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EU2020 essay
Growing old gracefully: How to ease population ageing in Europe
Alasdair Murray

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Growing old gracefully

How to ease population ageing in Europe

Alasdair Murray

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1 Introduction

Europe stands on the cusp of a demographic revolution. Over the next few decades, the make-up of Europe's population will change substantially. The baby boom generation – that large cohort born between the late 1940s and mid 1960s – will gradually move into retirement, swelling the ranks of the over-65s. The generations behind are much smaller – a legacy of decades of low fertility levels in almost all European countries. Europe's changing demographic profile poses political, economic and social challenges that are as important as climate change, security and globalisation.

Most assessments of Europe's demographic outlook take a deeply pessimistic view of the continent's future. Many commentators warn that Europe's changing demographic make-up threatens to blow a hole in government budgets, derail national economies, and leave European countries enfeebled in the face of competition from younger countries elsewhere. American conservatives have accused Europe of "committing a form of demographic suicide".[1] Even European analysts have warned of an old and decrepit continent becoming irrelevant on the world stage.[2] Much of their analysis shares the dismal world view of the founder of modern demographic science, Thomas Malthus. It is marked by demographic determinism – the idea that demography dictates human destiny.

[1] *George Weigel, 'The cube and the cathedral: Europe, America and politics without God' Basic, 2005.*

[2] *Philippe Colombani, 'Le commerce mondial au XXI siècle: scénarios pour l'union Européenne', IFRI, 2002.*

This paper sketches out a more optimistic view of Europe's future. There are two good reasons to believe that Europe's demographic problems are overstated. One is that the looming demographic changes may not be as severe as most commentators maintain. The

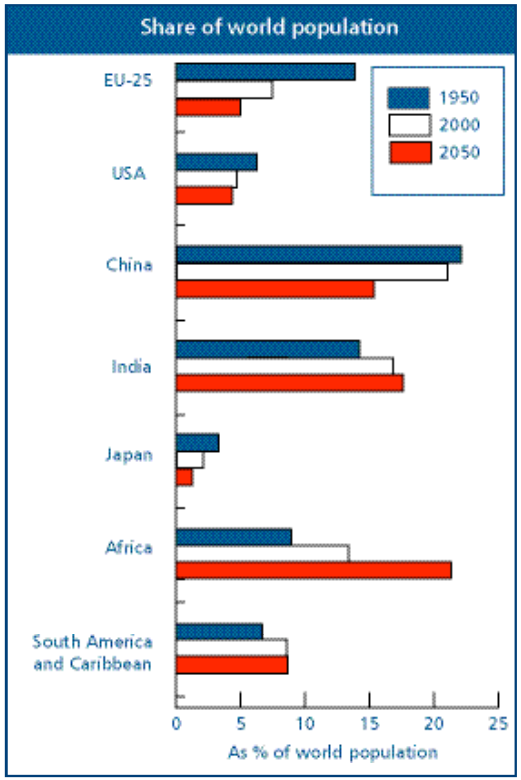
greatest challenge is posed by the passage of the large baby boom generation into retirement. But by mid-century, dependency ratios – that is, the proportion of workers to non-workers – will begin to stabilise. Europe is not in any case the only part of the world facing major demographic change – all developed countries, and a growing number of developing countries, are going through the same process. A second reason for optimism is that there is much that the continent can do to adapt to demographic change. Pension and healthcare systems are being overhauled and reforms to European labour markets should help to mitigate the adverse impact of ageing on public finances and the economy. This essay argues that at root Europe faces a rectifiable labour market challenge rather than an insoluble demographic crisis.

This essay is organised in three parts. Chapter 2 places demographic change in a historical and global context and considers the challenges faced by different parts of Europe. Chapter 3 discusses whether governments can or should seek to change underlying demographic trends through immigration or by attempting to stimulate birth rates. Chapter 4 examines the likely economic impact of Europe's demographic trends and explores how policy-makers might seek to meet the challenges that arise. The paper concludes with a number of policy recommendations and thoughts about the future.

2 The European demographic challenge in context

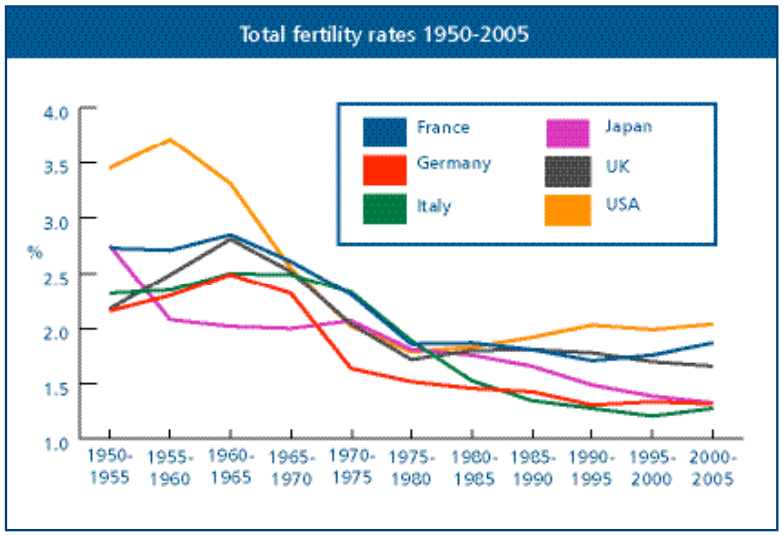
Europe has entered a period of relative demographic decline. Its share of the world population has fallen from 12.5 per cent in 1960 to 7.2 per cent now. On current projections it will fall to just 5 per cent by 2050.[3]

[3] *UN Population Division, 'World population prospects: The 2004 revision', 2004.*



Source: United Nations, 'World population prospects: The 2004 revision', 2005.

Europe's relative demographic decline has been driven by a sharp fall in fertility rates, which are now among the lowest in the world. The average fertility rate in the EU-27 stood at 1.5 children per woman in 2005, compared with 2.7 in 1965. UN figures suggest that 14 European countries will see a decline in their population by 2050. This will be the result of a fall in fertility rates below the replacement rate – that is the average of 2.1 births per woman defined as necessary to maintain a stable population – and negligible immigration. As the fertility rate declines, the average age of the population will rise rapidly.



