Demographic challenges and migration

Demographic change is expected to have a widespread impact on the economies of many countries, affecting economic growth, saving and investment, health and welfare expenditure, and financial markets. Demographic change has become a key focus for the Group of Twenty (G-20) Finance Ministers and Central Bank Governors in recent years, particularly in relation to its implications for economic growth and migration. This article provides an overview of the G-20 workshop on 'Demographic Challenges and Migration', held in Sydney on 27-28 August 2005.[1]

Migration has been a key element in international discussion of demographic change and increasing cross-border economic activity. In this context, relevant issues include the relative economic and social impacts of temporary and permanent migration, the implications of the mix of skilled and unskilled workers in migration, the impact of migration on business networks and knowledge exchange, the scope for governments to increase cross-border portability of pension and health benefits and access to payments systems, and the impact of migration on social cohesion and national security. These issues directly affect countries' development possibilities.

The workshop developed a work programme that may help identify those migration or labour mobility situations that benefit migrants and source and host countries alike. Future work will seek to identify the policy mix that maximises the benefits and ameliorates the costs of migration.

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1 The workshop publication is available at http://www.g20.org.

Introduction

Across the world countries face changing demographic profiles due to rising levels of development, improving health care, and declining fertility rates. This will have far-reaching implications for economic growth, saving and investment balances, and health and social security expenditures in all economies, both developed and developing. Countries are at different stages of demographic transition, with developing countries typically having younger populations than developed countries.

Over the next few decades, developing countries are expected to experience large increases in their working-age populations owing to high fertility rates in recent decades. According to the projections of the international institutions, lower income countries will add up to 1 billion workers to the global labour force by 2025 and 1½ billion by 2050. Conversely, without further immigration, the total labour force in Europe and Russia, the high-income countries of East Asia and the Pacific, China, and to a lesser extent North America will fall by about 30 million by 2025 and almost 250 million by 2050.

Representing two-thirds of the world's population, and with its unique mix of systemically significant industrial and emerging market economies, the G-20 is a useful forum in which to develop a shared understanding of the implications of demographic change, and to consider responses to the associated economic and social challenges. The worldwide pattern of available labour is changing as countries' demographic profiles are changing at different rates. Labour will become more plentiful in some parts of the world than before, and less plentiful elsewhere. International labour mobility, or more generally migration, could yield what may be called 'demographic arbitrage'.

Demographics was first discussed by the G-20 in 2003 as a possible future strategic priority, and placed on its work programme for 2004. France hosted the G-20's first workshop on demographics in 2004, exploring the impact of demographic change on growth. At the ministerial meeting that year, the G-20 agreed to an initial set of guiding policy principles. Countries already experiencing ageing populations should encourage greater participation in the labour force; while countries experiencing a rise in their working-age populations should prepare by investing in human capital and infrastructure, while pursuing prudent fiscal policies. The G-20 also called on the International Monetary Fund to commit to strengthening its monitoring of the economic challenges of ageing populations and countries' policy responses.

The G-20 held a second workshop on demographic change in August 2005 in Sydney, prompted by discussion among G-20 Finance Ministers and Central Bank Governors on the role of migration in dealing with ageing populations. Migration is not a global panacea for the consequences of ageing populations. This is because migrants themselves get old, and migration would have to increase exponentially over time to maintain the population structure, resulting in possibly unmanageable population growth in many countries.

Labour mobility is only one part of a set of adjustments associated with demographic change. One way to think about these adjustments is to decompose GDP growth per capita into three elements: population growth, participation in the labour force, and productivity growth — the 'three Ps'. Slower population growth in developed economies will adversely affect growth in GDP per capita. In the short run, the only way to influence population growth is through migration. However, this framework suggests that other policies, particularly those that influence participation and productivity, may mitigate the effects of ageing.

Although labour mobility cannot permanently prevent population-ageing in developed economies, it may delay or slow the process, creating an opportunity for countries to design domestic policy settings more appropriate for ageing populations. Hence it is important to understand the costs and benefits of labour mobility, for both destination and source countries.

The Sydney workshop considered these issues in three sessions. The first session examined current global demographic changes and their potential macroeconomic implications, including alternative scenarios arising from different policy responses. The second session started to explore the costs and benefits of migration. Finally, the third session delved deeper into two potentially large benefits of labour mobility: workers' remittances and knowledge exchange. These themes are considered below.

Global demographic change and macroeconomic implications

The magnitude of the current demographic change will affect global and national economies. The global macroeconomic effects are extensive and include changes in capital flows, current account balances, trade volumes and structures, economic growth rates, and the pattern of global growth.

