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**DEMOGRAPHIC AGEING, EMPLOYMENT GROWTH AND  
PENSIONS SUSTAINABILITY IN THE EU:  
THE OPTION OF MIGRATION \***

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## A. INTRODUCTION

Higher life expectancy and lower fertility rates have been the driving forces behind a secular trend towards population ageing. Although this trend is not new, it is set to further intensify because of the post-war baby boom. Demographic ageing raises important challenges for all those institutions and policies established in the middle of the last century when the demographic perspective was very different. Policy makers and politicians have tended to underestimate the cumulative impact of these demographic trends. However, there is an increasing awareness as Europe approaches the critical decades, where the bulk of the ageing baby boomers will start moving out of the labour market, that this trend is important and irreversible within the foreseeable future. Family-friendly policy measures could still provide some attenuation effects in the long run, but even in the most family-friendly EU countries, fertility rates are currently too low to prevent population ageing.

Today, there is a growing awareness in the EU that there are at least two major policy issues in relation to population ageing. These are the ageing of the workforce and the risk of growing imbalances in the financing of the social protection. These issues remain manageable for all member- States for some more years depending on the national situations. Then the trends accelerate in pace and raise serious questions about the capacity of the existing institutions to handle the impact.

Immigration is considered as one of the potential means to address the demographic challenge. In fact, it has always been an important feature of social, economic and cultural change in Europe. The European countries have long played a major part in migratory movements both as sending and receiving countries. The final decade of the 20<sup>th</sup> century has been characterised by an unprecedented rise in forced and voluntary migrations throughout the world and they have also had a major effect in Europe.

Today, in view of a rapidly changing economic and demographic situation, the debate on migration policies becomes a major issue in the EU. There is a growing awareness that restrictive immigration policies of the past 25 years are no longer relevant to the economic and demographic situation in which the Union now finds itself. Some European policy makers think that it is now the appropriate moment to review the longer term needs for the EU as a whole, to estimate how far these can be met from existing resources and to define a policy for the admission of 3<sup>rd</sup> country nationals to fill those gaps which are identified. This will also provide an opportunity to reinforce policies to combat irregular work and to ensure employers comply with existing labour legislation for 3<sup>rd</sup> country nationals who work for them.

The European Council, in Tampere in October last year, agreed that with the coming into force of the Treaty of Amsterdam, the Union should develop a common asylum and immigration policy. It is, therefore of particular importance to examine current trends and reflect on the related policies.

This paper briefly presents some the issues related to the debate on immigration in the European Union today. It also attempts to provide some insight on the possible future needs.

## B. THE IMPLICATIONS OF THE DEMOGRAPHIC TRENDS IN THE EU LABOUR MARKET

Since 1990, the age group of 15-29, from which entrants into the labour market are drawn, has been decreasing rapidly. Furthermore, the average age of the labour force, which had remained quite stable at around 40 years over several decades, has started to increase since 1995 at a speed of one year every 7 years. Finally the 65+ cohort will start growing rapidly in the next five years. As a result, labour capacity will be considerably reduced in the EU over the next decades, particularly after 2015. However it should be noted that the situation in the EU labour market is quite different from that in the USA and Japan. Europe has faced several employment crises between the middle of the 70's and the middle of the 90's resulting in a relatively poor activity and employment record. Over the last 3 years there are signs of a lasting recovery trend. However, unemployment is still as high as 9,5% compared with 4,5% and 4,1% in the US and Japan respectively. Furthermore, the EU average employment level is as low as 62%. Table 1 shows the employment rates for each of the main age/sex groups for each member-State in 1997. EU employment rates are considerably lower than the US (74%) and Japan (70%). Only the Scandinavian countries and some specific regions have employment rates exceeding 70%. At the other end of the scale, there are countries and regions (Greece, Spain, Southern Italy) with employment rates around 50%.

