# The Benefits of Migration for an Ageing Europe

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#### **Documents reviewed**

- Confronting Demographic Change (European Commission Green Paper, 2005).
- Facing the twenty-first century: New developments, continuing problems. By David Coleman (In: The New Demographic Regime: Population challenges and policy responses, UNECE, 2005).
- Immigration or Bust? Options for securing the future viability of the UK state pension system. By David Blake and Les Mayhew (London, LSE, UBS PRP Discussion Paper No.31, FMG 526, 2004).
- Labor force trends and immigration in Europe. By Serge Feld (International Migration Review, 2005, 39, 3).
- Migration in an Interconnected World: New directions for action (Report of the Global Commission on International Migration, GCIM 2005).
- Economic Impact of Ageing Population in the EU25 Member States. By G. Carone et al. (European Commission DG for Economic and Financial Affairs, 2005).
- Replacement Migration: Is it a solution to declining and ageing populations? (United Nations Population Division, 2000).

## **Abstract**

The number of people seeking to migrate from one country and continent to another will increase in the years to come, due to development and demographic disparities, as well as differences in the quality of governance (Global Commission on International Migration, 2005, p.21).

The "demographic disparities" which the UN Global Commission regards as one of the main factors behind the likely increase in global migratory pressures raise a very important policy question for ageing societies: do current demographic trends – the combination of below-replacement fertility with increasing life expectancy – provide them with a good reason for relaxing controls on migration? What difference should population ageing make to the policies that high income countries adopt for controlling and managing what the UN Global Commission sees as a largely inevitable increase in immigration pressures from low income countries?

### Selective migration or replacement migration?

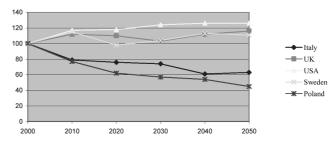
The likelihood that population ageing will intensify an already apparent 'global battle for talent' is a prospect that is becom-

ing increasingly familiar in forward-looking reviews of the international labour market<sup>1</sup>. As the skilled workers of the baby boom generation retire and the demand for appropriately qualified labour in the more 'high-tech' sectors of the economy continues to expand, the domestic pool of potential recruits will be shrinking. Since these pressures appear already to be making themselves felt in key sectors of the more advanced economies (for example, IT and health care), it seems reasonable to suppose that they will intensify over the next twenty or thirty years as the cohorts of workforce entry age start to contract (see Figure 1).

The likelihood that population ageing will contribute to problems of skills shortages provides the governments of the advanced economies with a good reason – self-interest – for encouraging selective immigration. It also gives them a strong incentive to make sure that they will not lose out in the global battle for talent, which means that it is in their own interest to offer a 'good deal' (in terms of citizenship and welfare rights) to incoming migrants. To many commentators indeed the case for selective migration has long seemed almost self-evident.

There ought to be selective immigration into the Old World. This policy, though in need of improvement, does exist in the United States. But it must be created in Japan and in Europe . . . . An immigration policy that was not selective would be neither politically tolerable nor socially acceptable.<sup>2</sup>

Ageing might stimulate migration, which would increase labour supply and stimulate growth *provided the skills of the migrants broadly match the economic needs of the host country*. European countries already rely on migrants to fill shortages for certain skilled and unskilled tasks (e.g. in the healthcare sector). Immigration could be a positive factor in labour market adjustment (my italics)<sup>3</sup>.



Source of data: Eurostat.

Figure 1. Index of change in population aged 20–24 yrs (potential workforce entry age) for selected countries.

Such appeals to self-interest on the part of the ageing world have, however, to be hedged round with provisos and qualifications: whatever the benefits of this kind of migration to the host countries and to the migrants themselves, it often appears that the sending countries are simply losing human capital that they can ill afford to lose (and in which their taxpayers have invested through the education system). 4 To the extent that we are uneasy about the morality (or wisdom) of transferring skills from societies that are relatively poor - with a large proportion living in 'absolute poverty' - to societies that are relatively rich, we are bound to look for a way of managing migration that does not exacerbate international inequalities or handicap societies that are still struggling to raise living standards above an acceptable minimum, but rather contributes to beneficial outcomes for sender countries as well as host countries.

