficient opportunities and prospects.

“Many countries have considerable scope for improving the future adequacy and sustainability of their pension systems by raising employment rates, and this not just in the higher age groups, but also for groups with lower employment rates such as women, migrants and youths. Reaching the EU employment target or catching up with the best-performing countries could almost neutralise the effects of population ageing on the weight of pensions in GDP”.¹⁹

Such a positive approach of promoting opportunities and reducing exclusion would contain the increase of the economic dependency ratio, thereby substantially alleviating the financial burden of ageing and aiding the basic purpose of pension systems: to deliver adequate retirement incomes. Broader participation in the labour market is not just the best response to the demographic challenge and pensions issues: it is also a major factor driving economic growth, fiscal sustainability and citizens’ well-being.

Moreover, these positive effects do not just accrue in the long run. Labour market performance can make a major difference in the medium term too, and not just for social inclusion and well-being dimensions. It can be a key driver of macro-economic performance and thus a response to the public finance crisis.

THE IMPACT OF BETTER LABOUR MARKET PERFORMANCE ON GROWTH AND PUBLIC FINANCES

6.1	Europe 2020 versus status quo scenarios	13
6.2	Status quo scenarios	15
	a) Economic dependency ratio	
	b) Impact on public budgets	
6.3	Europe 2020 scenarios	16
	a) Economic dependency ratio	
	b) Impact on public budgets	
6.4	Comparison of the impact on public budgets	18

6.1 EUROPE 2020 VERSUS STATUS QUO SCENARIOS

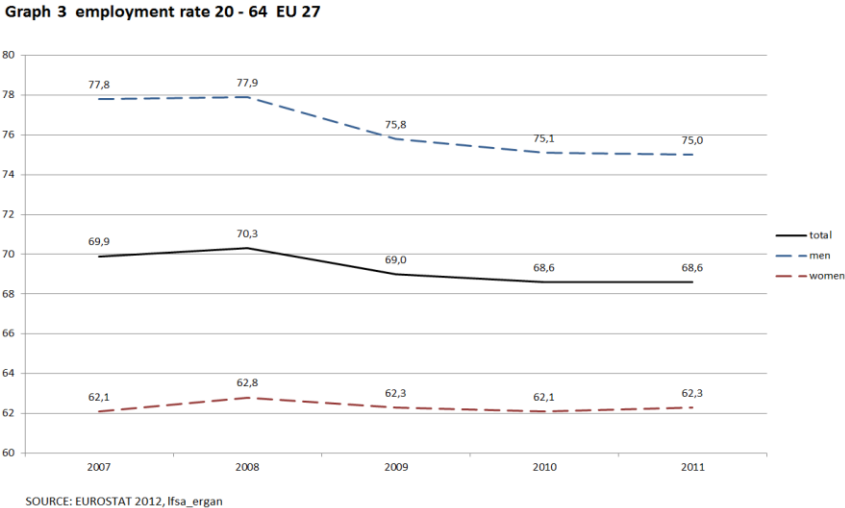
From 2010 to 2020, the number of people in the age group 15-64 is expected to decline by 5m and the number of people aged 65+ to increase by 17m, resulting in an increase of the demographic (old-age) dependency ratio from 26% to 31%.

Against the background of population change, we compare four scenarios for the year 2020 derived from two labour market scenarios and different assumptions on labour productivity growth and changes in benefit ratios (average pension expenditure as a proportion of GDP per employed).

Here are the main characteristics of the labour market scenarios:

- In the pessimistic status-quo scenario, it is assumed that employment and unemployment rates by sex and age group will remain unchanged, i.e. by 2020 these rates are still at the (very low) 2010 level. Corresponding overall employment and unemployment rates (15-64) are slightly lower by 2020 (- 0.1% employment rate, - 0.2% unemployment rate).
- In the optimistic Europe 2020 scenario, the assumption is that the Europe 2020 employment target of 75% employment in the age group 20-64 is achieved by 2020.

