

## **Does the Commission's report adequately address the key issues of the demographic future of Europe?**

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Who would want to be a policy maker in Europe when there's a crisis on the horizon? Demographers and economists foresee that thirty million Europeans of working age will 'disappear' by 2050. At the same time, retirement will be lasting decades as the number of people in their 80s and 90s increases dramatically. Policy makers must work out how to deal with the triple whammy of increasing demand on the welfare state and healthcare systems, with a decline in tax contributions from an ever-smaller workforce, while the politicians they serve are more focused on the next election than on the next generation.

So policy makers have cause to be gloomy. In order to plan ahead, they have to consider all possible scenarios for the future, and accept that the most optimistic of those scenarios probably isn't going to happen. On top of that, they have to promote forward-thinking policies that may not sit well with the politicians and electorate of today. Given this, we should sincerely congratulate the policy makers in the European Commission, and their political masters in the Member States and Parliament, for formulating and commissioning the report on "The demographic future of Europe—from challenge to opportunity" (European Commission 2006). But let's not sit back and relax as if, now we all think we understand the problem, the solutions will surely follow. The report is simply a good start.

In this piece we make three points. The first is that the move from 'challenge to opportunity' will need a multifaceted approach which is likely to require exceptional levels of joined-up thinking at both the European and Member State level. Given past and recent history we worry about the capacity to deliver. Second, the report articulates a semantic somersault in calling for a set of pronatalist policies, but terming them 'demographic renewal'. Our concern goes beyond the niceties of drafting and has to do with the ambiguity of demographic renewal and its inherent intractability. Finally, and with deliberate intent to provoke, we speculate whether the solution—or part of the solution—might be

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technological. That is, are we on the cusp of a second reproductive revolution that will have a social impact as dramatic and far-reaching as the introduction of the contraceptive pill in the 1960s?

### **More challenge, less opportunity**

One criticism that can be levelled at the report is that it is an oversimplification of the demographic challenge. The paper identifies ‘five core policy directions’: promoting demographic renewal in Europe, promoting employment in Europe, a more productive and dynamic Europe, receiving and integrating immigrants in Europe, and sustainable public finances in Europe. What the report is calling for is that these agendas are addressed in parallel and in a strategic fashion.

But this is a list of some of the most intractable and challenging issues facing European countries today. Putting aside demographic renewal for the moment, the remaining ‘directions’ have been attempted in a number of Member States, with mixed results. For example, in 2006 mass protests and strikes forced Jacques Chirac to bow to public opinion and revise his efforts to reform labour laws in France, the Lisbon agenda set out targets for improving productivity but these had to be revisited, and the riots in the Paris banlieues in 2005 showed us one of the social consequences of immigration. As for pension reform, governments will struggle to introduce change when an increasing proportion of the electorate is comprised of the older age groups.

Our intent is not to sound overly pessimistic; these agendas can be addressed, but they will need concerted leadership at both a European and Member State level. Our concern is that, in their attempts to paint pictures of the economic and social future, policy makers are failing to properly address one of the key drivers behind population ageing—the fact that people are having fewer babies.

### **A new pronatalism**

If EU Member States wish to tackle the challenge of population ageing from source they will need to increase fertility. Yet over the past 50 years, western European governments—with the notable exception of France—have been reluctant to pursue direct population policies. This is because the term ‘population policy’, and more explicitly ‘pronatalist’ policy, has become synonymous with totalitarian regimes such as Nazi Germany and, more recently, China with its one-child families.

Perhaps because of the negative connotations of pronatalism, the report elusively defines a set of policies aimed at increasing fertility as ‘demographic renewal’. This is a pity. The policies advocated by the Commission are actually intended to increase fertility. The paper argues that this is both ‘necessary and possible’. If such policies are necessary then they need to remain credible. It is thus essential that demographers, policy makers and politicians be honest and explicit with the citizenry in pursuing this new form of pronatalism.

More substantively, it is legitimate to question the effectiveness of pronatalist policies—that is whether they are realistic. At a macro level it seems that government policies can have an impact on fertility. Spain and France present an instructive contrast. Currently, Spain has the second-lowest fertility rate among the EU-15. A generation ago (in 1971), Spain's fertility was among the highest in Europe. The dramatic decline in fertility since then is associated with a shift from the pronatalist Franco regime—which banned contraception and encouraged large families—to a democratic regime that has no explicit population policy. In contrast, France, which was the first European nation to experience a decline in its fertility rate and has had an aggressive set of pronatalist policies in place for many decades, now has the second-highest fertility rate in Europe (behind Ireland).

However, when reviewing the literature on different and specific policy interventions to raise fertility, the evidence is more ambiguous. Authors seem to agree that there is a correlation between direct and indirect financial incentives and fertility, but the effect is limited and expensive, and often temporary. Conceptually, a distinction needs to be made between those policies that aim to incentivise people who want to have children to have them, against persuading those people to have children who don't want to have any. Given that there is a 'baby gap' between the number of children people say they want (ideal family size) and the number they actually have in the end, then logic suggests that policies aimed at making it easier to have and bring up children should be effective—and perhaps more effective than the literature suggests. Perhaps one of the explanations for the less-than-anticipated effect is that in recent years, the ideal family size has actually fallen below replacement level in a number of European countries and that while there is still a statistical baby gap, the social norm may be moving towards being childless or having a one-child family by desire. If this is the case, then the challenge is greater than the report implies, and will need a more subtle assessment of behaviour change, especially in the context of fertility.