Since a policy of selective migration would have us choose from among potential migrants those who are best qualified to meet the economy's requirements, its adoption in a country such as the UK (where the government is now consulting on the introduction of an Australian-style 'points system') would hardly constitute a relaxation of controls on migration, even if it was in fact accompanied by some increase in the level of immigration. As Philip Martin (2005) points out in one of the supporting papers for the Global Commission on International Migration report, the case for relaxing controls on migration from poorer to richer countries has come to rely more and more on the fact that these latter are mostly ageing societies, and would stand to gain from replacement migration. Does population ageing provide ageing societies with a good reason for trying to increase the scale as well as the quality of labour migration?

# Demographic deficits and what to do about them

The appeal of replacement migration is easy enough to understand. Ageing societies are going to find themselves in 'natural decline' - with deaths outnumbering births - at the same time as their members are living longer lives into a more advanced old age. As a result they will face a growing 'demographic deficit' that will have an impact on the welfare of their populations long before they are threatened with anything so apocalyptic as collective extinction. There will be too few young people in the new generations who are to replenish the labour force, take on the tasks and responsibilities of citizens, and help provide for those who will be then too young or too old to work. Might it not be possible to make good this deficit by looking to societies that have above-replacement fertility and growing populations? Migration would be used not just to meet specific current needs in the labour market, but to make good the demographic deficits of ageing societies. If the aim is to replenish the human resources on which these societies depend, an increase in immigration appears to be the only (peaceful) alternative to an increase in fertility.

The 2000 United Nations report on replacement migration

was written to test the plausibility of this idea against some real numbers – by asking what level of inward migration flows would be required to make good demographic deficits projected for selected ageing societies over the period between 2000 and 2050. How much *additional* migration – beyond current projected levels – would these societies require in order to prevent any decrease in (i) potential support ratios<sup>5</sup> (ii) the absolute size of the working age population (iii) the absolute size of the total population? Each of these demographic objectives represents a measure of the size of the demographic deficit that results from continued below-replacement fertility and increasing life expectancy.

For the first of these objectives at least, the conclusions to be drawn from the UN projections are clear: an increase in inward migration cannot by itself provide policy makers with a long term 'fix' for the effects of current trends in fertility and mortality on the age structure of the population, measured here by potential support ratios. This particular target - which is intended to stand proxy for the growing 'burden of dependency' that population ageing imposes on the economically active population<sup>6</sup> – can only be achieved by levels of immigration that are patently unfeasible. A large number of subsequent analyses have confirmed that "population aging is an inescapable phenomenon that can in no way be remedied by migratory flows" (Feld, 2005, p.639). The volume of migratory flows required to maintain present support ratios would have to expand at a rate which would lead to unsustainable rates of population growth. In this case at least, the long term numbers largely speak for themselves. By 2050 the annual inflow of migrants into the European Union would have to increase 15-fold over what the UN estimates to be the annual average for 1990-1998. Looking forward another 50 years to the end of the century, the UK would require 5 million new migrants each year - a 20-fold increase on the historically high levels of immigration for 2003-4 and more than five times the UN estimate for recent immigration rates into the entire EU (Coleman, 2005).

It is, however, less clear-cut whether the numbers required to avoid a decline in the absolute size of the working age population are similarly unrealistic or unsustainable. Although the UN report estimates that the annual inflow of migrants into the European Union would have to increase to double the annual average for 1990-1998 - with the result that by 2050 new migrants and their descendants would make up more than 25 per cent of the total population - it also points out, for some of the countries in their sample (e.g. France and the United Kingdom) that this would involve migratory scenarios that are within the range of recent experience for some parts of the industrialized world (e.g. Australia or Canada). For others, however, it would appear to be quite unrealistic. Hence, as one of the report's many commentators concludes (Feld, 2005), only one of the three migratory scenarios considered appears realistic for all the countries in the sample, namely that which would be required to avoid population decline.