Some may argue that the status-quo scenario is too pessimistic, while the Europe 2020 scenario might now be seen as too optimistic. Given labour market trends since 2007, the status-quo scenario is unfortunately far from being entirely unrealistic (see graph 4, which clearly shows the stagnation and deterioration caused by the crisis). On the other hand, although since 2007 the labour market situation has considerably deteriorated, achieving the Europe 2020 Strategy’s employment target is not completely out of reach. Thus, the comparison of these two labour market scenarios can be seen as marking the wide range of possible developments.



Linking the two labour market scenarios with the Ageing Report 2012’s assumptions on labour productivity growth (1.3%)²⁰ and on the development of the benefit ratio (-2.9%)²¹ we get status quo_1 and Europe 2020_1 scenarios.

In the status quo_2 scenario, an even stronger decline in the benefit ratio of 10% is assumed. This can be seen as a tightened austerity scenario, trying to achieve budgetary consolidation via huge cuts in public pensions.

In the Europe 2020_2 scenario, it is assumed that the implementation of the Europe 2020 strategy will not only result in better labour market performance but also in higher productivity growth. Higher investments in skills, training, research and innovation lead to a smart, sustainable and inclusive economy and society, with high levels of employment, productivity and social inclusion. Average productivity growth is assumed to be 1.8% between 2010 and 2020 (this is still below the level expected in the Ageing Report 2009).²²

Table 1 gives an overview of the main assumptions of the four scenarios. 2008 labour market data are added to show the huge impact of the crisis both on employment and unemployment.

Table 1: Status-quo scenarios / Europe 2020 scenarios – key assumptions

	2010	2020 scenarios			
		Status-quo_1	Status-quo_2	Europe 2020_1	Europe 2020_2
Employment rate (15-64)	64.1% (2008:65.8%)	64.0%	64.0%	70.5 %	70,5 %
Employment rate (20-64)	68.6% (2008:70.4%)	68.1%	68.1%	75.0 %	75.0 %
Unemployment rate (15-64)	9.8% (2008:7.1%)	9.6%	9.6%	5.6%	5.6%
Productivity growth (p.a.)		1.3 %	1.3 %	1.3 %	1.8 %
Benefit ratio (compared to 2010)		-2.9 %	-10.0 %	-2.9 %	-2.9 %

To analyse budgetary effects, we use the Dependency Ratio Calculator, which allows us to calculate the effects of higher employment rates on economic dependency ratios and public budgets.

To estimate impacts on public revenue in 2020, we use the cyclically adjusted total revenue of general government as a percentage of GDP projected by the European Commission for 2013, which is 46.1%.²³ The corresponding share in 2010 is 44.1 %.

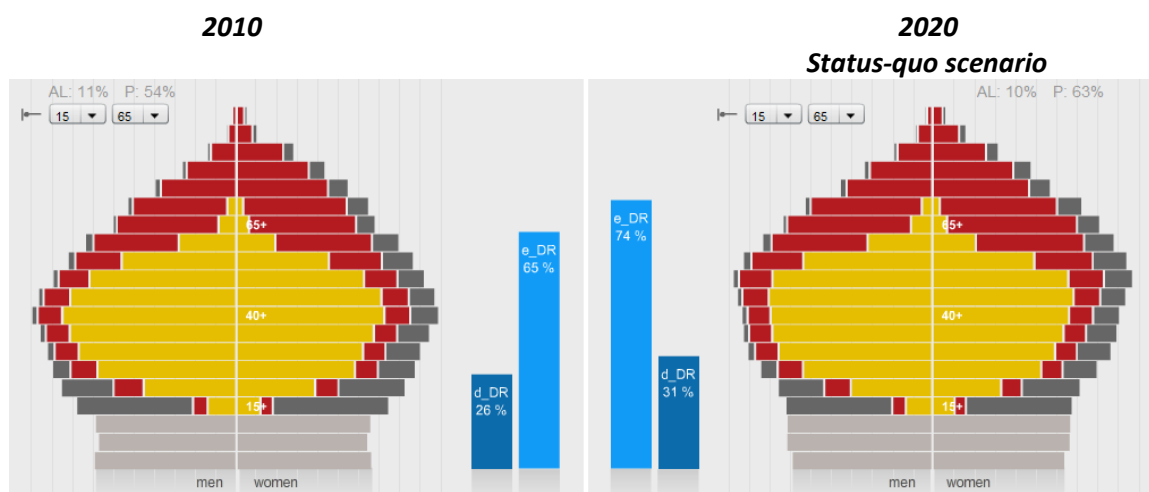
The current cost of pension and unemployment expenditure is about 13% of GDP.²⁴

6.2 STATUS QUO SCENARIOS

a) Economic dependency ratio

In graph 5 the situation in 2010 (left) is compared with the status-quo scenario for 2020 (right). Unchanged employment rates combined with demographic change lead to an increase of the economic dependency ratio from 65% to 74% (see light blue bars in the middle).