There are 15 million people in Europe currently looking for a job. There would be more than another 15 million people available for the labour market if all Member States would reach the employment rate of the best performing European countries or the US. In other words, the other side of Europe's weakness of having a low employment record is its availability of a considerable employment potential. The difference in employment rates equals an additional 33 million jobs in Europe. This can be seen as Europe's "full employment" potential. As shown in Table 1, this employment "gap" does not lie with prime age men. The EU's employment level of men aged 25 to 54 is equivalent to that of the US, at 85% and 88% respectively. The main divergence in employment rates can be ascribed to female employment participation. In Europe only 50% of all women between 15 and 64 are in employment. If the employment rate of women in Europe would equal the one of the US, this would imply 21 million additional jobs.

In fact, the services sector, on the demand side, and female employment, on the supply side are the key to the improving performance. The success in mobilising inactive human resources represents the main policy priority for the next years, since most EU member-States will still have unused labour capacities for at least 10-15 years. Nevertheless, it is worth noting that the ageing of the working-age population will imply that participation levels will be more and more influenced by the activity patterns of the increasing in size older generations. The question of maintaining older people in employment becomes an increasingly important policy issue since early retirement has become, over the last two decades, a well-established practice.

## C. THE LINK BETWEEN DEMOGRAPHIC AGEING, EMPLOYMENT GROWTH AND PENSIONS SUSTAINABILITY

In its effort to further reduce unemployment, the Lisbon European Council last Spring, established that, on the basis of a sustainable economic growth of 3% of GDP, Member States should move towards a total average employment rate of 70%, and over 60% for women, in 2010. To achieve this goal, the rise in the current levels of activity among women and older

workers will be crucial. An integrated policy of technology driven productivity growth, more and better jobs and a strategy for human resources development have been proposed.

The European Council also underlined the need to modernise social protection. Within this context, the link between employment and the pension systems is of critical importance. On the one hand, pension systems play a role in encouraging or sometimes discouraging employment. On the other hand, changes in the number of people in employment have a powerful impact on the financial balance of pension systems.

The pressure on pension systems and public finances is mainly stemming from the growing dependency. During the period 1995-2015, the population above the standard retirement age, 65 years, will increase by 17 million (30%). Within this group the very old, those over 80, will increase by 5.5 million (39%). Pension systems will have to become less sensitive to demographic and other societal changes.

However, in policy terms, it is not the demographic old-age dependency ratio that matters for the sustainability of pensions, but the economic dependency ratio. The importance of this link is explored in the following simulation. Economic dependency ratio stands for the ratio between the economically active people and the dependent people. For the purpose of this analysis the ratio of the age group 65+ divided by the number of people in employment represents a reasonable proxy of the old age economic dependency ratio. Figure I shows comparatively the trends in the demographic and economic dependency ratio at EU level. The gap between demographic and economic dependency ratio provides a measure of the existing margins of employment growth compared to the state of full employment. If employment in the EU grows over the next years according to the targets set in Lisbon, then, as shown in figure I, the decline of the economic dependency ratio will be much slower than the corresponding one of the demographic dependency ratio.

## D. HOW MANY (... ADDITIONAL) WORKERS ARE NEEDED IN THE UNION?

### 1. The question examined

This simulation aims to find out whether mobilising the unused potential of the EU working age population could suffice to offset the impact of the demographic trend. Alternatively, it attempts to provide a rough estimate of the volume of working age population needed to satisfy the employment growth and pensions sustainability objectives set in the form of the following two conditions:

- I. Employment growth should attain the target level corresponding to an average employment rate of 70% set in the Lisbon Summit, then it will continue growing at a pace leading to 78%<sup>1</sup> in 2040.
- II. Employment growth should be sufficient to keep economic dependency of each of the member-States constant at the corresponding 1999 national levels throughout the period 1999-2040.

### 2. Methodology and assumptions

The simulation is built upon the baseline scenario of the *2000 Revision* of Eurostat. The time period covered is from 2000 to 2040. In particular, the aim of this simulation is to find what are the requirements in terms of employment level in order to satisfy the condition I for employment growth and the condition II for the sustainability of pensions.