At this point it is useful to bear in mind that the demographic targets specified in the 2000 UN report are not proposed as policy objectives in their own right. What concerns us rather is the potential of migration to mitigate the impact of demographic change on the welfare of the populations of ageing societies; and of the three targets considered in the report, the prevention of population decline probably has the most questionable connection with any substantive policy objectives. When we look to the long run, the main threat that is implicit in persistent population decline would appear to be political. What is threatened, in other words, is the continued existence of a polity or a nation state. It should be clear, however, that the continued existence of a nation such as the UK is perfectly compatible with some contraction in its population. Indeed since population growth is one of the main engines of environmental degradation, there is clearly a case for regarding such as outcome as positively desirable (Coleman, 2005).

When, however, the demographic endpoint for replacement migration is specified in terms of the size of the working age population or potential support ratios, the underlying policy concerns are rather different. We are really asking about the extent to which an increase in net immigration might help (i) maintain a rate of growth in living standards that is threatened by a shrinking workforce and an increase in the non-working population (ii) finance the public provision of health and welfare benefits to a growing population of dependent older people from a tax base that is growing more slowly. Would it be possible to rely on replacement migration as a way of avoiding any potentially painful and unwelcome adjustments in domestic policy? How much easier will it be to secure these policy goals by increasing the inflow of migrants? Is it the case that an increase in net immigration might actually be necessary for their achievement?

# Migration and fiscal burdens

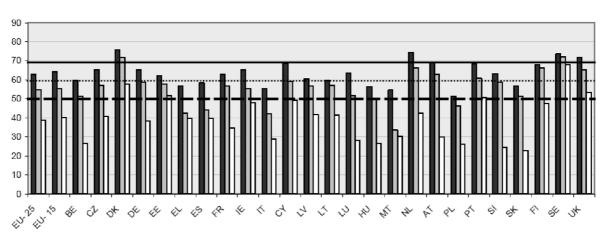
The central conclusion of the UN report - that migration is not a feasible solution to the problems of falling support ratios / increasing dependency ratios<sup>7</sup> - bears directly on the suggestion that migration might be able to solve the problems that population ageing will cause for tax-financed systems of public transfers from the working population to the older non-working population. Even though the potential support ratio that the UN uses for its analysis is a 'pure' demographic variable - it ignores the effects on the size of the tax base of (i) labour force participation rates in both the working age population and the retirement age population and (ii) growth in real wages<sup>8</sup> - the report's conclusions have effectively scotched the idea that migration might enable governments to avoid the need to make any potentially painful adjustments in these arrangements. Hence the conclusion of the 2005 European Commission Green Paper on 'confronting demographic change', that an increase in immigration cannot be a sufficient policy response to "all the problems associated with ageing" and "is no substitute for economic reforms" (p.6). What the UN report's analysis has not done, however, is put an end to all speculation about the possibility that increased inward migration might make a significant contribution to *easing* these problems – by reducing the size of the adjustments that would otherwise have to be made.

The United Kingdom may seem an unlikely candidate for such speculations, since by European standards its public pension scheme is quite small. Even so, given realistic assumptions about the likely development of the system, it faces the same sort of problems as other European countries with much larger unfunded schemes. In a set of projections provided to the House of Lords Select Economic Affairs Committee, David Blake and Les Mayhew (2004) illustrate the contribution that migrants might make to the financial sustainability of the UK pension system by estimating how many additional contributors the UK pension system would require to stay in balance under various more or less realistic scenarios for the period up to 2027.

Our analysis suggests that no single policy measure [including increased immigration] is capable of 'solving' the pension crisis without creating significant distortions and it is therefore probable that a range of measures involving increases in state pension age, higher contribution rates and additional immigration will be necessary (Blake and Mayhew, 2004, p.18).