Sources: Eurostat and United Nations, 2005.

Three myths about European demographics

The decline in Europe's share of the world population, allied to the ageing process, has led many commentators to offer gloomy prognoses for Europe's future. But some of these are based on misconceptions about the nature of demographic change. In particular, it is important to dispel three myths: first, that a declining fertility rate is a recent phenomenon; second, that falling birth rates are a uniquely European challenge (or at least that the scale of the decline is markedly greater in Europe than elsewhere); and third, that the current highly favourable age structure of the population represents a 'normal' state.

★ Fertility decline is not a new phenomenon

Most discussions of declining fertility rates take as their starting point the dip below replacement levels, which occurred in many European countries between two and four decades ago. By contrasting existing sub-replacement levels across Europe with 'baby boom' fertility rates, the impression is given that falling fertility is a recent phenomenon. In reality, fertility in most European countries and the US has been declining since the industrial revolution. Fertility rates in France, for example, peaked as early as 1800. Between 1850 and 1950, France had the oldest population in the world, causing much soul-searching among its political elite and prompting some of the first attempts at pro-natal policies in modern times. Seen over a long timeframe, it is the post-war baby boom, which broke a long-run trend towards lower fertility rates, that looks like an aberration. The real departure in recent decades is the fall of the fertility rate below replacement levels. Demographers attach great importance to national replacement rates, but for the individuals making fertility decisions such numbers are irrelevant. There is nothing unnatural about fertility rates declining below replacement levels.

★ Fertility rates are declining worldwide

A second common misconception is that declining and sub-replacement birth rates are a specifically European problem. Fertility is actually falling in almost all regions of the world. According to the United Nations (UN), global fertility rates have declined from 6.0 to 2.8 since 1972. Over half the world's population now lives in regions with fertility rates below the

replacement level. Sub-replacement fertility is no longer the preserve of developed countries and China. UN figures show that 25 developing countries, are already at or below replacement levels, including Cuba, Iran, North Korea and Sri Lanka. The UN's projections suggest that most developing countries will dip below replacement level by mid-century. This seems a reasonable assumption on existing trends, but predicting fertility rates remains a tricky business. There are a handful of countries, such as Argentina and Uruguay, where fertility rates fell sharply from pre-industrial highs but subsequently remained slightly over replacement levels for as long as 50 years. And fertility rates in Israel and Malaysia have held firm at around 3.0 for the last decade.

★ Europe's current demographics are unusually favourable

A final misconception is that the current age structure of the population – particularly the ratio between workers and the retired – is 'normal'. Many commentators make an unflattering comparison between the dependency ratio of workers to retired, which currently stands at around 4:1 in Europe, with a projected rate of 2:1 by 2050. Commentators and some governments have used these statistics to warn of a looming pensions and public spending 'time bomb' and to insist on urgent fiscal and other reforms.

There are two objections to basing the need for radical policy changes solely on these dependency ratio measures. First, a significant part of the worsening trend is specific to the demographics of the baby boom generation, the large generational cohort born between the end of the war and the mid-1960s. At present, the working age population is swollen by this group. As they move into retirement, the non-working population is set to increase sharply – while the numbers of working age will decline. But as the baby boomers gradually die off, the proportion of workers to retired will slowly stabilise. In

Germany, for example, the ratio of workers to retired is forecast to improve slightly after 2040 while in the UK it is projected to be broadly static. Second, the emphasis on the ratio between workers and retired gives an incomplete picture of dependency rates. Children are also dependants. Declining fertility rates have resulted in a fall in the proportion of dependent children within the population. The ratio of children and retired to those of working age – the total dependency ratio – will not rise as steeply in the coming decades. The rise in the number of retired will be partially offset by a decline in the number of dependant children.

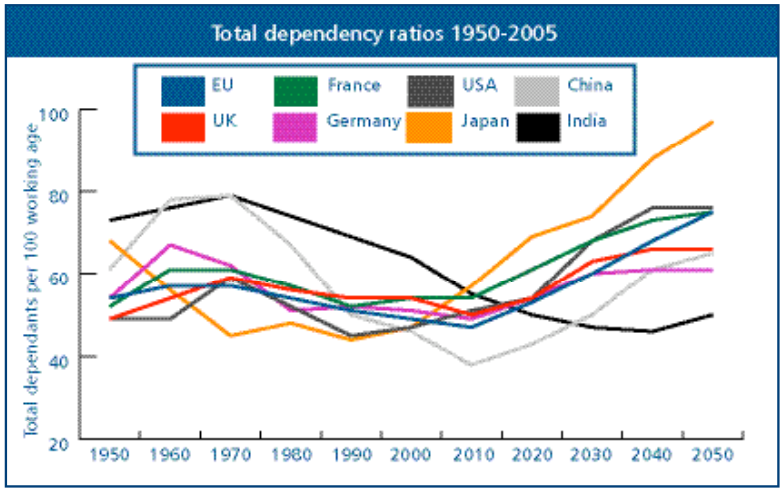
In many countries, total dependency ratios in 2050 will look more like those of the 1960s – when the majority of the baby boom generation were still children – than the present day. In the US, for example, the dependency ratio peaked in 1965, when there were 95 dependants for every 100 adults. By 2050 the figure will be 80 dependants for every 100 workers – admittedly much higher than the uniquely favourable figure of 49 in 2000, but still markedly lower than in 1965.[4] Even this measure of dependency fails fully to capture the balance between working and dependent populations – especially in European countries where rates of employment are low. Adults of working age who do not work can also be thought of as dependants. An increase in labour force participation, allied to a rise in employment, can therefore help to reduce the ratio of economic dependants to workers.

[4] *Gary Burtless, 'Does population ageing represent a crisis for rich societies?', Brookings Institution, January 2002.*

Europe: one demographic challenge or many?

There are certain demographic factors common to all European countries. Every EU member-state has a fertility rate below the replacement level and will experience a sharp rise in the number of people in retirement over the coming decades. But there are also striking differences in individual countries' demographic outlooks. Even small differences in fertility or immigration levels now can

have major consequences by mid-century, as population projections for Europe over the next 50 years illustrate. Although the population in three EU member-states – France, Ireland and the UK – is set to rise between 2005 and 2050, it is already falling in many of the EU's Central and Eastern European member-states. Other countries will soon follow, including Germany and Italy. National differences will have an important bearing on EU countries' policy responses. In the UK, for example, the current political debate is more focused on concerns about population growth resulting from high rates of net immigration.