The assumptions made are the following:

- The rate of productivity growth is set at 1.8% throughout the period. The figure is based on the current 3year projections of the Commission;
- The effort towards attaining the employment level of 70% at EU level in 2010 is distributed among the member-States taking into account their present age/sex employment levels and their corresponding activity rates.<sup>2</sup>
- the labour demand keeps sufficiently strong to absorb not only the available employment resources but also the immigration needed to two employment growth conditions throughout the period until 2040;
- the number of pensioners equals the 65+ age group, while the number of contributors is equal to the number of the people in employment. The ratio of these two variables represents in this exercise the economic dependency ratio;
- the only means to satisfy the two conditions set is employment growth. All other policies options (level of pensions, age of retirement etc) are kept unchanged;
- the age structure of the additional labour entries (immigrants) needed is equal to the average age structure of the immigrants observed at EU level in 1998;
- the behaviour of immigrants in terms of fertility, employment rate and retirement is the same with the rest of the working age population at national level;

### 3. Findings and policy implications

This simulation shows that the objective of employment growth set in Lisbon, could have a substantial, though temporary, positive effect on pensions sustainability for the member-States. Important differences are observed between the member-States in terms of their ability to sustain 1999 economic dependency levels by increasing employment on the basis of condition I. The following Table 2 shows how long each member-State could sustain the level of employment growth needed with their available labour reserves to maintain the economic dependency ratio at the corresponding national levels of 1999. The immigration flows built in Eurostat projections represent an average net inflow of approximately 650.000 people per year. It is widely accepted that this figure is underestimated.

Table 2 shows a diverging situation. Germany is facing immediate problems while at least two other member-States, Austria and Denmark, will also face pressures within the current decade. It is also worth noting that some countries will face a relatively long period of gradual deterioration of their situation ( Greece, Italy, Luxembourg, Portugal, Ireland, Belgium) while some others (mainly Denmark, Finland) the transition from balance to imbalance will take place within 2-3 years. Finally, some countries may have some additional labour capacities due to the high number of part-timers. The most typical example is the Netherlands. These countries may have some further possibilities to sustain the level of their economic dependency ratio by progressively converting part-time to full-time jobs.

Nevertheless, by 2020 the majority of the member-States will be faced with pressures in their economic dependency ratio that could not be managed by employment growth unless the Union increases its employment capacity through a substantial growth of immigration or go for substantial reforms of its social protection systems.

The situation at the EU level is seen in figure II. The lighter (green) line in denotes the level of employment required to satisfy the two conditions mentioned earlier. The lower (blue) line shows the level of employment required to satisfy only the first condition relating to the employment target of Lisbon. Finally the difference between the lighter and darker (green) lines represents the additional amount of employment needed to cover the resulting pensions rights of the additional labour inflows required. A new migration-boom effect will be born. Future generations will have to deal with it some 30 years later.

According to this simulation, to maintain at EU level the average economic dependency ratio at 1999 level (2,6) would require approximately 120 million of additional workers corresponding to an additional total immigration of some 170 million people<sup>3</sup>. These figures show the difficulty to maintain the sustainability of pensions systems through employment growth and migration without any further policy action.

For those member-States having an economic dependency ratio much higher than the EU average (i.e. Ireland 3.69, Netherlands 3.56, Denmark 3.5, Finland 3.1) a plausible approach would be to opt for reforms in their pension systems in order to lower the level of the economic dependency ratio at which their pensions system attains equilibrium. This would also lead to a higher convergence of the national levels of the economic dependency ratio across the Union. It could also substantially delay the need of these countries for immigration. Inversely, those member-States that are found already below the EU average level of the economic dependency ratio, may look for higher employment levels either by a better utilisation of their workforce or, in the case of low labour reserves, by developing a more active immigration policy. However, these conclusions should be interpreted with a lot of precaution given the complexity of the issues, the high degree of uncertainty associated with the set of economic assumptions over the long term and the difficulty to establish full comparability between member-States.