Graph 5: Status-quo scenario – evolution of the economic dependency ratio



Source: Eurostat (europop 2010); Labour Force Survey; The Ageing Report 2012, Dependency Ratio Calculator

Graph 5 clearly indicates that the status-quo scenario leaves huge potential for better labour market integration across all age groups.

b) Impact on public budgets

Unchanged low employment rates against the background of a shrinking working age population lead to a decline in the number of people in employment of about 3m. Combined with average labour productivity growth of 1.3%, this results in real GDP growth of 12% or € 1,500 bn.²⁵ in the period 2010 to 2020 (GDP 2010: €12,282 bn.). The corresponding increase of public revenue amounts to around €940 bn.²⁶

In the status-quo_1 scenario, despite the assumed 2.9% reduction in the benefit ratio, constant employment and unemployment rates according to sex and age group leads to additional expenditure of about €450 billion due to the increased number of pensioners. As a consequence of both the substantial increase in pension costs and the low increase in GDP (resulting also in a low increase in public revenue), unemployment and pension expenditure reaches 14.9% of GDP by 2020²⁷.

In the status-quo_2 scenario, additional pension expenditure is restricted by the assumed 10% reduction of the benefit ratio. Compared to the status-quo_1 scenario, this leads to pension expenditure savings of €132 bn. As a consequence, pension and unemployment expenditure only reaches 13.9% of GDP.

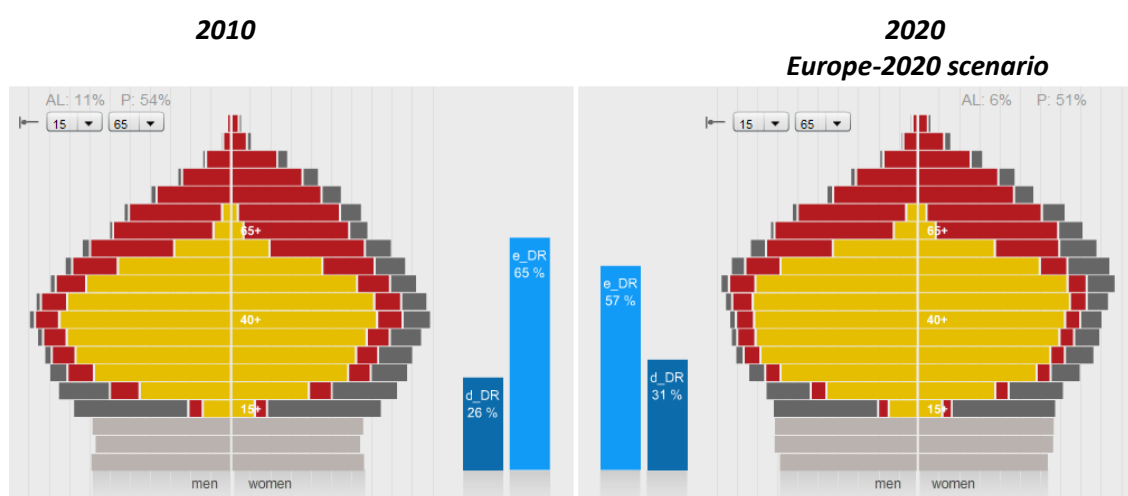
It has to be noted that, for the sake of simplicity, in this calculation negative macro-economic impacts of the assumed 10% reduction of overall pension income on aggregate demand are neglected. The more positive budgetary effect of this scenario, therefore, has to be considered carefully, as such severe income cuts will not come without effects on total demand, growth and public revenue.