Source: UN, 'World population prospects: The 2004 revision', 2005.

'Lowest-low fertility'

Demographers have recently coined the term 'lowest-low fertility' to refer to countries where the total fertility rate (TFR – see box) has dropped to 1.3 or lower. Lowest-low fertility is a recent phenomenon which first became apparent in countries such as Spain and Italy at the beginning of the 1990s. These countries have now been joined by a

number of others, including Germany. The population of a country with a TFR of 1.3 would halve in just 45 years. To put this in context, Germany has had below replacement level fertility rates for over 30 years but its population is only now on the cusp of decline. If Germany maintains its fertility rate at its 2005 level of 1.32, its population – without net immigration – would halve in 46 years. By contrast, at current fertility rates it would take 200 years for France's population to suffer the same decline. Lowest-low fertility also has a marked impact on the age structure of the population. At present fertility levels, the median age in Italy is projected to rise from 42.2 now to 52.7 by 2040. This compares with a projected increase from 39.1 to 44.4 in France over the same period.

Total fertility rate

The total fertility rate (TFR) is the standard demographic measure of the average expected number of births in a woman's lifetime. It is constructed using the recorded births in the previous year, which are then adjusted to take into account the individual's age. From this data, the estimated total number of births during childbearing years is calculated. The TFR is thus a projection of the fertility rate, rather than the actual measure, called the completed fertility rate, which can only be calculated once a generation of women have passed their childbearing years. This means that the TFR can fall rapidly if women choose to postpone births – even if the decline in the completed fertility rate is ultimately more modest.

Demographers are divided as to whether lowest-low fertility represents a temporary shock – and fertility rates will rise back towards levels seen elsewhere in Europe – or whether it will prove more enduring. As the box above explains, the TFR measure sometimes paints too pessimistic a picture of the longer run trend. In Central and Eastern Europe the decline in fertility rates closely

correlates with the end of communism, when many of the child support structures collapsed, including nurseries and family allowances. Women may have chosen to postpone births due to economic and social uncertainty. Consequently, the birth rate may rebound as prosperity and security returns. In some countries there is tentative evidence of a bounce back in fertility. In the Czech Republic and Estonia, for example, fertility rates have risen over the past five years. However, the TFRs of other Central and East European countries, such as Lithuania, Poland and Slovakia, have continued to decline.

In the old EU-15 countries, the picture is equally mixed. Italy and Spain have seen a pick up in their fertility rates from their troughs in the mid-1990s while Germany remains only just above its low point. But even in those countries with an improving trend, there is no certainty about how far or how long this revival will continue.

Childlessness and one-child families

Another distinctive feature in parts of Europe is the rise in the number of people without children. In several countries, notably Austria and Germany, childlessness is a key cause of the falling birth rate. In Germany, for example, the share of childless people has risen from 11 per cent among those born in 1940 to 32 per cent for those born in 1965.[5]

[5] *Herwig Birg, 'Auswirkungen und Kosten der Zumwanderung nach Deutschland', Institut für Bevölkerungsforschung und Sozialpolitik', 2001.*

The rise in childlessness is not directly correlated with fertility rates. In Italy and Spain, for example, the low birth rate is associated with the prevalence of one-child families. In Spain, the proportion of women with only one child rose from 7.5 per cent for women born in 1940 to 28 per cent in 1965. By the same token, some countries with relatively high fertility rates also have high levels of childlessness. Ireland has the second highest total fertility rate in Europe with 1.88 children per woman, but childlessness has risen from 5 to 16 per cent. Similarly, the UK has a TFR of 1.84 while the

percentage of women without children has almost doubled from 10 per cent among women born in 1945 to 18 per cent for those born in 1959. The percentage of childless women remains low in relatively high fertility France (8 per cent) as well as in low fertility Spain, where it has only risen from 8 to 10 per cent despite the sharp fall in the birth rate.

The growth of childlessness in countries such as Austria and Germany poses fresh challenges for policy-makers. Some demographers are concerned that childlessness is gradually becoming a social norm in many European countries. The fear is that the practice will carry over into the next generation in even greater numbers, causing far more rapid population decline. At the very least, the growth of childlessness raises questions about the provision of social policies, such as long-term care for the elderly. The rise in childlessness could, for example, lead to a collapse in 'informal' care by relatives, leaving a substantial body of the population potentially more reliant on the state.

3 Can governments alter long-term demographics?

In theory at least, European governments could try and fix their demographic difficulties by altering the underlying dynamics of population growth. Over the past few years, there has been a growing debate within Europe about whether governments should favour policies that seek to achieve this goal. Such policies broadly take two forms: 'pro-natal' policies – that is, measures such as fiscal incentives designed to stimulate a rise in the birth rate; or a relaxation of immigration policies so as to boost the influx of younger workers and consequently the population of working age. This chapter discusses whether either option represents a viable answer to Europe's demographic challenge.

The return of pro-natalism

Pro-natal policies have a long and often unsavoury history. Ancient Babylonian, Greek and Roman civilisations all used laws to strengthen the family in an effort to increase fertility. In the last century, authoritarian regimes tainted pro-natalism by employing coercive and illiberal measures in an effort to boost the national population. Nevertheless, pro-natalism is enjoying something of a political rehabilitation across much of Europe. Proponents of pro-natal policies include political conservatives who want to reintroduce "traditional values". However, most of the debate now focuses on the desirability of "family friendly" measures which would make it easier for parents to combine work and children, along with financial incentives such as tax reductions and childcare benefits.