## E. SOME ADDITIONAL DIMENSIONS OF THE DEMOGRAPHIC IMPLICATIONS IN THE EU LABOUR MARKET

Although this paper deals with issues and policies of the Community with its present membership, it is important to recognise the significant implications for employment policies that an enlarged Union will represent. In addition analysing trends and setting objectives for employment based on aggregate data may be misleading since it does not take account of the very high diversification of labour market situations at regional level. It does not also consider the risk of growing skill mismatches. Consequently, although the European Union may still have at hand, at aggregate level, the necessary resources to face the demographic ageing over the next 10-15 years, important shortages and/or mismatches may arise much earlier at regional or sectoral level. It is thus necessary to briefly discuss these issues.

### 1. Migration and enlargement

No clear prediction can be made as to how migration trends will develop during the process of enlargement of the EU. It is expected that there would be a substantial migration flow from the Eastern European countries to the rest of the EU immediately after the introduction of free movement of persons. This is likely to be characterised by a peak in movement in the short-term, levelling out over 10 years to below 150 000 people per annum.

The extent and type of transition period is a crucial aspect in determining the size of future migration in the enlarged EU, since this is one mechanism for managing the balance of factors involved in migration. Important among these are labour market demand and wage differentials and they are supplemented by geographical and cultural considerations as well as by established patterns of migration. However experience has shown that an assessment of wage differentials must always be accompanied by an assessment of the cost of living which acts as a balancing factor.

The impact of labour migration in the enlarged EU is dependent on wage differences. Wage equalisation between the CEE10 and the EU is currently estimated to be reached in about 30 years, and as this is reached, movement will more and more reflect the current patterns of

movement between Member States. The movement of highly skilled workers will increase as flexibility increases and multi-national companies move employees throughout Europe. "Labour tourism" (short-term income seeking workers and contracted temporary workers) will also continue to develop as companies take advantage of labour which is cheaper than indigenous labour, and low-level cross-border trading will also increase as trans-border economic regions develop.

## 2. The regional trends

The regional situation in the EU is quite diversified. Some of the regions in Southern Scandinavia, Northern Italy, a substantial part of England, Central Portugal and Southern Germany combine sustained economic growth with relatively high employment rates ranging sometimes beyond 70%, and a fast declining demographic trend. This implies that their ability to compensate for the demographic effects, over the next decades, will be limited. Mismatches and local scarcity of human resources might prove a serious challenge for economic growth in these parts of Europe, already during the current decade.

While these regions do not have any labour reserves, other regions, often within the same country, face particular difficulties in activating their unused employment potential or they suffer from regional decline. Several member-States (Italy, Spain, Portugal, France and Greece) show situations of increasing regional disparities, with some of their regions below 80% and other above 120% of their national average employment rate. The enlargement to the Eastern Europe may aggravate this situation in the enlarged Union.

Could intra-european mobility help improving employment and growth performance? The reversal of demographic trends that, so clearly differentiate Europe's regions, naturally raises also this question. Increased labour mobility is one way of dealing with regional imbalances. Mobility has both an occupational and a geographical dimension. Occupational mobility - training, retraining of the workforce - and geographic mobility are important factors for adjustment to changing the labour market conditions.

Despite the important progress made in the liberalisation of the free movement of persons over the last decades in the EU, Europeans have still tended to move less than in the early post-war period. Geographical mobility between Member States is limited to 0,1 per cent a year. Nevertheless, the scale of labour mobility between regions is bigger, about 1,5 per cent a year though with large variations between regions. The increased participation of women in the labour market might have been one of the reasons explaining this lack of geographical mobility, as mobility in many cases concerns two people with professional careers. Some further important reasons to be considered are the increasing welfare standards across even the poorer EU regions and the growing instability of jobs.