Macroeconomic models can be helpful in providing a range of possible scenarios. Economic modelling by **Warwick McKibbin**, for example, suggests that, in many instances, the global demographic transition may have just as substantial an impact on a national economy as a country's own demographic transition. For example, in McKibbin's model, capital is shifted out of rapidly ageing economies and into economies with growing working-age populations, including many developing economies and the United States. GDP growth is higher in these economies than would be the case if subject to only their own demographic change. To an extent, these capital flows are already occurring, and will continue over the coming decades. The impact on capital markets of global demographic change will be further considered this year when Australia hosts a G-20 workshop on the topic in July 2006.

Just as capital mobility might be part of the adjustment to demographic change, so might labour mobility, or more generally, migration. **Alan Winters** makes the crucial point that, although migration is not a solution to demographic change, it remains part of the policy set because other policies are inadequate on their own, or entail significant adjustment costs. Previous work has shown there are potentially large gains to the world economy from even small increases in labour mobility.

Winters argues that temporary migration might be preferable to permanent migration because the apparent costs of temporary migration, to both destination and source countries, are smaller, while the gains are substantial. Temporary mobility, however, raises substantial policy issues such as the need for portability of pension and health benefits. Only about one in five migrants work in a country with portable pension benefits, and even then their health benefits are not necessarily portable.

Robert Holzmann argues that countries could face practical difficulties in increasing migration, including community resistance and concerns about national security. In this case, policies to promote labour force participation in ageing economies may be an important part of the response. However, these policies are also insufficient in isolation, because the participation rate would have to increase continually as the population's working-age share falls.

Holzmann argues that policies to promote fertility are unlikely to be an adequate solution by themselves. Even if policy levers do exist to lift fertility rates, the immediate result is an increase in the number of dependants in the community, who take 15 to 20 years to enter the workforce.

Productivity growth is a key component of any policy response, and will include efforts to liberalise and reform economies. For ageing populations, enhanced productivity will boost per capita GDP growth. For developing economies, investment will expand and increase employment.

In summary, labour mobility could be part of a combination of policy solutions to address demographic change. Regardless of the possible benefits of labour mobility, however, the perception remains of large costs associated with migration, both to source and destination countries. The second session of the workshop examined these costs and benefits more closely.

The costs and benefits of labour mobility

One of the most frequently cited costs of migration is so-called 'brain drain' — the loss of educated workers with valuable skills, which can impose large losses on governments that bear the costs of education and training. Brain drain is potentially a concern for all economies, both developing and developed, with some developed economies experiencing significant rates of skilled emigration.

Frederic Docquier and Hillel Rapoport, however, show that skilled emigration rates have decreased on average among G-20 countries since the 1970s because of increases in educational attainment in most countries. And while academic and policy debates of previous decades focused on the possibility of brain drain, current thinking now focuses on 'brain gain' or 'brain circulation'.

The emigration of skilled workers may not be a cause for concern. Docquier and Rapoport demonstrate that, under particular circumstances, the source country can gain from out-migration. If there is a large difference between what a person can earn overseas and what they can earn in their own country, then they have a strong incentive to accumulate human capital that would enable them to go overseas. Individuals can benefit from earning a higher income, and source country communities may benefit from the economic growth and tax revenue generated by a better educated population.

The opportunities provided by temporary labour mobility can provide an incentive to accumulate human capital, although it is unclear whether the magnitude is similar to that provided by the possibility of permanent migration. That is, while temporary migration boosts income and human capital accumulation in developing economies, the gains to education may not be as large.

Ian Preston discusses how different types of migration can affect the choices and economic outcomes of immigrants and their families. For example, Preston notes there is some evidence that the educational attainments of the children of migrants who intend to stay only temporarily are lower than those of children whose parents intend to stay permanently.

This highlights that while temporary migration may be less costly than permanent migration — making less call on public services in host countries and causing less 'brain drain' on source countries — there may also be additional costs relative to permanent migration. Temporary migration may not provide sufficient incentive for migrants to see the host country as home and to assimilate or integrate. Temporary migration, for example, appears to reduce the incentive of migrants to learn the language of the host country.

The effect of the duration of migration on relative costs and benefits is difficult to assess, as is the effect of the skill level. As with duration, the skill dimension of the migration flow imposes different types and magnitudes of externalities on residents of both source and destination countries.

Externalities imposed on destination country labour markets are considered by **David Card** in his analysis of the impact of immigration on local labour markets in the United States. The conventional wisdom has been that low-skilled labour migration adversely affects host country labour markets, eroding employment opportunities and wages of low-skilled workers. But the evidence Card presents is more mixed. Concerns about lower wages or unemployment among local workers due to immigration may be exaggerated, especially in economies that have greater labour market flexibility.