Pro-natal policies in Europe

France, which has one of the highest birth rates in Europe, has also long had the most developed panoply of pro-natal policies in the region. One feature of the French system, which is steadily gaining attention elsewhere, is its focus on encouraging women to have three or more children. This reflects the fact that it is the decline of larger families, rather than the rise of families with one or no children, that explains most of the decline in fertility in France. The French system includes income tax reductions, based on the number of children in a family, allied to other generous subsidies such as the *carte famille nombreuse* which reduces travel costs on public transport. A reform in 2005 doubled child benefit levels to €1,000 a month as an incentive for women to stay at home and look after a third child. This focus on the third child appears to be paying off. A recent comparative study of British and French fertility rates found that all social groups in France were more likely to have a third child than in the UK.[6]

[6] *Olivia Ekert-Jaffe et al, 'Fertility, timing of births and socio-economic status in France and Britain: social policies and occupational popularisation', Population vol 57 (3), May-June 2002.*

France's relatively high fertility rate by European standards has attracted the interest of some of its neighbours. The German government, for example, has warned that unless the birth rate picks up, the country will have to "turn the lights out". It has introduced a series of reforms designed to boost the birth rate, including a requirement that men take two months off work to look after new-born children if they want to qualify for state-funded welfare support. New state-funded maternity/paternity payments, which came into force in January 2007, compensate two-thirds of previous income, up to a maximum of €1,800 a month. Parents can also offset up to €3,000 of childcare costs each year against tax. Sweden does not pursue an explicitly pro-natal policy as such, but its 'family friendly' measures are often held up as a model for a liberal form of pro-natalism: one which increases the choices available for women to combine work and children. Sweden has introduced generous maternity and paternity provisions, in addition to a well-developed system of universal childcare. These measures helped to lift fertility rates in the late 1980s, but the boom in childbirths petered out in the 1990s.

The liberal case for pro-natalism rests partly on survey evidence that suggests that many women are not having the number of children they would like. In the UK, the Institute for Public Policy Research (IPPR), a think-tank, has estimated that women in aggregate are having 90,000 fewer children each year than they would ideally like.[7] In the EU, a Eurobarometer survey found that while women wanted 2.36 children on average, the actual rate is below replacement levels.[8] Several observers have concluded from such evidence that policy-makers should devote more effort to removing the barriers that prevent women from having their desired number of children – so raising fertility. The trouble is that it is hard to draw firm conclusions from this evidence.

[7] *Mike Dixon and Julia Margo, 'Population politics', IPPR, 2006.*

[8] *Eurobarometer 65.1, 'Child-bearing preferences and family issues in Europe', October 2006.*

To start with, it is not clear how much of the gap between desired and realised fertility can be influenced by public policy. Women tend to overestimate their desired number of children when young. The response of some women may reflect the expectations of society, which in most of Europe remains to have two or more children, rather than their real desires. The recent Eurobarometer survey found that fertility problems related to health or lifestyle issues, such as the failure to meet a suitable partner, are the most common reasons for not achieving the desired number of children. Also, men on average want fewer children; and they have an important influence on fertility decisions.

In any case, there are grounds for doubting the effectiveness of pro-natalist policies. It is true that France's birth rate rose in the late 1990s, following a reform of the '*allocation parentale d'éducation*', a benefit paid to mothers who chose not to work after the birth of the second child. One study concludes that around half of the increase in births between 1995 and 2000 can be directly related to this reform.[9] But it is too early to assess whether the latest surge represents a sustained increase in fertility.

[9] *Guy Laroque and Bernard Salanié, 'Does fertility respond to financial incentives?', CEPR discussion paper 5007, April 2005.*

Evidence from Sweden certainly invites caution on this front. The family friendly measures introduced in Sweden during the 1980s pushed up fertility rates to 2.14 in 1990, but the effect was short-lived. By 2000, the birth rate had slipped back to 1.54. Similarly, a study of Quebec found that pro-natalist policies introduced in the 1980s had only a short-term impact on birth rates. Fertility levels remain among the lowest in Canada and there seems to have been little long-term benefit.[10]

[10] *Paul Demeny, 'Policy challenges of Europe's demographic changes: From past perspectives to future prospects', The New Demographic Regime, United Nations, 2005.*

Studies of individual measures cast further doubt on the effectiveness of pro-natalist policies. Child-contingent cash benefits or tax credits, by raising parental income, could lead to increased preferences for children. But the evidence suggests that raising child benefits has at best only a modest impact on fertility rates. A comparative study of 22 industrialised countries found that tax measures have a positive impact on the birth rate – but that it is small. It estimates that a 25 per cent increase in family allowances results in an increase of just 0.07 children per woman.[11] Or, to put it another way, a £2.5 billion annual increase in public spending on child benefits would only raise fertility rates in the UK from 1.84 to 1.91. Other studies indicate that the impact may be weaker still – with tax incentives providing a short-term boost but having little long-term impact on fertility rates. For example, a US study on tax exemptions for low income households with dependants found a strong positive impact on family birth decisions. But the greatest impact appears to have been on the timing of births.[12]

[11] *Anne Gauthier and Jan Hatzius, 'Family benefits and fertility: An economic analysis', Population Studies, 51 (3), 1997.*

[12] *Joëlle Sleebos, 'Low fertility rates in OECD countries: Facts and policy responses', OECD, October 2003.*

It is even harder to quantify the impact of 'family friendly' policies on fertility rates. In particular, there are difficulties establishing the direction of causality – are women having children because of flexible working arrangements, or do women who already have children seek out jobs with flexible working hours? Evidence of a positive relationship between fertility rates and the availability of childcare is no more conclusive. One study of 21 OECD countries found a positive relationship between the provision of childcare and aggregate fertility.[13] But a separate study of childcare and fertility in Sweden found no evidence that high levels of childcare provision increased the probability of second or third births.[14] Similarly, a Norwegian survey found that a 20 percentage point increase in childcare provision caused a rise of just 0.05 children per woman in a completed fertility cohort.[15] In short, while there is some evidence that a broad array of pro-natal policies could raise fertility rates, the impact is likely to be modest at best. The empirical evidence suggests that large public outlays, combined with family friendly policies, usually have only a small impact on fertility rates – and that this is often short-lived.

[13] *Francis Castles, 'The world turned upside down: Below replacement fertility, changing preferences and family friendly policy in 21 OECD countries', Journal of European Social Policy, vol 13 (3), 2003.*

[14] *Gunnar Anderson et al, 'Do childcare characteristics influence continued childbearing in Sweden?', Max-Planck Institute for Demographic Research, 2003.*

[15] *Oystein Kravdal, 'How the local supply of day-care centres influences fertility in Norway: A parity specific approach', Population Research and Policy Review, 15(3), 1996.*

The demographic limits of immigration

An oft-mooted solution to Europe's demographic problem is to accept higher levels of immigration. Pro-immigration groups argue that new arrivals are needed in order to lower the average age and increase the size of the population. The median age, they point out, is rising more slowly in the US than in Europe or Japan, partly because of that America's high rate of immigration. Europe, they imply, should follow the US' lead. Leaving aside humanitarian considerations, there are undoubtedly economic benefits associated with immigration – notably the filling of skills gaps in the host country. But is immigration really a panacea for Europe's demographic problem, as proponents allege?