6.3 EUROPE 2020 SCENARIOS

a) Economic dependency ratio

Compared to graph 5, in graph 6, the picture on the right looks quite different. The Europe 2020 scenario with an assumed employment rate of 75% in the age group 20-64 leads to a significant extension of the yellow areas and to a corresponding diminishment of the red and dark-grey areas.

Graph 6 – Europe 2020 scenario – evolution of the economic dependency ratio



Source: Eurostat (europop 2010); Labour Force Survey; The Ageing Report 2012; Dependency Ratio Calculator

Half of the increase in employment is assumed to come from a reduction in unemployment. The unemployment rate is reduced to 5.6%. Compared to 2010, this is a reduction of 4.2 percentage points (compared to 2008, the reduction is only 1.5 percentage points).

Further increases in employment mainly result from:

- an increase in female labour market participation (reducing the gap between men and women by about 3.2 percentage points), and from;
- improved labour market participation in the age group 55-64 (as assumed in The Ageing Report 2012).

Despite the higher level of demographic dependency, realising the Europe 2020 scenario would lead to a considerable decline of the economic dependency ratio, from the current level of 65% to only 57% by 2020.

b) Impact on public budgets

In the Europe 2020 scenarios, despite the already shrinking number of people of working age, the sharp increase of the employment rate leads to a huge increase of the number of people in employment of about 19m (+0.85% p.a.).

The Europe 2020_1 scenario differs from the status-quo_1 scenario only in terms of much better labour market performance. This leads to significant additional GDP growth and, therefore, higher public revenues. The real increase of GDP amounts to 24% (more than €2,900 bn), and a corresponding increase in public revenues of nearly €1,600 bn.

Furthermore, due to the reduction in the number of people dependent on unemployment benefits or early-retirement pensions, the increase in pension and unemployment expenditure is reduced to around €200 bn. This is less than in the status-quo_2 scenario, in which severe pension cuts are assumed.

As a GDP percentage, total expenditure for pensions and unemployment decreases to 11.8%.

Compared to the status-quo_1 scenario, the Europe 2020_1 scenario leads to positive budgetary net effects of more than €900 bn. This is seven times more than the (probably overestimated) €130 bn net effect of the status-quo_2 scenario.

In the Europe 2020_2 scenario, the positive budgetary effects turn out to be even stronger.

In this scenario with its higher productivity growth, the real GDP increase amounts to 30% (€3,700 bn), resulting in additional public revenues of about €1,950 bn.

On the other hand, higher income levels due to higher productivity growth will result in higher benefit levels. The pension and unemployment expenditure increase of about €290 bn is thus somewhat higher than in the Europe 2020_1 scenario, but positive revenue effects outweigh these extra costs by far. Compared to the status-quo_1 scenario, the net budgetary effects of the Europe 2020_2 scenario amount to €1,175 bn.

6.4 COMPARISON OF THE IMPACT ON PUBLIC BUDGETS

Table 2 compares the GDP and budgetary effects of the four scenarios used in this paper.

Table 2 – Impact of achieving Europe 2020 employment target on public budgets

Scenarios	Employment rate	Unemployment rate	GDP	Public revenue 2010: 44.1% of GDP 2020: 46.1% of GDP	Pension and unemployment expenditures	Budgetary net effect compared to Status quo_1 scenario	
	change 2020/2010 in p.p.		change 2020/2010 in bn. €			in bn. €	in % of GDP (2020)
Status quo_1 prod. growth: 1,3% pensions level: -2,9%	-0.1% (64.0%)	-0.2% (9.6%)	1.507 (+12%)	940	454	----	----
Status quo_2 prod. growth: 1,3% pensions level: -10%	-0.1% (64.0%)	-0.2% (9.6%)	1.507 (+12%)	940	321	132	1.0% (GDP: 13.788 bn. €)
EU-2020_1 prod. growth: 1,3% pensions level: -2,9%	6.4% (70.5%)	-4.2% (5.6%)	2.935 (+24%)	1.599	200	912	6.0% (GDP: 15.216 bn. €)
EU-2020_2 prod. growth: 1,8% pensions level: -2,9%	6.4% (70.5%)	-4.2% (5.6%)	3.703 (+30%)	1.953	291	1.175	7.4% (GDP: 15.984 bn. €)

Source: EC 2012, *The Ageing Report 2012*; EUROSTAT 2012, *europop 2010*, *LFS 2012*; own calculations (all amounts prices 2010)

The calculations clearly show that ‘austerity’ policies aiming simply to cut public expenditure could easily turn out to produce negative budgetary effects. On the other hand, inclusive strategies that improve labour market performance and productivity growth will have a strong positive impact on public finance.

