



## A Demographic Dividend for the Developing Countries? Consequences of the Global Aging Process

Even in the countries of the South life expectancy is rising and birth rates are falling. As a result, not only is population growth on the decline, but the proportion of minors in the population, too. Conversely, the proportion of inhabitants aged between 15 and 65 years who are gainfully employed and able to save is growing.

During this period a rise in the savings ratio is likely, bringing higher growth rates, provided that the additional savings are invested productively in the country itself. The high rate of economic growth in East and South-East Asia since the late 1980s is probably due in part to this "demographic dividend".

The demographic dividend has, however, evaded most Latin American countries so far, their investment conditions being too unattractive in the years that mattered. Africa, Central Asia, the Middle East and India can still benefit from the demographic dividend. This is also important because the propensity to save is likely to diminish in the industrialized countries over the next twenty years – again for demographic reasons – and they may even become net capital importers by 2030.

For the developing countries it will therefore be even more essential than in the past to ensure profitable and safe investment conditions for domestic and foreign investors.

### Global demographic change

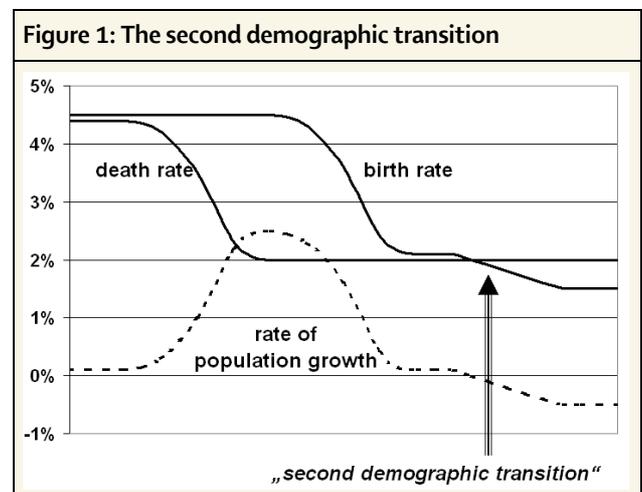
Too often the consequences of demographic change are discussed only in a national context. And frequently the discussion is even confined to the more developed countries of the North, where the aging process is already farther advanced and by 2030 will result in a rise in the proportion of the over-65s. Yet the demographic changes in both the South and the North will have major consequences for all parts of the world.

For the decades to come the world population will continue to grow. It is true that the increase has already passed its peak and that population growth rates will continue to fall. According to United Nations forecasts, however, the number of people on Earth is set to rise by a further 2.5 billion to 9.2 billion (40%) by 2050. Most affected by this trend will be the least developed countries, whose populations will double, while the countries of Europe and the former Soviet Union will have to contend with decreases of 15 and 30% respectively. The centre of gravity of the world population will thus shift further to the South. Despite HIV/Aids, the United Nations predicts that Africa's share of the world population will rise from 13 to 22%, while Europe's share will fall from 12 to 7%. The populations of the developing countries will not begin to level off until 2100 (UN 2006).

The reason for this is that the demographic transition is still under way in the developing countries. Thanks to

improved hygiene, easier access to medicines and better health care, death rates have fallen, while birth rates are still at a relatively high level, causing the population to grow. It will take some time for birth rates to decline and fall into line with death rates again. As they have even fallen below death rates in some (though not all) industrialized countries, their populations are shrinking. This is also known as the "second demographic transition" (see Figure 1).

Far more serious, however, is the expected aging of the world population. According to United Nations calculations, the proportion of people aged over 60 will rise



from 10 to 22% by 2050, whereas the proportion of under-15s will fall from 28 to 20%. The global median age will thus climb from 27 to 37 years.

### Consequences for savings and economic growth

The development debate was long dominated by the proposition set out by Robert Malthus in his *Essay on the Principle of Population*, published in 1798, that high population growth restricts economic growth and is therefore one of the main causes of underdevelopment. Empirical studies refuted this proposition in the 1980s, prompting the World Bank not to continue its population programmes.