The issue of mobility will be increasingly important over the coming 10-20 years. It is expected that in the near future, the socio-economic and institutional environment in Europe will be more favourable for geographical mobility. Growing economic integration, together with improved economic performance, will certainly contribute to this trend. As mentioned before, the enlargement to eastern European Countries will also contribute to an increased mobility. However, given that most of the candidate countries face similar or even stronger demographic ageing trends, this mobility might be a source of increasing regional demographic and economic imbalances.

In the long run, fast technological change and particularly the expected progress in telecommunications, networking and transport could help improving the allocation of human resources and may decrease the need for geographical mobility.

### 3. Skill mismatches and unsatisfied labour demand

Skill mismatches may also grow as a result of the decrease of labour reserves but also for at least two further reasons.

#### *a. The acceleration of technological progress*

Fast changes in technology create new demands for skills and competencies across most economic sectors. The young people entering into the labour market are indeed more highly educated in general terms. However, technological progress seems, to be bringing about a polarisation of the skill mix. The employers demand specialised workers, whereas the workers offer a medium to high, but generic, educational level. Already, today, 80% of European enterprises consider information technology skills development to be their number one training priority. A new economy is emerging, with technologically more advanced enterprises, and a growing services sector, often delivered by new small firms. In large and small enterprises, new demands are being made of workers, with the technologies creating a more process, rather than function, driven workplace. The EU has yet to respond in this shift in demand. 500 000 information technology jobs could not be filled in 1998 by lack of qualified applicants. Without urgent action the direct job growth foregone will rise to 1.6 million by the year 2002.

#### *b. The growing need for new type of services*

The shortage of highly skilled information society specialists is not the only aspect of the shift in skills demand. Skill shortage problems will spread out and affect other growing sectors being developed on cross-disciplinary applications of information and communication technologies. This mainly refers to the service sector. Over 54% of the working age population in the US works in the service sector. In Europe this is just 40%. This difference equals 36 million jobs. Differences are to be found in all parts of the service sector – distribution, financial services, hotels and restaurants, leisure, and communal services such as education, health and social services. Communal services alone represents 10 million jobs. Demographic ageing and increasing prosperity will certainly accelerate the growth of these services in the future.

#### *c. The household needs and the underground economy*

Trends in the demography and family also increase the need for services to people. As more women –traditionally main carers- are entering employment, fewer people are available to care for family dependants and particularly for the increasing number of the very old. In fact the +80 group of population is expected to double over the next 15 years. Over the last decades, a considerable number of this type of jobs has been created in the EU member-States. The trend is expected to continue since female participation in the labour market is far from been completed and changes in the structure and the composition of the household are expected to further increase these needs. It is worth noting that the formal labour market has failed in most member-States to satisfy this demand which is mostly covered by immigrants within the underground economy.

In fact, the growth of the illegal immigration, over the last years, has been encouraged by the underground economy particularly in the Mediterranean Member-States. This trend mainly refers to temporary or seasonal employment mainly in agriculture, construction and in the sector of services. The trend is also observed even in regions with higher unemployment. There is a range of causes to explain that. They start from institutional rigidities, particularly the relatively high level of non-wage costs in the formal sector, to social attitudes. Moreover,

some member-States, mainly in southern Europe, appear more tolerant of large informal sectors than the their Scandinavian partners.

However, the issue seem to be ever broader. Both illegal and legal immigrants are more vulnerable than the national workers. They are often ready to make concessions concerning their wage and other work-related rights. This may be a source of increased competition with the national workers particularly when employment is stagnant. The issue is more important among the low-skill workers. This is precisely the kind of argument often used in support of policies to limit recruitment of new immigrants.

## 6. SOME FURTHER CONCLUDING REMARKS

This analysis allows for some of conclusions but it also raises several issues for further debate.