Therefore, mobilising employment potential is not only the most effective response to demographic change and a key driver of social cohesion and citizens’ well-being, but also makes a key contribution to economic growth and fiscal sustainability.

CONCLUSIONS AND POLICY IMPLICATIONS

Demographic change and in particular population ageing are considerable challenges for Europe's economic and social model and need to be addressed as a measure of urgency. When assessing the dependency which arises from having a larger population share that is not in employment, there is a clear need to go beyond considering purely demographic measures: labour market participation is clearly crucial, not only to deal with the impact of ageing but also for social cohesion and well-being.

This paper shows that it is now even more important to address the issue of low labour market participation in order to address low growth and the public finance crisis. The scale of this effect is truly staggering: public spending can significantly increase the sustainability of public finance in the long run.

Of course, this is not an easy process. More public spending could increase debt in the short term, which could easily result in a negative market reaction, imposing significant costs on the crisis countries in particular. In addition, different spending policies to achieve higher employment rates could further distort eurozone imbalances, implying that higher public spending on employment policies is unlikely to be the solution unless it is highly targeted and efficient. Given the precarious public finance situation, any increases in spending should be counter-balanced, as far as possible, by a fall in public spending, including on out-of-work benefits (with fewer needing support) but also by cutting unproductive sectoral subsidies or increasing public revenue (for example, through additional taxation on pollution or on excessive risk taking in the financial sector).

The opportunities must not be missed: higher labour market participation would substantially promote GDP growth and public revenue and it would eventually considerably reduce public spending without additional cuts to social security levels, instead decreasing the number of people depending on social benefits. Achieving the Europe 2020 employment target would result in positive budgetary net effects between €912 bn and €1,175 bn by 2020, which is between 6.0% and 7.4% of GDP. Of course, the cumulative effect from 2010-2020 would even be higher.

Much higher GDP would also bring much-needed relief to public finance. Debt-to-GDP ratio could be substantially reduced by virtue of positive budgetary net effects and significantly higher GDP growth. This proves how essential a European strategy for higher growth – as well as more and better employment – is to solve the public finance crisis: “Countries must not only be willing but also able to repay their debt, which must come from renewed growth and prosperity. And without such an improvement the social cost and political acceptability of austerity programmes will rapidly diminish.”²⁸

Achieving such higher labour market participation is of course a significant challenge, especially in the current economic climate. While there is a need to focus on proven, cost-effective measures, some countries would need additional support. Boosting growth – especially in the crisis countries – by enabling a better functioning pan-European labour market and pursuing employment and long-term, social investment-friendly public finance consolidation is part of the answer. A well-functioning social system is also clearly an asset that can help, rather than hinder, long-term public finance sustainability.

Politically, action in this area is difficult, especially at EU level. Many actions carry political costs, and often go against strong vested interests. Despite common political commitments at EU level, most competences and instruments are still at member-state level, and many governments are still reluctant to allow the EU level to get involved. In many countries struggling with disastrous public finances, action will only be possible with support from stronger economies.

But the euro zone is now moving towards creating such a capacity for support. The changes to EU governance are also giving – at least indirectly - Brussels a role in structural reform, including labour market reform. The EU thus has a responsibility to promote policies which can improve labour market participation, using the new governance mechanisms to push for implementation.

Specific policies which should be considered²⁹ include:

- flexicurity and in particular active labour market policy, i.e. investing in providing people who lose their jobs with the right skills to facilitate re-entry³⁰;
- providing employment-oriented support to people with health problems or disabilities;
- policies aiming at reconciling work and family life (flexible working times for parents, child-care facilities, etc.)
- helping those with caring responsibilities;
- adaptation of workplaces and work organisation to create better opportunities for older women and men to stay in the labour market;
- pension, social security and labour market reform which incentivise staying in the labour market;
- enabling ‘second careers’ for older workers, ensuring that these workers can remain in the labour market longer by ensuring the availability of appropriate jobs;
- designing wage and welfare systems which make work pay;
- investing in the integration of marginalised groups;
- stimulating labour demand, especially to help the long-term unemployed or young people to enter the labour market.

