

28 June 2007

What is this document?

The Policy Foresight Programme, in conjunction with the Oxford Institute of Ageing, held a one day workshop on 28 June 2007 aimed at better understanding the interrelated issues of fertility and mortality and population ageing. The main issue that the 25 participants addressed was the key issue of maximising the opportunities which arise from the inclusion of several generations in our communities, workplaces, and families, given the possibility of extending healthy, active ageing well into our 70s and even beyond.

Main Points:

- A major shift in thought needs to occur in discussions on ageing. We are entering a world not of old age, but of longer, healthier lives.
- If societies are falling into the Low Fertility Trap, which locks societies into not being able to replace their populations, there may be only a very short window to reverse their direction.
- More robust attention should be paid to the social and economic effects of population increase and ageing
- It should be the role of civil society, therefore, to influence government, interact with it, and to develop their own programmes independent of government where needed.

Global Ageing

A world where people live longer

Record of the Seminar

Global Ageing: setting the scene

Speaker: Professor Sarah Harper

Professor Sarah Harper, Director of the Oxford Institute for Ageing, initiated the day's events with an overview of the major current strands of thought on global ageing.

The top three UN Challenges for the 21st Century, Harper pointed out, are global climate change, global ageing, and global terrorism. She welcomed this high profile placement of the issue, and noted that different populations will feel the effects of ageing differently. While half of Europe will be over 50 by 2050, on a global scale the sheer numbers of people over 60 and over 80 will be in Asia and the South, not Europe.

Why is this skewed distribution of population happening? Harper suggested that a major reason had to do with the different rates of falling fertility. By 2050, most of the world will be at or below the replacement level of their societies, meaning that the number of children being born will be less than that needed to

maintain the size of the population. In some societies - most of the developed world - this change occurred gradually over the last 150 years. The countries currently experiencing the change are likely to make the same demographic transition in 20-25 years, but are unlikely to be able to make the necessary institutional transitions to cope.

The key question is whether the world we are moving into is one of old people or one where people simply live longer.

This led Harper to question how we currently plan for ageing at the societal level. One point she noted was that the flow of migrants from developing to developed countries would potentially undergo significant alterations in its quantity and flow, over the next 20-30 years. For the past decades the wealthy, older, developed regions of the world had exported capital to the

younger developing and transitional economies, and accepted labour to compensate for their ageing populations. This is likely to be altered as developing regions face their own skills shortages as their fertility rates drop dramatically and as these regions create a demand for highly skilled work that the developed world could supply. Harper also pointed out that we had grown accustomed, especially in Europe, to combining encouraging younger people to stay in education for as long as possible with a drive for early retirement, so that some individuals were economically active for only 30 years in a potentially 90 year life span; this would be unsustainable whether at the individual or societal level.

Harper concluded that the key question is whether the world we are moving into is one of old people or one where people simply live longer. It is more useful to see the issue of global ageing as one of longevity, not old age.

Population dynamics: falling fertility and mortality

Speaker: Professor Wolfgang Lutz

While the 20th Century was the century of population *growth*, the 21st Century will be that of global population *ageing*, argued Dr. Wolfgang Lutz, leader of the World Population Program at the International Institute for Applied Systems Analysis (IIASA) and Director of the Vienna Institute of Demography. There is a significant range of possible peaks for world population in the next hundred years, but nearly all scientists agree that the end of population growth will occur by the century's end.

Primarily this will be due to the universal process of "demographic transition" that all countries seem to go through, though each at a different time and pace. In this process, first death rates fall due to better sanitation and medical advance, but birth rates remain high because they are culturally determined, resulting in high

population growth. Cultures then adjust, lowering birth rates and creating zero or even negative population growth. One of the inadequacies of research in this area, however, is that we do not know what will happen to fertility levels after they reach replacement levels.

We need to view age from two angles: years from birth and years left to live.

Uncertainty in fertility is only one of the uncertainties involved in population projections, Lutz argued. In contrast to UN projections, Lutz believed that projections should also incorporate uncertainties due to mortality rates and migration patterns. This gives the broad range of population peaks, as shown in the graph on page 2.

By the year 2050, there will be half as many people of working age per person over 65. He continued this line of thought by showing the uncertainty in the distribution of the proportion of the population of Western Europe above 80 in 2100. The figures range from under 5% to nearly 45% of the population that could be above 80. Lutz argued that if the larger figure was obtained, those above 80 will likely be much healthier. For Lutz, this was a compelling argument that, when discussing how to structure institutions to handle changes in demographics, we need to view age from two angles: years from birth and years likely left to live.