# A shrinking workforce in an ageing Europe

Notwithstanding occasional pieces of analysis like that from Blake and Mayhew, recent debate in Europe about the potential of large-scale immigration to mitigate the impact of the region's demographic deficit on the welfare of its citizens has concentrated on the implications of low fertility for the size - and hence the aggregate output - of the labour force. The European Commission Green Paper on demographic change reiterates the diagnosis of an earlier Commission consultation document, which laid out the case for a common EU policy on economic migration: the projected decline in the working age population across the EU as a whole threatens the capacity of the European economies to sustain the growth rates that underpin their prosperity. At current levels of net immigration, there will be a fall of more than 20 million in the working age population of the EU as a whole between 2010 and 2030. Although the effects of this drop in the size of the potential labour force may be offset to some extent by increasing labour participation rates among women and older people in their late fifties or early sixties (see Fig. 2), success in meeting the so-called Lisbon and Stockholm 2010 targets for the labour market - female employment at 60 per cent and older worker employment at 50 per cent - would not be enough to counterbalance the impact of demographic change on the effective labour force<sup>9</sup>. It is moreover looking increasingly unlikely that the EU as a whole will



Source of data: Eurostat.

Figure 2. Progress towards Lisbon and Stockholm targets for labour force participation rates in the EU, 2002 data.

meet these targets on schedule (though some countries such as the UK are already well within them). This is why the Green Paper on economic migration suggests that "more sustained immigration flows could increasingly be required to meet the needs of the EU labour market and ensure Europe's prosperity" <sup>10</sup>.

Although it is only to be expected that the European Commission should treat of the countries of Europe as one single population that is facing a shared demographic future, in reality the demographic prospects (and not just the labour markets) of the various member countries of the European Union are very diverse. Italy and Germany, for example, as well as all the post-communist countries of central and eastern Europe, are already experiencing a 'natural decline' in their populations (i.e. deaths exceed births). In Italy and Germany, however, the total population is still continuing to grow as a result of net immigration, whereas in most of the post-communist countries natural decline is further compounded by net outward migration to the older EU member countries. In the UK, on the other hand, as well as France, Denmark and the Netherlands, the turnaround in population development from natural increase to natural decrease will not occur for some years yet (2040 in the UK according to the latest GAD projections). And not only is the total population in the UK projected to grow for several decades after this turnaround, but the working age population will also continue to grow throughout the period (2010-2030) when Europe as a whole will start to see a decline in its working age population. These UK figures assume an annual inflow of 130,000 per year (with about 2/3 of these being potential recruits to the workforce) - an increase over previous projections. Eventually, if there is no increase in net immigration or fertility, the working age population in France and the UK will contract just as it is projected to do in Italy and Germany. The timing of the contraction will, however, be different – which means that the timing of policies aimed

at encouraging with a view to avoiding a significant contraction in the labour supply also has to be different. Italy would have to implement any such policies at least a couple of decades before the UK or France.

The problems that the diversity of demographic circumstances and labour market conditions present for the attempt to harmonize migratory policies at the European level are highlighted in a recent discussion by Feld (2005), who concludes that "it seems inappropriate to try to cope with European labour force decline through a common migratory policy" (p. 655)<sup>11</sup>. If there is a case for relying on migratory flows rather than social policy reforms as way of boosting the labour force, it seems strongest, according to Feld, for the countries of Southern Europe, which not only have strikingly low fertility rates and labour participation rates, but also have seen large-scale immigration flows in the last few years. In the UK, on the other hand, as in France, the Netherlands and Denmark, modest increases in labour participation rates in the years up to 2025 more than make up for the losses to the labour force that result from a smaller working age population over the same period.

# Migration, fertility and labour force participation rates

In the absence of migration a decline in the working age population will lead to a contraction in the effective labour force *if* there is no change in age- and sex-specific labour force participation rates. Policy makers have therefore a limited set of options if they want to prevent any substantial decline in the effective labour force. They can try to boost the size of the population who could be recruited into the labour force – either by increasing migration or by increasing fertility; or they can try to recruit a greater proportion of their population into the labour force (i.e. increase age- and sex-specific labour force participation

rates). Some sense of how the different options measure up can be found in the 2004 IMF report on the Global Demographic Transition, which provides rough estimates, for a few selected countries, of the targets that governments would have to meet if they set out to:

- increase labour force participation rates in the working age population (15-64 yrs), especially among women and older members of the working age population (55-64 years);
- increase labour force participation rates for people outside the present upper limits of the working age population (65+);
- increase immigration.