Financially, however, introducing these policies is often difficult. Frequently, they have a short-term impact on public finances, requiring significant investment from the public purse, with a labour market impact only coming further down the line.

But what this paper suggests is that the public finance argument at least should not be taken at face value. Higher labour market participation addresses the challenge of population ageing and, through its growth impact, helps to alleviate the public finance situation. Finance ministries should thus look at labour market policy differently: not as a social outlay but as an investment in the future, which will provide significant and sustainable returns.

Europe will have a role to play here: not only by promoting good practice but also by ensuring that those countries which do not have the means to invest in labour market participation are supported by the economically stronger countries. The figures suggest that this will be of benefit to all, not least by helping to address the public finance crisis which is at the heart of the euro zone’s woes.

Appendix

Journals, Publications and Acts

Dhéret, C., Zuleeg, F., Chiorean-Sime, S. and Molino, E. (2011) 'Well-Being 2030: a new vision for 'Social Europe'' EPC Issue Paper No. 65, July 2011, European Policy Centre.

Available at http://www.epc.eu/documents/uploads/pub_1326_a_new_vision_for_social_europe.pdf

European Commission (2010) 'Europe 2020- a strategy for smart, sustainable and inclusive growth' Communication from the Commission of the 3th March 2010. Ref. COM(2010)2020.

Available at <http://ec.europa.eu/research/era/docs/en/investing-in-research-european-commission-europe-2020-2010.pdf>

European Commission (2012) 'An agenda for adequate, safe and sustainable pensions'. White Paper. Ref. COM(2012)55 Final.

European Commission (2012) 'Annual Growth Survey 2012'. Communication from the Commission, Ref. COM(2011)815 Final.

Available at http://ec.europa.eu/europe2020/pdf/ags2012_en.pdf

European Commission and European Policy Committee (2009) 'The 2009 Ageing report: Economic and Budgetary Projections for the EU 27 Member States (2008-2060)' European Economy, No.2/2009.

European Commission and European Policy Committee (2012) 'The 2012 Ageing report: Economic and Budgetary Projections for the EU 27 Member States (2010-2060)' European Economy, No.2/2012.

European Commission and European Policy Committee (2012) 'The 2012 Ageing report: Statistical Annex, EU 27 Country fiches'.

Available at http://ec.europa.eu/economy_finance/publications/european_economy/2012/2012-ageing-report_en.htm

European Commission and European Policy Committee (2012) 'The 2012 Ageing report: Underlying assumptions and Projection methodologies' European Economy, No.4/2011.

European Council (2012) 'Conclusions of the European Council summit of 28/29 June 2012'. Ref. EUCO 76/2012.

Available at www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/ec/131388.pdf

Eurostat (2012) Euroindicators, News release No. 113/2012, 31 July 2012.

Available at http://epp.eurostat.ec.europa.eu/cache/ITY_PUBLIC/3-31072012-BP/EN/3-31072012-BP-EN.PDF

Guerzoni, B. and Zuleeg, F. (2011) 'Working away at the cost of ageing: the labour market adjusted dependency ratio'. EPC Issue Paper No.64, April 2011, European Policy Centre.

Wöss, J. and Türk, E. (2011) 'Dependency ratios and demographic change. The labour market as a key element' ETUI Policy Brief 4/2011.

Available at www.etui.org/Publications2/Policy-Briefs/European-Economic-and-Employment-Policy/Dependency-ratios-and-demographic-change.-The-labour-market-as-a-key-element

Wöss, J. and Türk, E. (2011) 'Dependency ratio calculator, simulation tool for the interaction between demography, pensions and the labour market.' Presentation given in occasion of the OECD Workshop of the 19/12/2011 on public pensions sustainability and disability pensions procedures and reforms. Available at <http://www.oecd.org/economy/productivityandlongtermgrowth/49313763.pdf>

Zuleeg, F. (2007) 'How to grow old without going bust: the need for more efficient EU labour markets' EPC Policy Brief, November 2007.