There are grounds for doubting so. In the short term, immigration has two positive effects. It increases the size of the working age population and it raises the birth rate (because fertility rates among immigrants tend to be above the replacement rate). Over time, however, these advantages dissipate. Not only do immigrants age in their turn, but their fertility levels normally decline towards that of the indigenous population. And when immigrants retire, they contribute to the worsening dependency ratio – requiring countries to attract ever larger numbers of new arrivals to keep the ratio stable. Based on 1995 levels, UN figures show just how many immigrants European countries would have to attract to keep dependency levels constant through to 2050. Germany, for example, would require 188 million immigrants to maintain a stable dependency ratio, resulting in a population of 299 million by 2050 (up from 82 million at present).

The UN figures are admittedly a little misleading, as they are based on the unrealistic goal of maintaining the highly favourable dependency ratios of the mid-1990s. Even so, the underlying lesson remains: it is impossible to see any country willing or able to permit immigration on the scale needed to fix Europe's demographic problem over coming decades. It is important to stress that this is not an argument against immigration. There are plenty of sound reasons for supporting some immigration. But casting immigration as a solution to Europe's long-term demographic problem is not one of them.

4 The economic impact of demographic change

Population growth is normally regarded as essential for economic growth. The American writer Philip Longman puts it bluntly: "Capitalism has never flourished except when accompanied by population growth and it is now languishing in those parts of the world where population is stagnant."[16] Europe as a whole has benefited from an economically advantageous age structure in recent decades, but this is coming to an end. The working age population will soon start to shrink while the numbers of retired will jump, provoking a rise in the dependency ratio (see previous chapter). This chapter discusses how demographic change will influence the European economy, focusing on three crucial areas of economic activity: the labour market, productivity and government spending.

[16] *Philip Longman, 'The global baby bust', Foreign Affairs, May/June 2004.*

A drag on economic growth?

The pessimistic view of the impact of demographic decline on economic growth can be traced back at least as far as John Maynard Keynes. The British economist worried in the 1930s that falling fertility would harm the economy because of its adverse impact on the number of consumers available to support demand. Such simple determinism has not been fully borne out by the facts. Although they have started to suffer from population decline, Central and East European countries, such as the Czech Republic and Estonia, are among the fastest growing economies in Europe. After a decade-long slump, Japan's economy is now growing again even as its population has started to fall.

Contemporary economists have tended to stress the importance of a country's age structure to growth, in preference to trends in the overall size of the population. Economies, for example, can potentially benefit from a 'demographic dividend' – a decline in the fertility rate which results in a fall in the overall dependency ratio. At the same time, the labour supply can increase as more women enter the workforce. This large working age population saves for retirement, providing resources for further investment and offering a boost to the economy. By some estimates, up to a third of the East Asian economic 'miracle' can be attributed to this phenomenon.[17] Similarly, Ireland's recent economic success can be attributed partly to the impetus provided by its belated baby boom 'bulge' generation, following a decline in birth rates throughout the 1970s and 1980s.[18] However, favourable demographics cannot trigger growth in isolation: governments must adopt sensible economic policies, while outward migration rates also need to fall, before a country can create such a virtuous growth circle.

[17] *David Bloom et al, 'Global demographic change: Dimensions and economic significance', Harvard Initiative for Global Health, April 2005.*

[18] *David Bloom and David Canning, 'Contraception and the Celtic Tiger', Economic and Social Review, vol 34 (3), winter 2003.*

Europe's changing age structure will undoubtedly act as a drag on GDP growth in the coming years. The Organisation for Economic Co-operation and Development (OECD) estimates that the shrinking workforce will reduce overall economic growth in Europe by 0.4 percentage points a year until 2025 and by 0.9 percentage points thereafter. The effect will be for trend annual growth to decline from 2.2 per cent at present to 1.8 per cent between 2011 and 2030, and to just 1.3 per cent in 2031-50. Those European countries with the worst demographics are at risk of the sharpest slowdown in growth. Trend GDP growth in the Central and East European member-states is set to drop from 4.3 per cent currently to just 0.9 per cent by 2050 – although part of this slowdown will reflect a gradual fall in the pace of productivity growth as the period of economic 'catch-up' draws to a close. Across the EU as a whole, per capita income growth will slow from 1.7 per cent at present to 1.1 per cent by 2050.[19]

[19] *Joëlle Sleebos, 'Low fertility rates in OECD countries: Facts and policy responses', OECD, October 2003.*

Europe's ageing population structure will have an adverse impact on economic growth, therefore. But it does not follow that Europe is doomed to a future of penury. This pessimistic forecast of future growth still represents a doubling of per capita GDP from current levels over the next half century – even as the number of people in retirement also doubles. A more comprehensive measure of economic welfare than GDP per head would also consider the prospects for further rises in health standards and longevity.

Labour markets

There is much that European governments can do to mitigate the impact of a contracting population of working age on economic growth. For example, many European economies remain strikingly inefficient in their use of labour. In such countries, there is plenty of scope to raise labour force participation and rates of employment. For many EU countries, simply meeting the EU's 'Lisbon target' of a 70 per cent employment rate would substantially reduce dependency ratios. If all EU countries reached this target, it would go a long way to offsetting the negative impact of ageing. Even countries with high employment rates, such as the Denmark, Sweden and the UK, still have substantial pockets of inactivity – such as the large numbers on incapacity benefits – that could be further reduced. So Europe faces more of a labour market challenge than a demographic crisis. This essay is not the place to make detailed prescriptions for labour market reforms. But two general points are worth making.

First, policy-makers should pay greater attention to 'total economic support ratios'. These include not just dependent children and the retired, but also all adults of working age not in employment. The merit of this broader measure of dependency is that it helps to highlight the problem of under-employment – which

governments can do something about – rather than the seemingly intractable problem of demographic change.