If Germany, for example, were to rely entirely on migration in order to maintain a constant size labour force (i.e. numbers actually in work), it would have to accept a cumulative immigration that would amount to 35 per cent of the total population by 2050. It could avoid this either by increasing aggregate labour participation rates by 14 per cent or by delaying retirement by 9 years. Although the UK is in a somewhat better position, which is to say that some of the options look more feasible, it still faces the same basic choice - either a cumulative immigration that would constitute 20 per cent of the 2050 population or an increase in labour participation rates of 5 per cent or an increase of 3 years in the retirement age. It is important of course to look at the context behind these numbers in order to get a real grip on what the targets mean for different countries. In Germany female participation in the labour force is lower than in the UK. So, although Germany may have performed less well than the UK in increasing labour participation rates in recent years (and they still have relatively high levels of adult unemployment), they are also likely to gain more from the effect of younger cohorts of women with higher participation rates replacing older cohorts with lower participation rates.

An earlier set of projections made by McDonald and Kippen (2001) for selected OECD countries, using what are now rather dated statistics, tackles the issue from the other end, by asking what outcomes (for the size of the labour force) can be expected if governments succeed in achieving targets for migration/labour participation/fertility that lie more or less at the outer limits of feasibility:

- annual net immigration to increase to 0.5 per cent of total population (in line with recent experience in 'high immigration' countries such as Australia, Singapore and Canada)<sup>12</sup>
- labour force participation rates to increase to current levels for Sweden
- total fertility to increase to 1.8 children per woman.

The results are in line with the IMF estimates. The only European countries in their sample that look as though they might be able to avoid a substantial decline in their workforce between 2000 and 2050 without a large increase in

the levels of immigration are France and the UK. If the annual flows of migrants into these countries remain stable and labour participation rates increased to Swedish levels, the workforce size would be (more or less) the same in 2050 as in 2000.

What about fertility? It is possible that one of the attractions of migration as a way of boosting the size of the labour force is that a decision to allow more migrants into Europe looks as though it would be much easier to implement than a decision to increase European fertility. In the one case it is 'simply' a matter of letting more people do what they already want to do – of being permissive and 'going with the flow' of current trends. In the other case it is a matter of getting people to do something that they appear reluctant to do – of being persuasive and shifting the direction of current trends. The European Commission seems not to subscribe to this opinion, however – or at least it takes a more upbeat view of the difficulties of increasing the fertility rate in Europe.

The Commission is encouraged in this view by the fact that the European countries with the highest fertility rates (the Nordic countries) also have the highest labour force participation rates for women. It should be possible, therefore, for other European countries to increase labour force participation rates among women and increase fertility rates at the same time – and a commitment to the implementation of policies that would make this possible accordingly receives a strong endorsement from the European Commission as an essential part of the long-term solution to the problems that arise from very low fertility. Given, however, that it will take more than 20 years for an increase in fertility to have much of an impact on the size of the working age population, it is best to think of such an increase as a long term solution, which still leaves the prospect of a substantial contraction in labour supply through the 2020s.

# Migration and future living standards

The two most obvious ways in which population ageing might act as a drag on future growth in living standards are through (i) the impact of the contraction in labour supply on growth in total output (ii) the increase in the relative size of the economically inactive population that require a share in this output<sup>14</sup>. An early OECD study of the macroeconomic impact of ageing reckoned that in Europe changing dependency ratios would dampen growth in living standards by about 0.5 per cent per annum between 2025 and 2050 (Turner *et al*, 1998). The contraction of the workforce would have an additional negative impact of 0.1-0.2 per cent per annum. Although average living standards

would therefore be considerably lower in 2050 than they would otherwise have been (i.e. without these population ageing effects), GDP per capita in 2050 is still projected to be almost twice its level in 2000<sup>15</sup>.