Developing further on a lack of knowledge about fertility projections and the generally accepted assumption that fertility rates will level off after declining

(Continued on page 2)



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to around the replacement rate, Lutz presented his *Low Fertility Trap Hypothesis (LFTH)*, which gives plausible reasons why fertility may well decline to still much lower levels. In essence, the hypothesis states that once fertility falls below a certain level and stays there for a while it can create a self-reinforcing demographic regime change that is difficult or impossible to reverse.

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This is a very policy-relevant area, argued Lutz, as all current considerations about the consequences of population ageing and decline in Europe are based on the assumption of fertility not falling below current levels. If it falls lower the consequences will be more dramatic.

If the LFTH mechanisms are indeed at work, this implies urgency because there may be only a short window for governments to try to reverse the course (in Germany it may be too late, but in Southern and Eastern Europe regime change is not yet complete). This presents a strong new rationale for efforts to quickly bring up the number of births.

If LFTH is not true then governments should take a "wait and see" attitude. The right policy approach depends on the future course that fertility would take without explicit fertility policies; hence this is a very important research topic.

Finally, Lutz pointed out that sperm count, while perhaps not a driving factor in fertility change, needs to be taken more into account, as procreation is much less likely when sperm density falls below 50 million/ml, and studies exist (e.g. from Denmark) that show almost a quarter of the young male population fall below this density.

In discussion the following points were made:

Population Ageing and Generational Fairness

Speaker: Dr. Kenneth Howse

"Population ageing and generational fairness" was the topic addressed by Dr. Kenneth Howse, a Senior Research Fellow at the Oxford Institute of Ageing. His main question was, 'Is the idea of generational fairness important or necessary for policy-making for an ageing society?' If it is, then we must decide what counts as a generationally unfair policy.

Generational fairness is about the way in which we transfer resources between generations. If we think of a generation as a birth cohort, we are dealing with a question of a legacy of capital (both public and private) that one generation hands down to the next. The general problem here is one of fairness to future generations. If we think of a generation as an age group, however, the problem is different: we are concerned with the relations of dependency and support between co-existing generations. In this view, the issue is how the transfers of resources and support reflect the relations of dependencies between current generations. This view is concerned with fairness between

sets of current generations. Generational fairness therefore serves as a criterion for deciding whether we have 'got it right' with our collective arrangements for age-related transfers - and the rationale for an appeal to intergenerational justice is the argument that some kind of check or constraint is required on the spending commitments made (in this case) to the baby boom generation.

Some agreed standard of generational fairness is essential for the maintenance of pay-as-you-go pensions arrangements (since each generation of pensioners relies on the willing participation of the working generation for its retirement income). The importance of generational fairness turns on the quasi-contractual nature of pay as you go arrangements (e.g. each working generation pays for the pension entitlements of current retirees 'on the understanding that' when it retires, it will benefit from the contributions of those in work). Howse argued that we needed a criterion of generational fairness

that connected with other ideas of distributive justice - and there are

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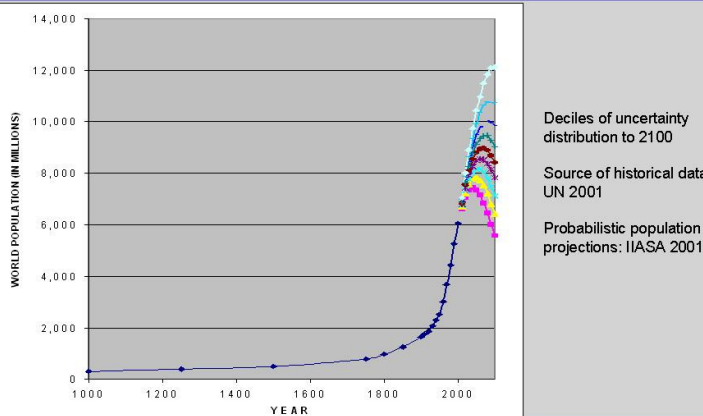
different candidate criteria. For example, arrangements for age-related transfers should ensure equal treatment of generations; or ensure that arrangements do not leave the next generation worse off (i.e. the Rawlsian just savings principle); or arrangements should not entail redistribution from later to earlier generations.

In making actual assessments of fairness, the scope of assessment of the collective legacy must be determined. Do we e.g. isolate pensions arrangements from all other kinds of generational

(Continued on page 3)

World Population from the year 1000 to 2100

(historical data from 1000 to 2000; deciles of IIASA's probabilistic forecasts to 2100)



Deciles of uncertainty distribution to 2100

Source of historical data: UN 2001

Probabilistic population projections: IIASA 2001



- Climate change is another major factor that needs to be accounted for in changing demographics. Lutz's book, *Population and Climate Change* co-authored with MacKellar and O'Neill, addresses just this point.