Certainly, population ageing will have a major impact on the labour market with the arrival of the baby boomers in the age of retirement and this will be a lasting trend. The problem of labour shortages seems to be limited at least for the next 10 years to some specific sectors of the economy and some regions of Europe. Unlike the US, the European Union had over the last 3 decades a poor record in job creation. Today, the European Union still has considerable employment reserves due to relatively high unemployment and low activity levels compared to the USA and Japan. The paradox is that this weakness of Europe represents, at the same time, its force (compared for instance to Japan) in facing the demographic challenge. The reserve employment potential of the EU represents a total of more than 30 million people which with appropriate policies could become a source for further employment growth in the next 10 to 15 years. These labour reserves mainly consist of females and males in the older age group. However given the importance of the demographic ageing, Europe may progressively face a more generalised labour scarcity but in any case not before 2020.

Future enlargement may further complicate the issue. Although this paper mainly focus at issues and policies of the Community with its present membership, it is important to recognise the significant implications for employment policies that an enlarged Union will represent. The existing differential in economic terms is expected to generate a considerable inflow of immigrants from these countries. However, these countries are also faced with similar demographic problem. Employment reviews are being carried out in candidate countries at present, with a view to gaining a better understanding of the situation and the possible future trends.

An additional element of uncertainty is related to the future evolution of productivity. The limited growth of productivity over the last two decades despite the information revolution has puzzled the economists. A substantial increase of the productivity in the future may modify significantly the policy debate on future employment trends.

The sustainability of the European pensions systems seem to be an additional and perhaps more important issue in the long run because of the speed with which it will develop once the baby boom generation will cross the age of retirement. The policy makers are faced with different options. Containing public spending on pensions by rendering pension schemes less sensitive to demographic changes is one of the option. The option is often complemented by suggesting important reforms in the PAYG systems<sup>4</sup> or a shift to a funded system. The latter in fact may ultimately imply, among other, investing on countries with higher potential in human resources and higher economic growth.

Covering the growing imbalances by targeting at higher and higher employment levels through migration represents another option. This approach privileges the need to sustain growth within the developed world. The different options are not mutually exclusive. Different policy mixes can be considered in an effort to maintain the high welfare standards of the EU social models without harm neither for the European society nor for the developing countries. Besides, rapid and radical policy changes to either direction might imply increased transition costs and unpredictable social implications.

Finally, a last consideration, concerning the long run. The fast technological change and particularly the expected progress in telecommunications, networking and transport may increase the importance of the immaterial economy reducing the need for geographical mobility of the workforce. Nobody can say today with certainty whether or not in 30 years from now the European economy would need all these millions of immigrants.

Nevertheless, over the next 20 years, migration could have a substantial contribution in offsetting the mismatches and part of the demographic decline provided that there is a sustained rate of employment growth to meet this extra labour supply. In the absence of sustained employment growth, migration inflows could not have the expected positive balancing effect in the labour market and the social protection.

The key role of employment growth has been underlined by the EU policy makers. Significant policy initiatives were taken since 1997 in the context of the Common Employment Strategy<sup>5</sup> designed to improve employability, adaptability, equal opportunities and to promote entrepreneurship with a view to job creation in existing and new enterprises. In addition, last Spring, the Lisbon European Council outlined an integrated approach which should encompass a wide range of policies including the need to modernise the European social model and in particular its developed systems of social protection. This strategy combined with a broader mobilisation of all economic and structural policies, operating more and more in a mutually supportive way is expected to increase the performance of the EU over the next years. In fact, over the last 3 years, there are encouraging signs of improvement in the fight against unemployment.

In conclusion, assessing the needs of immigration for the European Union is a quite complicated issue that cannot be treated by taking only into account the demographic trends. A lot of considerations should be taken on board. Besides, each country of the Union represent a different situation not only because the demographic patterns are different but also because each of them faces its own socioeconomic reality. Economic and social institutions are often different too.