These baseline projections from Turner et al are not much different from the estimates included in the 2005 declaration of European values in the globalised world - a shrinking workforce could halve the rate of growth (of GDP) by 2040, from 2.25 per cent to 1.25 per cent<sup>16</sup>. Flesh is put on the bones of this rather summary prognosis by a set of projections of potential GDP growth for the period 2004-2050 made on behalf of the European Commission by Carone et al (2005). The projections themselves are straightforward: they combine projections for the future growth (and then decline) of the labour force with assumptions about changes in labour productivity to obtain estimates for rates of growth in both GDP and GDP per capita. Once the labour force starts to decline, the sole driver of GDP growth will be increasing productivity and here the projections work with what are essentially theoretically plausible guesses. They assume that average growth rates for labour productivity will rise in the older EU states (EU15) - from a relatively low 1.3 per cent per annum in 2004 to 1.7 per cent per annum in 2050 – and fall in the newer EU member states (EU10) - from a relatively high 3.6 per cent per annum to fall to an average of 1.9 per cent per annum. Although these projections for labour utilisation and labour productivity yield an apparently benign picture when annual growth rates for GDP are averaged over the entire period from 2000 to 2050 (1.6 per cent per annum in the EU15 and 2.4 per cent per annum in the EU10), the time path is one of declining rates of GDP growth – from 2.2 per cent to 1.3 per cent in the EU15 and from 4.7 per cent to 0.9 per cent in the EU10. What this means in global terms is that European standards of living fall more and more behind those in the USA.

It is against the background of estimates such as these of the *potential* impact of an ageing population on future growth in living standards that researchers have investigated the contribution that migration might make to the future prosperity of Europe. Cichon *et al* (2003), for example, ask what would have to happen to immigration in order to maintain 3 per cent annual growth in GDP per capita. The answer depends of course on what happens to labour utilisation and labour productivity. What matters for the conclusions drawn in this particular study, however, are not so much the precise assumptions made about productivity increases: it is rather the size of the gap between expectations of growth in standards of living and productivity increases.

- If the native population is unwilling to increase its labour participation by more than the baseline assumptions used in the projection (increase in female labour force participation rates of 1 per cent per annum and no rise in retirement age), substantial migration can be avoided only if per capita growth expectations are no more than a fraction of a per cent higher than productivity increases.
- Migration requirements 'explode' if growth

- expectations are substantially higher than productivity increases (i.e. 1 per cent or more).
- A gap of about 0.5 per cent between productivity increases and growth expectations could be filled by a combination of a large increase in labour force participation rates (modelled here as a 15 per cent increase in the 15-64 year group) *and* a cumulative migration from outside Europe that would account for 20 per cent of the total population by 2050<sup>17</sup>.

## Conclusion

Although the UN report (2000) on replacement migration – along with many other successor reports with updated population data – has scotched the idea that mass migration might enable ageing societies to make good a growing deficit in the ratio of young to old, it has by no means disposed of the suggestion that increased levels of migration might be necessary to maintain not only their prosperity, but even perhaps the financial sustainability of their public pension schemes.

Within Europe it now seems to be a matter of general agreement that in order to reap the full economic and social benefits of migration, it is necessary to ensure not merely that migrants have the same 'degree of attachment' to the labour force as residents, but also that their skills and qualifications should as far as possible match the needs of the economy. In other words, European governments should try to manage immigration - apart, that is, from the obligation to grant asylum - with an eye to the immediate needs of the labour market. It is unlikely that inward migration will help to alleviate fiscal burdens and promote economic growth unless these conditions are satisfied. Many analysts would probably go further than this and urge European governments to prepare themselves for a "a permanent effort. . . to participate in the rising world market for flexible high-skilled workers" (Constant & Zimmerman, 2005).

What many of the papers and reports cited in this review are attempting to do - by clarifying a set of choices that population ageing will force upon all the countries of Europe - is push the policy debate beyond this broad consensus over the desirability of selective migration. There is not a single country in Europe that will not have to learn to live with increases in dependency ratios along the drag this will exert on growth in living standards. All of them - eventually - will have to look for ways of mitigating the impact of a shrinking labour supply on their economies and welfare systems; and it should be clear that substantial inward migration will almost certainly figure in any workable set of proposals to achieve such widely shared objectives. A consensus about the importance of the quality of labour migration is not the same thing as a consensus about its scale. Governments have to ask themselves and their populations about the implications of population ageing for the 'optimum' size of the inflows of migrants that are allowed to settle permanently in Europe. The level of migration required to secure a set of specific objectives for e.g. growth rates and the average age of retirement may turn out to be so high that Europe's ageing societies wish to revise the objectives – which is precisely the kind of trade-off that these various papers and reports invite us to consider.