The costs and benefits of labour mobility raise complex policy issues that the workshop only began to explore. **Michael Clemens**, for example, analyses the controversy around the recruitment of health professionals from developing economies to work in developed economies. He considers the issue of whether destination countries free-ride on the education and training efforts of source countries, depleting their skilled health workers, with adverse consequences for their health systems. But again, the conventional wisdom is open to question. Clemens concludes that, on average, those African countries with the highest emigration rates tend to have the best health systems, and that emigration is motivated by poor rates of pay and dangerous local conditions. He argues that there is no evidence that migration has reduced the effectiveness of these countries' health systems over time.

Also, any losses of human capital may have been offset by the benefits that accrue from remittances and knowledge exchange, which are crucial parts of the dynamic adjustments in response to demographic change. These issues were explored in the third session of the workshop.

Remittances — welfare, human capital, and knowledge exchange

Remittances exceed overseas development assistance, and are approaching the magnitude of foreign direct investment, in developing countries. They are estimated to be over US$100 billion per year, but their magnitude is understated due to large unrecorded and unofficial flows.

As discussed by **Ernesto López-Córdova** and **Alexandra Olmedo,** remittances offer possibly the best means of improving household welfare in middle-income and developing countries. López-Córdova and Olmedo identify a strong correlation between remittances and health and welfare outcomes in communities that receive large remittance flows. Regions with large remittance inflows are better off, on average, than those without.

A key way in which remittances can enhance household welfare is by promoting education. Studies generally find a direct positive relationship between remittances and a household's level of educational attainment. Remittances promote human capital investment not just by easing budget constraints, but also by providing an incentive to undertake education and training. Remittances demonstrate the possibility of earning higher wages abroad that can, in part, be remitted back home.

Richard Brown provides a thorough analysis of the link between remittances and human capital, highlighting that decisions around migration and human capital are made at the same time. Remittances and human capital can be modelled as a set of implicit informal family loan arrangements. Migrants' remittance motivations evolve over their lifetime through three phases: repaying parents, educating the next generation, and providing for the migrant's own retirement.

Another crucial 'remittance' to source countries is knowledge exchange. As **Clay Wescott** outlines, migration is a conduit for knowledge about business processes and technology to flow between developed and developing economies. Diaspora networks can offer tremendous potential for world-wide knowledge exchange, rapidly diffusing ideas and innovations, making all countries more productive. It is increasingly apparent that the diffusion of knowledge and innovation plays a crucial role in economic growth. The key challenge for governments is to establish the market and policy mechanisms that most effectively and efficiently support such diffusion.

Some of the gains from migration can be lost if policies do not allow the newly acquired capacities of the skilled diaspora to be brought back to the source country. At a minimum, policy should aim to do no harm. Migrants are more likely to return to their home countries if these countries offer social and economic reliability. Governments can build bridges back for their emigrants, but these are more effective if they are directly compatible with the interests and aspirations of the diaspora.

The rise in the number of people who work in a variety of countries for short periods (trans-national workers) suggests that governments might also not need to aim at bringing emigrants back permanently. While business and information networks might be more important, the issue of how to build successful networks is not yet well understood.

Future directions

Labour mobility is already creating 'demographic arbitrage'. But it is just one of a wider array of policies required to meet global challenges. These other policies include:

getting public finances right; promoting domestic economic flexibility and productivity; encouraging labour force participation; liberalising domestic and global means of exchange; and allowing trade between countries. Crucially, both host and source countries need to be conscious that the policies of source countries are critical to attracting migrants home.

Institutional arrangements matter. Policies matter. And the flexibility of governments' responses to new developments will be critical to smooth economic and social adjustment to the demographic transition under way. The labour market impacts of migration, for example, may be different for countries with less flexible markets.

While labour mobility can deliver significant benefits to the world economy, it is timely to consider how these benefits can be achieved. Migration and demographic choices are inherently personal decisions, influenced by economic opportunities and social factors such as language and culture. We need to understand better the incentives for people to migrate and to assimilate, whether they be temporary or permanent migrants. This requires a better understanding of individual and household decisions to acquire education, skills, and networks, and how that human capital is used.

All dimensions of international migration are under-studied. To start with, better data, especially on migration and remittance flows, are needed. There is a widespread view that existing data on remittances are incomplete and there may be value in well-targeted surveys. Better data on remittances may assist research into their macroeconomic implications, including effects on exchange rates and their development impacts in home countries.

Further examination of the costs and benefits of temporary labour mobility in the context of real-world temporary migration arrangements is also needed. This includes the design of portable pension and health benefits. Finally, research is needed into conduits of knowledge exchange, especially market mechanisms that facilitate it.

The work programme proposed above may help identify the migration or labour mobility arrangements that benefit migrants and source and host countries alike. Future work can identify the policy mix that allows countries to maximise the benefits and minimise the costs.