Zuleeg, F. (2011) 'Achieving sustainable austerity' EPC Policy Brief, 16 December 2011. Available at www.epc.eu/documents/uploads/pub_1384_achieving_sustainable_austerity.pdf

Zuleeg, F. (2012-forthcoming) 'Europe in crisis - a lost decade or stronger future?' in 'The Aftermath of the Global Crisis in the European Union'. Cambridge Scholars Publishing, 2012.

Web Sites

Ecfm-Ameco online database:

http://ec.europa.eu/economy_finance/ameco/user/serie/SelectSerie.cfm

European Year for active ageing and solidarity between generations:

<http://europa.eu/ey2012/>

Eurostat:

<http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>

Eurostat- Labour Force Survey:

<http://epp.eurostat.ec.europa.eu/portal/page/portal/microdata/lfs>

Eurostat- population projections:

<http://epp.eurostat.ec.europa.eu/portal/page/portal/population/introduction>

Endnotes

- ¹ Eurostat (2012) *Euroindicators*, News release No. 124/2012, 31 August 2012.
- ² See Zuleeg, F. (2012-forthcoming) 'Europe in crisis – a lost decade or stronger future?' in *The Aftermath of the Global Crisis in the European Union*. Cambridge Scholars Publishing, 2012.
- ³ All demographic data are taken from Eurostat (2011), EUROPOP2010.
- ⁴ European Commission (2010) 'Europe 2020 – a strategy for smart, sustainable and inclusive growth' *Communication from the Commission of the 3th March 2010*. Ref. COM(2010)2020.
- ⁵ <http://europa.eu/ey2012/>
- ⁶ European Commission (2012) 'An agenda for adequate, safe and sustainable pensions'. White Paper. Ref. COM(2012)55 Final, p. 2.
- ⁷ European Commission (2012) 'Annual Growth Survey 2012'. *Communication from the Commission*, Ref. COM(2011)815 Final, pp. 4-5.
- ⁸ Dhéret, C., Zuleeg, F., Chiorean-Sime, S. and Molino, E. (2011) "Well-Being 2030: a new vision for 'Social Europe'" *EPC Issue Paper No.65*, July 2011, European Policy Centre, p. 18.
- ⁹ European Council (2012) 'Conclusions of the European Council summit of 28/29 June 2012'. Ref. EUCO 76/2012.
- ¹⁰ It must be noted that long-term projections are not forecasts: they rely on the continuation of current trends. For the main assumptions and methodologies, please see: European Commission (2012) 'The 2012 Ageing Report. Underlying Assumptions and Projection Methodologies', pp. 35-67.
- ¹¹ European Commission [2012, cfr. Note vi], p. 6.
- ¹² For more information, see Wöss, J. and Türk, E. (2011) 'Dependency ratios and demographic change. The labour market as a key element.' *ETUI Policy Brief*, Issue No. 4/2011 and Wöss, J. and E. Türk (2011) 'Dependency ratio calculator, simulation tool for the interaction between demography, pensions and the labour market.' Presentation given in occasion of the OECD Workshop of the 19/12/2011 on public pensions sustainability and disability pensions procedures and reforms.
- ¹³ Cf. Guerzoni, B. and Zuleeg, F. (2011) 'Working away at the cost of ageing: the labour market adjusted dependency ratio'. *EPC Issue Paper No. 64*, April 2011, European Policy Centre. The concept of LMADR was first explored in Zuleeg, F. (2007) 'How to grow old without going bust: the need for more efficient EU labour markets' *EPC Policy Brief*, November 2007.
- ¹⁴ Graphs and calculations derived from the AK Wien's Dependency Ratio Calculator, which are presented in this paper, are based on the following definitions:
- Employed:** EUROSTAT, LFS (mini-jobs included).
- Pensioners:** All pensioners (The Ageing Report 2012), age and sex profile (approximation based on EUROSTAT, LFS-Data). Approximation (based on The Ageing Report 2012 and the Labour Force Survey): exclusion of double-counted pensioners (cross-country paid pensions within EU 27), separation of other cross-country paid pensions and pensioners already counted as employed (these two groups are included in the calculation of the economic dependency ratio but not shown in the graph).
- Unemployed:** by LFS definition (EUROSTAT, LFS) complemented by discouraged unemployed / inactive (EUROSTAT, LFS, inactive by reasons).
- Neutral:** neither employed nor unemployed nor pensioners.
- ¹⁵ A further dependency indicator – the total economic dependency ratio (TEDR) – is calculated as the total population minus the employed as a percentage of the number of employed (the sum of red fields and light and dark grey fields relative to yellow fields). As children and adults without earned income or cash benefits are normally economically dependent too, the TEDR, which is currently about 129% (EU 27 2010), can be taken as an indicator of the overall degree of dependency within a society. In other words, every three persons in employment face four persons not in employment.
- ¹⁶ Guerzoni, B. and Zuleeg, F. [2011, cf note xiii]; Zuleeg, F. [2007, cf note xiii] p.6.
- ¹⁷ Guerzoni, B. and Zuleeg, F. [2011, cf note xiii]p.20.
- ¹⁸ European Commission [2012, cf. note vi], p. 6f. Calculations based on an updated version of the Dependency Ratio Calculator used in this paper with the exclusion of double-counted pensioners (cross-country pensions within EU 27, approximation), the inclusion of discouraged unemployed and updated demographic projections based on europop 2010 show an even lower increase from 65% to 74% (the basic value remains unchanged as inclusion of discouraged offsets the exclusion of double-counted pensioners).
- ¹⁹ Ibid. p.6f.