Today, the political momentum tends to be in favour of a managed increase in legal immigration. In order to manage migrant flows successfully and to cut illegal migration, the EU intends to adopt a coordinated approach focussing its attention on all aspects of the migratory system and in close partnership with the countries of origin. In addition, the EU intends to promote effective integration measures for the new immigrants ensuring them decent living and working conditions and the development of anti-discrimination policies which could in turn reinforce their socio-economic contribution to their host society.

## TABLES

Table 1: Employment rates (%) for EU member-States by gender and age group in 1999.

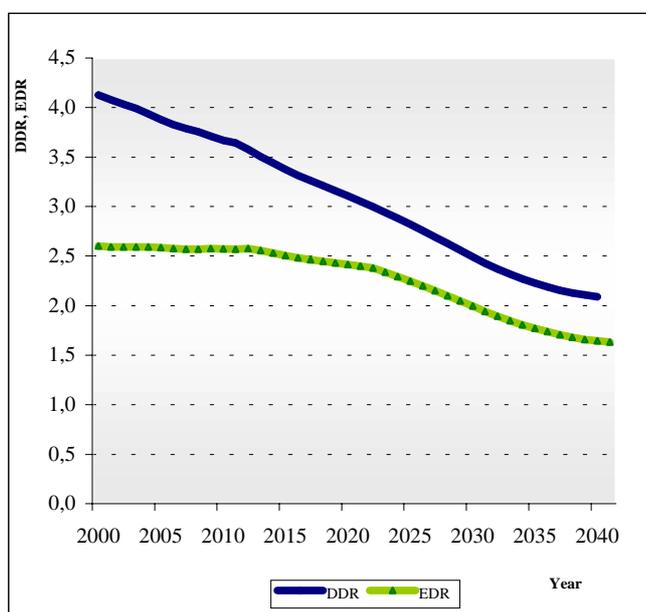
	<b>Males 15-24</b>	<b>Males 25-54</b>	<b>Males 55-64</b>	<b>Total males 15-64</b>	<b>Females 15-24</b>	<b>Females 25-54</b>	<b>Females 55-64</b>	<b>Total females 15-64</b>	<b>Total 15-64</b>
EU	42,2	86,2	47,3	71,6	35,1	64,5	27,0	52,6	62,1
Denmark	69,6	89,3	60,1	81,3	63,0	79,3	47,5	71,6	76,5
Germany	48,6	86,6	46,9	72,4	43,9	69,9	28,7	57,1	64,8
Portugal	47,9	89,8	62,3	75,7	38,5	72,2	41,6	59,5	67,4
UK	57,1	86,5	59,4	76,9	52,8	72,5	39,8	63,7	70,4
Netherlands	62,8	91,4	48,8	80,3	62,5	69,4	22,0	61,3	70,9
Luxembourg	33,3	92,0	38,1	74,5	29,2	61,5	19,0	49,6	52,9
Austria	59,0	89,6	41,5	76,7	50,6	73,0	17,7	59,8	68,2
Sweden	35,6	83,5	67,3	72,1	35,0	80,1	61,8	68,9	70,5
France	29,9	86,0	31,9	67,5	23,3	68,6	24,9	53,5	60,4
Belgium	27,4	86,1	35,1	67,5	23,3	66,3	14,7	50,2	58,9
Finland	47,2	83,3	40,7	70,2	43,0	77,5	37,8	64,6	67,4
Italy	30,3	84,3	40,8	67,1	20,9	49,5	15,1	38,1	52,5
Ireland	49,9	86,4	61,1	73,5	43,0	60,2	25,6	51,4	62,5
Spain	35,2	84,2	52,2	67,6	27,8	23,1	47,5	19,1	52,3
Greece	34,1	89,1	55,8	71,6	22,2	51,6	23,7	40,3	55,6

Table 2: How long employment growth could maintain the economic dependency around the 1999 levels without additional immigration?