Second, policy-makers should seek to increase the number of people aged over 64 in work. According to the European Commission, just 5.6 per cent of 65-74 year-olds are in work in Europe, compared with 18.5 per cent in the US. European governments should reduce incentives to early retirement and make the transition into retirement more flexible. An increase in the effective retirement age by seven years would have the same effect as raising employment rates to 70 per cent.[20] The dependency ratios of the 1960s can be recreated by delaying retirement to 72 for countries with TFRs of 1.6, and to 75 for those with TFRs of 1.3.[21]

[20] *European Commission, 'Economic and financial consequences of ageing populations', European Economy Review, November 2002.*

[21] *John Caldwell et al, 'Policy responses to low fertility and its consequences: A global survey', Journal of Population Research vol 19 (1), 2002.*

There may also be a case for increasing labour force participation among the young. This ambition would need to be balanced against the pressing need to raise education levels. But comparisons with the US are instructive. The percentage of young men active in the EU labour market has fallen from 60 per cent of 15-19 years-olds in 1970 to around 33 per cent at present.[22] For women the decline has been from 50 to 25 per cent. However, the employment rate for 15-24 year-olds in the EU is 13.4 percentage points lower than in the US, which has similarly high rates of participation in tertiary education. This gap suggests there is room to improve employment rates without jeopardising education – notably by curbing excessively long university courses and by reducing high youth unemployment.

[22] *European Commission, 'Report of the high level group on the future of social policy in an enlarged European Union', May 2004.*

Productivity

Over the long term, an economy's growth rate is determined by two factors: changes in the use of labour (both in terms of the numbers of people in employment and the total amount of hours worked) and changes in the rate of productivity growth. As European countries' workforces start to shrink, their economies will become increasingly reliant on advances in productivity to generate growth. Productivity will not just be the main source of economic growth; in some countries it could be the only source of growth.[23]

[23] *EU Economic Policy Committee, 'Impact of ageing populations on public spending', February 2006.*

Some commentators worry that the ageing process itself will act as a drag on productivity growth. David Willetts, a British Conservative politician, has argued that ageing societies will "have fewer Picassos" – youthful entrepreneurs responsible for productivity-enhancing innovations.[24] Similarly, Philip Longman has claimed that "we are living in a world of declining inventiveness".[25] This argument is based on a straightforward assumption: that older workers are less innovative and adaptable and consequently contribute less to advances in productivity. Longman supports his claim by pointing to evidence from the Global Entrepreneurship Monitor (GEM) that most entrepreneurial activity is undertaken by educated individuals between 25 and 44 years old.

[24] *David Willetts, 'Old Europe? Demographic change and pension reform', CER pamphlet, October 2003.*

[25] *Philip Longman, 'The global baby bust', Foreign Affairs, May/June 2004.*

Although there is some evidence that countries with a higher median age exhibit lower growth rates, the arguments in support of declining productivity in an ageing society are not entirely convincing. For one, they tend to confuse the related, but not identical, concepts of innovation and productivity. Economies can be productive without being innovative – particularly if they excel at perfecting innovations from elsewhere and embedding them in working practices. For another, while there does seem to be evidence that risk-taking declines with age, as the GEM report suggests, it is unclear whether it is age per se that matters or proximity to retirement. If retirement ages steadily increase, the period during

which people feel able to take risks could conceivably be extended. In short, there is no straightforward correlation between a population's age structure and its record on innovation.

Studies of the impact of demographic change on productivity are by no means all pessimistic. Two recent studies, for example, have concluded that ageing per se does not have a particularly strong impact on productivity.[26] Others have stressed that it is not age but the amount of time spent in a job that matters in terms of improving productivity. An individual's productivity continues to increase up until around 13 years in one job and then goes into decline.[27] Rates of productivity growth might even intensify because a scarcity of labour will encourage a more efficient use of resources. Economic historians, for example, have drawn attention to the surge in productivity and innovation that helped redress the labour shortages caused by the Black Death in medieval Europe.

[26] *Alexia Prskawetz et al, 'The impact of population ageing on innovation and productivity growth in Europe', European Commission, 2006. Joaquim Martins et al, 'The impact of ageing on demand, factor markets and growth', OECD Working Paper No. 420, 2005.*

[27] *International Labour Organisation, 'Protected mobility for employment and decent work: Labour market security in a globalised world', 2005.*

Public finances

Many commentators have painted a very negative view of the outlook for European public finances. They argue that EU governments are saddled with open-ended pension commitments and spiralling health costs which could leave some countries facing insolvency. However, the latest EU assessment presents a more benign view of the impact of ageing on public finances, following governments' efforts in recent years to contain pension and healthcare costs. In 2006, the EU's Economic Policy Committee concluded that "reforms enacted in several EU countries since... 2001 appear to have curtailed the projected increase in public spending significantly in half of all EU-15 member states".[28]

[28] *EU Economic Policy Committee, 'Impact of ageing populations on public spending', February 2006.*

Any future projection of public spending must of course carry caveats. The EU forecasts rely on a number of key assumptions that could prove wrong. In particular, they build in a rise in participation rates for older workers (those aged between 55 and 64) from around 40 per cent at present to 59 per cent by 2025. Furthermore, the EU assumes that governments will further reduce the eligibility and level of welfare benefits. The impact of these assumptions is to offset 70 per cent of the expected increase in public spending – if such changes fail to materialise, the impact will be greater.

Rise in age-related expenditure as a share of GDP

	2030	2050
Spain	3.3	8.5
France	2.0	3.2
Ireland	3.3	7.8
Italy	1.0	1.7
The Netherlands	3.8	5.0
Portugal	4.3	10.1
Finland	4.7	5.2
Sweden	1.3	2.2
UK	2.2	4.0
Czech Republic	1.8	7.2
Hungary	3.1	7.6
Poland	-6.1	-6.7
Slovakia	4.4	9.7
EU-25	1.6	3.4

Source: Adapted from EU Economic Policy Committee, 'Impact of an ageing population', 2006.