Although the European Commission has so far refrained from setting targets for migration into Europe (whereas it has set targets for labour participation rates), they have concluded that immigration has a positive but limited part to play in maintaining the labour supply.

While using immigration to fully compensate for the impact of demographic ageing on the labour force is not a realistic option, increasing immigration flows are not only likely but necessary  $\dots$  <sup>18</sup>

... a view endorsed, though here the emphasis is rather different, by the European Parliament's Committee on Justice, Civil Liberties and Home Affairs.

We must firmly reject any attempt to present economic migration as a solution to Europe's problem of an ageing population or its economic difficulties. The Member States have to explore new medium and long-term avenues in economic, employment and family policy if they are to meet the challenges of a globalised world. Economic migration is only one policy component along-side many other policy measures<sup>19</sup>.

Whether or not these are policy problems which should be resolved collectively, through the institutions of the European Union, or individually, by national governments, is as contentious perhaps as the issues themselves. It does seem inevitable, however, that they should present themselves with different degrees of urgency and difficulty in different countries.

#### References

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#### **Notes**

- <sup>1</sup> As discussed in evidence presented to US Senate Special Committee on Aging by Gary Geipel of the Hudson Institute, September 2003.
- <sup>2</sup> Norbert Walter, Chief Economist of the Deutsche Bank Group, speaking at a conference on the Graying of the Industrial World in Washington DC, 2000.
- <sup>3</sup> Carone *et al*, 2005.
- <sup>4</sup> Martin (2005) offers the recent surge in the migration of skilled IT workers from India as an example of how this process might benefit the *sending* country. They contrast the situation in India with the migration of healthcare workers from Africa, which appears to present the sending countries with a clear net loss.
- <sup>5</sup> Ratio of working age population (here defined as aged 15-64) to older population (65+).
- <sup>6</sup> Bijak et al (2005) include in their projections two additional support ratios as well as the PSR (i) the ratio of working age population to both pre- and post-working age population (ii) the ratio of economically active working age population to the older population.
- <sup>7</sup> Reaffirmed for Europe in the European Commission's Social Situation Report for 2002.
- 8 It also ignores the effects of changes in the size of pre-working age population.
- Ocarone et al (2005) estimate that Europe's effective labour force will increase by approx. 20 million between 2004 and 2017 and then contract by approx 30 million by 2050 a net fall of 10 million over the period 2004-2050. Much of the increase over the next 15 years will arise from changing patterns of female

- participation in the workforce as older cohorts of women are replaced by younger cohorts with higher rates of employment. These projections use Eurostat assumptions on future trends in immigration with annual inflows reducing from current levels to 0.2% of total pop. by 2015 and remaining stable until 2050.
- <sup>10</sup> COM (2004) European Commission Green Paper, 811 (p.14).
- <sup>11</sup> A view shared in the 2005 report of the House of Lords European Committee on Economic Migration to the EU.
- <sup>12</sup> In Spain in 2002, the yearly net inflow of migrants was estimated to amount to more than 1% of the total population (Bijak, 2005).
- <sup>13</sup> Green Paper on confronting demographic change, 2005, p. 5.
- <sup>14</sup> Another possible transmission mechanism by which population ageing might depress the real economy is via the impact on savings. If households tend to dissave in retirement, then an increase in the proportion of retired people should decrease the amount of private savings available for investment.
- <sup>15</sup> Projections for the UK have yielded similar estimates (Young, 2002).
- 16 Communiqué from the European Commission COM (2005) 525.
- <sup>17</sup> Cichon *et al* fix on this figure of 20%, since it is the figure used by Rowthorn (2003) to illustrate a level of cumulative migration that, in his judgment, would be pushing at the upper bounds of acceptability in the UK.
- <sup>18</sup> First Annual Report on Migration and Integration, 2004, p. 16
- <sup>19</sup> 2005 report on the Commission Green Paper on a EU approach to managing economic migration.