Finally, and a point not acknowledged in the Commission's report, the effectiveness of a pronatalist policy needs to be seen as an investment in a future generation. Even if fertility rates rebounded to above-replacement level tomorrow, the demographic and economic impact will not be felt until the newborns enter the labour market in a generation's time.

### **A second reproductive revolution**

One strategy that has only recently begun to be examined is the potential impact of scientific solutions on low fertility. This could occur through three mechanisms. The first is through awareness building.

The WHO estimates that some 80 million couples worldwide are affected by infertility. At least a quarter of all couples experience a period of infertility (inability to conceive) lasting over 1 year, one in seven couples have serious difficulties conceiving, and infertility levels in Europe are predicted to double by

2015. The ability to conceive drops significantly after 35, but female age at childbirth is increasing. If this trend continues, and there is no reason to suppose that it will not, the proportion of couples who have difficulty conceiving at the time when they plan to have children will rise even further. Currently, many young men and women seem unaware of the fertility risks associated with postponing childbirth.

To help couples make more informed choices about the best time to have children, it might be possible to provide detailed biomedical information on potential fertility issues. For example, differences were found in gene expression profiles of women who had given birth after the age of 45 compared to women who had not. It might therefore be possible to predict the success of fertility treatment in older women using their gene expression profiles. Ultimately, a scientific solution would be to provide over-the-counter tests that allowed men and women to predict the chances of conception at different ages in the future, helping them to avoid problems with declining fertility.

A second mechanism is to reduce infertility among couples who are trying to have children but failing. For couples experiencing serious fertility problems (i.e., more than one or two years without conceiving, depending on the definition) there are various assisted reproductive technologies (ART) that might enable them to conceive. Two recent studies—one by RAND Europe (Grant et al. 2006) and the other by the Vienna Institute of Demography—conclude that ART are already having an impact on fertility rates and though that impact is still relatively small, it is likely to increase in the future. More interestingly, a comparison of cost per additional birth showed that an ART strategy maybe as cost-effective as social interventions such as child benefits.

Finally, a third scientific mechanism is to extend the reproductive lifespan. Recent advances in reproductive medicine have prompted an open debate in the scientific literature on whether female fertility could be extended into late middle age and beyond. The simplest way to extend a women's reproductive lifecycle would be to freeze her eggs until they are needed. 'Egg banking', as it is becoming known, raises a number of scientific challenges, including the fact that the human egg is the largest cell in the body and is very sensitive to freezing. A more radical approach would be to disrupt the molecular mechanisms behind follicular atresia, which is the progressive decline in the supply of eggs over a woman's reproductive life. A number of scientific groups are trying to slow atresia in animal models, but this work is very exploratory and cannot be assured. A further alternative would be to use the stem cells in a woman's ovaries to coax them into replenishing her egg supply later in life.

As with all basic science, predicting the success or otherwise of specific lines of investigation is foolhardy, but it is not unreasonable to assume that within the next 15-20 years the menopause will no longer be a biological barrier to motherhood. If this is the case, an interesting thought experiment is to explore some of the demographic implications, especially in the context of the report. For

example, a straight-line projection of mean age at first birth since the 1970s in Europe would forecast an increase to 40 years of age by 2050. If science allows this to occur, then it is conceivable that fertility rates will increase. Such a scenario could lead to a second reproductive revolution that allowed women not only to control if and how many children to have (through contraception), but also when to have them (through assisted reproduction).

There are of course ethical considerations aplenty here that will need rigorous attention. Is it a good strategy to encourage couples to have their children later? What are the implications for older parents reaching retirement age while their children are still in education? Will public opinion oppose such biomedical interventions in the same way that GM food is currently vilified? Reproductive technologies will undoubtedly raise ethical discussions and meet objections, but 40 years after the pill, a society without contraception is now virtually unthinkable. Those preparing for a future 40 years hence should bear this in mind.

### **Population realism**

Optimists would argue that the above is overstated; that the adverse impacts of population ageing will be mitigated through adaptation. We would not contest this view, but point out that adaptation can occur in a haphazard way or in a planned way. The Commission's report is an attempt to persuade the institutions of Europe to think strategically about the consequences of population ageing and plan for that future. For this reason and none other it should be welcomed. It is worth pointing out that none of the proposed policy directions is harmful in itself—indeed some would say they are common sense—but we must recognise that there are gaps between potential benefits and delivery in the policy opportunities outlined in this document that have yet to be taken into account.

So in conclusion, we hope and believe that the report is the beginning of a discourse on the demographic future of Europe. However, we must ensure that this discourse is open and transparent, that its intent is clearly articulated, that what we don't know is acknowledged, and that a range of ideas are explored and debated. By doing so, the crisis can be averted and the justified gloominess among the policy makers and politicians alike can be cleared.

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