- While all other sections of our lives are being stretched - such as longer preparatory period before entering the work force and longer healthy spans after retirement -

the one section that has not change is the fertility period for women. This could be a factor in societies falling into the fertility trap, i.e. as more women are emancipated they may decide to put off child-bearing until possibly beyond their fertile period.

- Migration of unskilled worker to Western countries is not something those countries should continue to rely on, as the flow of migrants

from Eastern Europe will soon ebb and there may be problems associated with the integration of large numbers of migrants from very different cultures. The challenge for these economies is how to train and retain the age group between 20 and 50.

- One participant noted that in South Korea, measures taken to reduce the pension burden on the state include mandating those over 55 to remain in the workforce for lower pay. While this may not work in all countries, it shows the variety of approaches different states are taking to the issue. In general, most of Southeast Asian governments have woken up to the need to address ageing issues in a cross-departmental nature.

- A number of participants commented on the Danish sperm count study, and it was noted that the Danish study was used because of the general lack of studies of this nature, as data is difficult to collect.



Developing Countries and Ageing

Speaker: Mr. Richard Blewitt

To gain a perspective on the issue of ageing from the standpoint of developing countries, we turned to Richard Blewitt, CEO of HelpAge International. Blewitt began his talk by saying that ageing is often low on the priority lists of countries in the developing world. Part of the reason for this is that there are many competing policy priorities. A reality is that many older people don't retire because they can't afford to and continue to work despite facing health problems. They work until they become too ill to work, or die.

Addressing the issue of ageing in the developing world is difficult, in no small part due to the lack of sufficient data about people over 50, how people experience poverty, HIV and AIDS, and even access to basic services such as water and sanitation. The issue is one that will become more important, however, as the number of people over 60 in developing countries will triple between 2007 and 2050, from 453 million to 1.6 billion. Broken down into absolute numbers in regions, Blewitt said, the increase in numbers of older people is quite staggering. For example, in Africa there are now just under 50 million older people, but in 2050 there will be just under 200 million. And in Asia, the rise is from 365 million to 1.2 billion.

Blewitt argued that what these rapidly rising numbers of older people want is the same the

world over, from the poorest to the most powerful: financial security, good healthcare and participation in society. These wants, however, are much harder to fulfil in less developed regions. Combined with that are factors such as low literacy levels among older people - meaning they can't fill out the paperwork to access their entitlements for healthcare or other social programmes - to the much larger role they play in raising grandchildren compared to the developed world.

The role that HelpAge International plays is in working with Governments and civil society partners in developing new solutions for implementing the globally agreed Madrid International Plan on Active Ageing (MIPAA) because, as Blewitt argued, there are lots of good intentions in the plan, but also many difficulties in trying to actually implement it. HelpAge International believes that the aims of MIPAA can be realised through the delivery of universal social (non-contributory) pensions, affordable healthcare and anti-discriminatory legislation. A 2006 survey by HelpAge International of 17 countries with social pensions showed that 24.3 million people over 60 receive a social pension. However 83% do not receive a social pension because they are means-tested or the age limit is set too high. Without this income, older people are reliant on their household, but the cost of caring for them - and many often have chronic medical

problems - is frequently too expensive for the family to bear.

In discussion the following points were made regarding both Blewitt's talk and the EU perspective:

- In response to a question about what kind of non-discriminatory agenda Blewitt had in mind, he gave an example of governments taking action to address problems older people face in accessing health clinics regardless of their age.
- Civil society organisations play an important part in less developed countries, filling the gap between what the state can provide and what is needed.
- Older people groups have been shown to be very influential when they form.
- The concept of ageing held by those in power is still dominantly a male perspective.
- Rather than focus on ageing as a problem for less developed countries that developed countries can help with, we should focus on helping less developed countries make their own decisions on setting sustainable appropriate policies to address their ageing opportunities and challenges.

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transfers? Or include all public age-related transfers? Or expand the scope of assessment to include public capital, legacies of environmental degradation etc? Do we end up with a standard of generational fairness that is completely unusable because it is too complex?

Howse ended with a tentative suggestion that we should distinguish between the costs of population ageing due to increasing longevity and the costs due to falling fertility. If low fertility is equivalent to under-saving, we should ask if low-fertility generations should increase their real capital to compensate for their lower production of lower human capital.