-
- ²⁰ European Commission and European Policy Committee (2012) 'The 2012 Ageing report: Economic and Budgetary Projections for the EU 27 Member States (2010-2060)' *European Economy*, No.2/2012, p. 77.
- ²¹ Ibid. p.466.
- ²² In the Ageing Report 2009 labour productivity growth was expected to increase from 1.7% in 2007 to 2.0% in 2015 and to 2.1% in 2020. The widely-differing assumptions of productivity growth in the Ageing Reports of 2009 and 2012 reflect the expected negative, long-term impact of the crisis. European Commission and European Policy Committee (2009) 'The 2009 Ageing report: Economic and Budgetary Projections for the EU 27 Member States (2008-2060)' *European Economy*, No.2/2009. p. 424.
- ²³ EC, Economic and Financial Affairs, AMECO; The projection period ends with 2013, without policy change the cyclically adjusted total revenue of general government as a percentage of GDP should remain unaffected afterwards. Pro-cyclical changes in total revenues are ignored in the calculations, resulting in an underestimation of the positive financial effects of positive scenarios and the negative financial effects of negative scenarios. Pro-cyclical changes in total revenues means that total revenues as a percentage of GDP increases in an economic upturn and decreases in an economic downturn. The assumption of unchanged total revenues as percentage of GDP thus tends to underestimate the positive/negative financial effects of positive/negative economic scenarios.
- ²⁴ Public pensions as %age of GDP: 11.3%. See European Commission and European Policy Committee [2012, cfr. Note xx] p. 466. Unemployment cash benefit expenditures as %age of GDP (2009): 1.7%. See Ibid. p. 272 table 6.1.
- ²⁵ All amounts prices 2010.
- ²⁶ 46.1% of GDP by 2020 (€13,788 bn) compared to 44.1% of GDP by 2010 (€12,282 bn).
- ²⁷ Calculations of unemployment expenditures are based on cash benefit expenditure per unemployed as a constant percentage of average income. (European Commission and European Policy Committee [2012, cfr. Note xx] p.276) Therefore the key driver of future costs of unemployment is the assumed number of unemployed.
- ²⁸ Zuleeg, F. (2011) 'Achieving sustainable austerity' *EPC Policy Brief*, 16 December 2011.
- ²⁹ There is a responsibility here not just for the EU and governments: employers, trade unions and individuals all have a role to play.
- ³⁰ There is currently an open question as to how well flexicurity performs in a situation of prolonged low labour demand, as witnessed in the current crisis. However, even if this is confirmed, it does not necessarily mean that the approach is wrong. Rather, it could indicate that the approach needs to be supplemented with measures to stimulate labour demand in a crisis like the one currently being witnessed.