Despite recent improvements, therefore, European governments cannot be confident that they have placed their public finances on a sustainable footing. The European Commission published a broader assessment of the long-term health of public finances which concluded that six member-states – Cyprus, the Czech Republic, Greece, Hungary, Portugal and Slovenia – were at "high risk" of budgetary problems in the longer term.[29] The report emphasised that many countries had made progress in reducing the risks to their budgets from demographic change. But too many countries start from a position of large existing deficits (which are not age-related) and are vulnerable to difficulties in the medium term. Even the UK is regarded as a "medium risk" country. Uncertainties about future dependency ratios and further rises in life expectancy mean that no government can afford to be complacent about the outlook for public finances.

[29] *European Commission, 'The long term sustainability of public finance in the European Union', 2006.*

That said, there is no reason to despair. Take healthcare. Commentators often paint a dystopian future of public health systems overwhelmed by increasingly decrepit baby boomers. Age pessimists, such as Philip Longman, have argued that a general rise in disability levels, allied to a rise in obesity, will vastly increase the pressure on health resources. At first glance, the evidence in support of this view looks compelling. In the UK, for example, over 65s make up around 16 per cent of the population but consume 30 per cent of healthcare resources, according to the Office for National Statistics. The OECD has estimated that average spending in member countries on public health and long-term care could increase to 13 per cent of GDP by 2050, from 7 per cent at present.[30]

[30] *OECD, 'Economic outlook', May 2006.*

[31] *Tim Callen et al, 'How will demographic change affect the global economy?', Internatioanl Monetary Fund, February 2004.*

However, the more pessimistic forecasts often take a linear view of health spending. They ignore the relative improvement in health in recent decades and assume that people will spend more years ill and/or disabled even as longevity increases.[31] But life

expectancy has risen precisely because overall health has improved. People live longer because they are healthier. The quality of health of most individuals at age 60 is equivalent to those aged 45 to 50 half a century ago. Disability-free life expectancy is accelerating faster than overall life expectancy. The period of ill-health that people suffer ahead of death has remained constant. People do incur extra healthcare costs before they die – but the amount is broadly the same whether they do so aged 60 or 90.

There will undoubtedly be some additional costs to the public purse – the growth in the number of people retiring will produce an inevitable spike in health spending as this cohort reaches the end of its life. Countries such as Italy and Spain face especially large increases in spending in the future because of the pace of the transition from a young to an old population. The OECD estimates that direct demographic factors could push medical spending higher in these countries by 4 percentage points of GDP by 2050. But demographic change will not have the devastating impact on health budgets that some commentators imply.

Demographic change may not in any case be the most important factor driving increasing health costs. Recent economic work has sought to explain increases in spending on healthcare in terms of individuals placing greater value on the extra years of life delivered by good healthcare over other forms of consumption.[32] One of the most valuable and productive opportunities for spending is to purchase better health, and consequently longer lives. The law of diminishing returns suggests that the additional utility from increasing consumption falls as consumption rises. But life itself is less influenced by diminishing returns – the vast majority of us still place a high value on extra years of life. Hence, as societies become richer they tend to devote proportionately more money to health, in preference to other forms of consumption. One recent report has estimated that this trend could push health

[32] *Federal Reserve Bank of San Francisco, 'More life versus more goods: Explaining rising health expenditures', May 2005.*

spending towards 25 to 35 per cent of GDP by 2050 – dwarfing demographic-related increases.[33]

[33] *Robert Hall and Charles Jones, 'The value of life and the rise in health spending', National Bureau of Economic Research, Working Paper No. 10737, September 2004.*

Could inter-generational conflict be an obstacle to reform?

How difficult will policy-makers find it to enact the required reforms to pensions and healthcare systems in the future? Many commentators claim that demographic change could spark an inter-generational conflict as the large cohort of baby boomers seeks to preserve its economic privileges, such as pension and healthcare rights, at the expense of the much smaller younger generation. David Willetts, for example, has written that: "A young person could be forgiven for believing that the way in which economic and social policy is now conducted is little less than a conspiracy by the middle aged against the young."[34]

[34] *David Willets, 'Heirs to the baby boomers: securing equity across the generations', in Roger Gough ed. '2025: What future for Maggie's children?' Policy Exchange, 2006.*

British proponents of the inter-generational conflict argument point to the introduction of student tuition fees, high levels of personal indebtedness and a more competitive job market as evidence that the generation leaving education now is facing a more difficult start to adult life. In contrast, their parents are enjoying the fruits of rising property prices, and the legacy of generous final salary pensions not available to their offspring. Government, meanwhile, is exacerbating the problem by issuing debt to fund increases in public spending, including off balance sheet innovations such as the private finance initiative, which will leave the younger generation to foot the bill. Elsewhere in Europe, economic liberals criticise the baby boom generation for introducing high payroll taxes to fund their generous welfare provisions, and rigid labour market laws to protect those in work at the expense of the young entering the job market.

There are two problems with this thesis. First, there is little evidence that any inter-generational conflict is actually emerging. Voting

patterns show limited correlation with age (although the young are less likely to vote). Indeed, all the evidence suggests that inter-generational solidarity remains strong. Parents and grandparents are as likely to be motivated by the needs of their family as their own. For every baby boomer 'squandering' the family inheritance, another is investigating how to minimise inheritance taxes. An opinion poll in the US found that nine out of ten people believe that older Americans receive about or less than their fair share of government benefits and have the right amount of influence or too little.[35] Meanwhile, a survey in the UK found scant evidence that the votes of the baby boomer generation were determined solely by issues that directly affect their own age cohort. Education and affordable housing, for example, remain major concerns even for the baby boom generation.[36]

[35] *University of Southern California, 'Inter-generational conflict? Think again', November 2004.*

[36] *Opinion Leader Research/Age Concern England, 'Winning in 2009: The importance of the baby boomers', October 2005.*

Second, the inter-generational conflict thesis ignores the fact young people are on average more educated, enjoy a higher rate of employment and are richer than their parents were at the same age. Unemployment among the under 25's has fallen in the UK from close to 20 per cent in the early 1980s to around 13 per cent now. As for student tuition fees, they have been introduced to fund the expansion of higher education. Far more people attend university than a generation ago. The introduction of fees has not had a major adverse impact on participation rates because the rates of return to higher education continue to rise.[37] And while young people face many challenges, such as spiralling house prices, these can only partly be attributed to the baby boom effect. The young will bear some extra costs as the large baby boomer generation ages – whether this is borne directly through taxation to fund the welfare system or indirectly through a transfer of private resources. But the vast majority of the younger generation can still look forward to a wealthier and longer-lasting life than their parents.