In discussion the following points were raised:

- The aspects of the concept of fairness that Howse chose seem too narrow.
- However, if Howse applied his thinking to particular institutional structures, some participants believed his categories would adapt to the context.
- A number of participants questioned the viewpoint that Howse took to analyse generational fairness, arguing that all issues of fairness are institutionally framed, and we can only talk of what is fair within the institutional framework. One participant highlighted three modes of fairness based on the work of Peyton Young: parity (equality of condition), priority (first come, first served), and proportionality (goods distributed proportional to contribution or need).

The Democratic Future of Europe:

From Challenge to Opportunity

Speaker: Mr. Julius op de Beke (presented by Wolfgang Lutz)

The afternoon of the workshop was to include a presentation by Julius op de Beke from the European Commission, but he was unfortunately unable to make it. With his kind permission, we have posted the speech he would have made on the Policy Foresight Programme website. Dr. Wolfgang Lutz provided a brief overview of points for discussion from op de Beke's speech.

Thinking about ageing at the European Union became substantial after the 2005 green paper on "Confronting demographic change: a new solidarity between the generations" (COM2005-94). This paper was followed by a 2006 Communication "The demographic future of Europe - from challenge to opportunity" (COM2006-571), which was not quite as alarmist in tone. The EU is focused on fertility, mainly because they see the main paradigm gap as being between the average family size and the ideal family size.

Other ways of dealing with demographic change at the EU level include creating more jobs and having longer working lives for citizens; becoming more productive and competitive in the global marketplace; continuing the flow and integration of migrants; and making public finances sustainable. The last point is significant because it was the finance ministers who first put the ageing problem to the EU.

General Discussion

The workshop was then opened up to general discussion on the issue of global ageing. Some of the key themes and points raised in discussion included:

- One key aim of the Policy Foresight Programme is to help ideas flow between government, industry, academia, and civil society on issues relating to science and technology. One way that this could be better achieved is if there was more integration of scientific perspectives on policy issues at the highest levels of government. In particular, there should be a Cabinet committee on science, and there should be a Minister of Science.
- NGOs work best when they interact with strong governments, but governments, even strong ones, do not have the capacity to do everything. It should be the role of civil society, therefore, to influence government, interact with it, and to develop their own programmes independent of government where needed.
- It was reiterated that ageing was not a high concern for developing countries, as so many other issues take precedence. It is important that governments implement long term plans of action on the issue, however, and that is where NGOs and civil society can work together in developing countries.
- Overall, there was still a need to give the issue more precision, explicitly drawing links between fertility, longevity, and mortality.



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Policy Foresight Programme

Director: Sir Crispin Tickell

The Policy Foresight Programme, part of the James Martin Institute for Science and Civilization at the University of Oxford, is designed to facilitate interaction between government, business, industry, the media, and academia on issues of science, technology, and the environment. The purpose is to identify leverage points in current policy that could have significant long-term benefits for civilization.

Under the direction of Sir Crispin Tickell, the main activity of the Programme is to host up to six 1-day seminars a year, where around 25 people will engage in constructive debate to further integrative thinking on a particular issue. The emphasis of the seminars is to look anywhere from 10 to 50 years into the future to see what will be the major decisions we will be faced with then and what can be done now to direct policy along a resilient path. The Programme will cover all major areas of the James Martin Institute, namely: Tomorrow's People, Tomorrow's Technologies, Tomorrow's Planet, Governance of Technological Change, Technology and Inequality, and Tomorrow's Civilization.

Oxford Institute of Ageing

Director: Professor Sarah Harper

Established in 2001, the Oxford Institute of Ageing is the first research institute to examine societal ageing and demographic change, rather than the ageing of old people per se. Our aim is to understand how an ageing population affects work, family and social networks, political, economic and consumer behaviour, the delivery of health and social services and how state support should be provided. We also work with colleagues in government and policy making to help develop the economic, political and social structures that are needed in order to take advantage of the opportunities that a mature society will bring.

www.ageing.ox.ac.uk

Participants

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Upcoming Seminars

Biodiversity: Science & Religion: following from EO Wilson's Call to Action, we will look at how to combine the forces of science and religion to tackle the problem of decreasing biodiversity.

Uncertainty in Scientific Models for Policy Advice: How can we (scientists, policy makers, and the general public) better handle the uncertainty with large models that are used in policy-making? We will explore this question in conjunction with the TransAtlantic Uncertainty Colloquium (TAUC) and the International Institute for Applied Systems Analysis (IIASA).

Developing Reinsurance Mechanisms for Climate Change Catastrophes: How can the global society help those countries which will be most affected by climate change, but are least able to deal with it? This will be explored in conjunction with IIASA.

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