A	BE	DE	DK	GR	ES	FR	IR	IT	L	NL	P	SF	SW	UK	EU
2006	2016	2001	2006	2020	2028	2013	2020	2020	2020	2012	2017	2011	2012	2014	2012

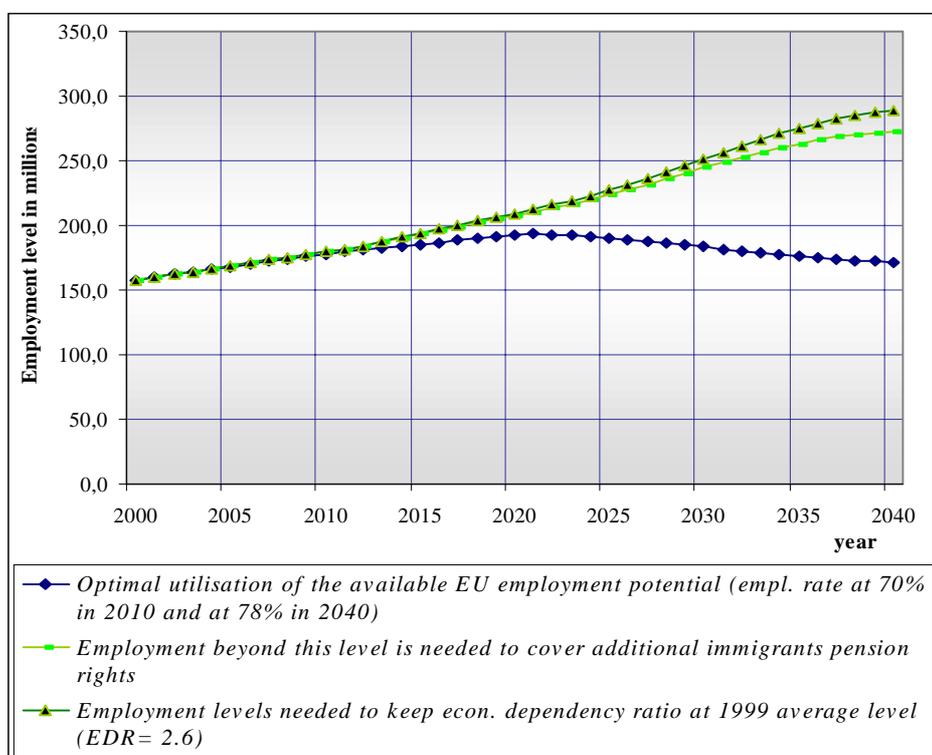
## FIGURES

figure I: EUR-15.Future trends in the demographic and economic dependency ratios;  
Period 2000-2040



Source: EU Commission calculations based on Eurostat 2000 demographic scenarios and Commission economic scenarios.

figure II: Employment levels required to meet employment growth and pensions sustainability conditions in the EU; Period 2000-2040



Source: EU Commission calculations based on Eurostat 2000 demographic scenarios and Commission economic scenarios.

## ENDNOTES

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<sup>1</sup> 78% is considered to be a maximum level of employment that can be sustained over a long period. It is comparable with the labour performance observed in the USA and Japan during periods of sustained economic growth.

<sup>2</sup> The EU employment target of 70% for 2010 is set as for each of the member-States as follows: A 73.0, B 66.0, DK: 79.7, DE 71.2, GR 66.0, ES 66.7, FR 67.0, IR 72.9, IT 63.3, L 67.9, NL 78.7, P 74.9, SF 73.2, SW 75.8 UK 75.0. In 2040 all countries are assumed to converge to 78%.

<sup>3</sup> Assuming that the immigrants have the same activity rates than the EU population. This is perhaps unrealistic for the first years. However given the assumption about a gradual increase of the employment rate up to 78%, the assumption becomes overall quite plausible.

<sup>4</sup> According to an internal Commission study a gradual average increase of the effective retirement age of 9 years would be required to compensate for the demographic effect on EU pension systems between 1999-2030

<sup>5</sup> For more information see European Commission: Employment Guidelines 1999 and Employment Guidelines 2000

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