[37] *Julian Astle, 'Open universities: A funding strategy for higher education', Centre Forum, 2006.*

5 Conclusion and policy recommendations

Rising life expectancy and low fertility rates are radically transforming Europe's demographic profile – with major consequences for the region's economy and society. But the most pessimistic predictions about Europe's demographic future overstate the problem in most of the continent and ignore countries' potential to adapt. The presumption that Europe is destined for economic and social calamity represents an unjustified loss of confidence in the ability of our societies to react to a changing world.

Any attempt by governments to 'fix' Europe's demographic problem will to a large extent be futile, because falling fertility is heavily influenced by factors that cannot be changed by policy. These include economic development and urbanisation, both of which have reduced the need for children to help till fields and provide food and support to their parents in their old age; and declining infant mortality, which means that fewer children are needed to ensure that some reach maturity. More recently, the birth rate has fallen due to factors such as improved education levels among women, increased female participation in the labour market, and the widespread availability of contraception. There is broad agreement about the range of factors influencing fertility rates, but little about their relative weight. There is still little understanding, for example, as to why the same factors have caused a gentle fall in fertility in some countries and a precipitous drop in others.

In theory at least, there are two ways in which European countries might try to alter their underlying demographics. The first would be to boost the birth rate by pursuing pro-natalist policies. However, most of the empirical evidence available casts doubt on the

effectiveness of pro-natalist measures. Over the last 40 years France, which has long adopted explicit pro-natal policies, has averaged a TFR just 0.01 percentage points higher than the traditionally non-interventionist UK.[38] A second conceivable solution would be to rely on increased immigration. The problem with this option is that while it increases the working age population and the birth rate in the short term, over the longer term these effects tend to weaken: immigrants age in their turn and their fertility rates generally decline towards those of the host population. As immigrants retire, moreover, the dependency ratio deteriorates – unless ever higher numbers of new arrivals enter the host country to keep the ratio in check. The levels of immigration that EU countries would need to attract to keep dependency levels constant through to 2050 would almost certainly be beyond their social and political capacity to absorb. To repeat, this is not an argument against immigration, which is an essential component of an open and competitive economy. It is merely to point out that immigration does not really provide a long-term fix to Europe's demographic challenge.

[38] *Olivia Ekert-Jaffe et al, 'Fertility, timings of birth and socio-economic status in France and Britain: social policies and occupational popularisation', Population Vol 57 (3), May-June 2002.*

So Europe faces a rapidly ageing population and there is little it can do to change its underlying demographic dynamics. But this essay has argued that the economic consequences of ageing are overstated and that there is much that countries can do to counter its effects. At root, Europe faces more of a labour market problem than a demographic crisis. There are several ways to soften the adverse impact of a falling working population:

★ The working age population can be increased by raising the retirement age. Greater flexibility can also be introduced to allow people who are over the statutory age of retirement to continue working if they would like to do so. A reform of this nature would have social, fiscal and psychological benefits as people would not be obliged to move from economic activity to dependency.

★ Rates of participation in the labour force should be increased. This will require several segments of the population to be targeted: women who are discouraged from looking for work by family responsibilities or the interaction of the tax and benefits system (which argues the need for improvements in childcare facilities); the long-term unemployed who have become discouraged and cease looking for work; people on disability benefits (whose numbers are unusually high in the UK and Nordic countries); the young, whose entry into the labour force is often delayed by ill-adapted (or excessively lengthy) educational courses and by regulations that privilege labour market insiders; and older workers tempted by early retirement.

★ A rise in the participation rate will solve nothing unless the rate of job creation is strong enough to absorb the resulting increase in the labour force. European governments must therefore also push through supply-side measures to raise the employment rate. This is admittedly not an area in which all European governments have excelled. But several EU countries have shown what supply-side reforms to the labour market can achieve. This is not the place to offer a detailed blueprint for reform. However, the best-functioning labour markets in the EU are usually marked by liberal policies on hiring and firing; low non-wage labour costs; and a benefit system that provides incentives to the unemployed to re-skill and actively seek work.

★ Money currently spent on early retirement could be re-directed to mid-life training to encourage individuals to upgrade their skills throughout their working lives.

Demographic trends could have significant social consequences. The decline in the nuclear family, for example, could have an important bearing on social interactions. A growing number of people will not experience sibling relationships and their support networks, while many who enter old age with no children may miss out on the benefits of informal care. Demographic change could even influence

social values. One commentator has even claimed that demographic change threatens to turn Europe into a more religious and socially conservative continent.[39] Again, however, such theories often rest on a hefty dose of demographic determinism. They assume, among other things, that high fertility rates among religious conservatives and low fertility rates among secular segments of the population will continue indefinitely. But there are plenty of examples of conservative and religious societies with declining birth rates – witness Iran. Besides, such theories assume that values are constant and easily transferred between generations; they also preclude the possibility that religious values might change and splinter. This seems no more likely than the now discredited assumption that secular liberalism is destined to become the unchallenged bedrock of western society.

[39] *Eric Kaufmann, 'Breeding for God', Prospect, November 2006.*

What does seem inescapable is that European society is set to become more heterogeneous. Family structures will become more diverse as the two-child family continues to decline in importance. The well-educated will be best placed to adapt successfully to a longer working life. Longevity will continue to rise, but the gap in the life expectancy of rich and poor could widen further. Immigration, meanwhile, will continue to alter the social and racial mix of the European population. Without compensating policies, demographic change could therefore exacerbate social and economic inequalities.

★

Growing old gracefully

How to ease population ageing in Europe

Alasdair Murray

Europe stands on the cusp of a demographic revolution. Rising life expectancy and low fertility are radically transforming Europe's demographic profile. Ageing populations pose profound political, economic and social challenges for Europe. Many commentators are deeply pessimistic about the consequences of population ageing for the social and economic fabric of Europe. But Alasdair Murray's essay takes a more optimistic view. He argues that although pro-natal policies or increased immigration cannot be relied on to reverse Europe's long-term population trends, demography is not destiny. There is much that governments can do, particularly to their labour markets, to counter the economic effects of ageing. At root, Europe faces more of a labour market problem than an intractable demographic crisis.

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