It is only in the last few years that a more differentiated view has been taken. Population growth is thus not deemed to be a problem in itself. What is decisive is, rather, the age structure of the population. It is assumed in this context that people attain significant incomes only in the middle phase of life (e.g. between their 15th and 65th years). Before that (as children and adolescents) they depend on their parents or other adults to pay for what they consume. Much the same applies to those over 65, who usually live off their own savings or receive assistance from the state, their own children or other people. Many people save primarily between the ages of 40 and 65, using their savings after retirement.

If, then, the proportion of people over the age of 65 increases, the savings ratio is likely to decline, and this in turn will slow economic growth. This is precisely what will happen in Japan and many European countries from 2020 onwards, because the baby-boom generation born between 1955 and 1970 will then be retiring. In 2050 there will probably be 29 people under the age of 15 and 42 over 65 for every 100 between 15 and 65. The equivalent figures today are a mere 27 and 21, respectively. Each employable person will thus be helping to support 0.71 people of non-employable age – rather than today's 0.48.

In the developing countries, on the other hand, this "dependency rate" is expected to fall from currently 61% to 53% in 2050. While one person of employable age today supports 0.08 people over 65 and 0.53 people under 15, the equivalent figures by the middle of the century will be 0.21 people over 65, but only 0.32 people under 15. The increase in the proportion of over-65s in the population as a whole will thus be clearly offset by the decline in the proportion of under-15s.

Consequently, the propensity to save of the population of many developing countries will grow by 2050, and this is also likely to have a positive impact on per capita income. Empirical studies indicate that a decrease in the dependency rate by one percentage point increases economic growth by 0.5 to 0.7 percentage points. Bloom and Canning (2006) even take the view that more than a third of the upturn in East and South-East

Asia which has continued since the 1980s is due to this "demographic dividend". Much the same is true, they contend, of the economic boom in Ireland, which began around 1990. As contraception was not legalized in Ireland until 1979, it was only subsequently that the birth rate fell. Conversely, Bloom and Sachs (1998) believe that the economic problems in sub-Saharan Africa are partly due to the fact that the birth rate there is still very high and that the proportion of under-15s is still very large.

However, a "demographic dividend" does not automatically occur in every country in which the dependency rate falls. What is decisive is that the growing number of people of employable age also find adequately paid employment. Essential in this context are a well-educated and well-trained labour force, a competitive industry, flexible labour markets and open commodity markets. Little is gained if the growth of the employable population simply leads to a rise in the number of unemployed at working age.

It must also be ensured that the additional savings formed by a growing number of gainfully employed people remain in the country concerned and are used productively. Investment conditions must therefore be attractive and safe, the financial sector should be capable of passing household savings on to worthwhile investment projects quickly and inexpensively, and, by exercising budgetary discipline, the state should ensure that the additional capital available is not immediately used for higher government consumption.

Various studies confirm that the demographic dividend is the greater,

- the more open the markets of the country concerned,
- the more it spends on education,
- the more flexible its labour markets,
- the better the social security of the labour force,
- the fewer debts the state incurs in spending on mere consumption and
- the better the financial sector is developed.

Bloom and Canning (2006) show, for example, that the demographic dividend is twice as high in very open economies as in the average of all countries and that it often entirely fails to emerge in completely closed economies because they are usually incapable of creating sufficient jobs for the rapidly growing labour force.

Demographic change thus creates opportunities, but they must be seized by the developing countries. Latin America is an example of how these opportunities can be missed. Practically no country in the region has so far benefited from a demographic dividend. In the period from 1970 to 1990 their markets were too closed, too little was spent on education, and government exercised too little budgetary discipline. Although the savings ratio rose as a result of demographic change, the

additional savings were not invested productively at home, but in real estate or abroad.

In East Asia, on the other hand, not only the domestic savings ratio but also the propensity to invest rose during the 1990s owing to the growth of the proportion of the population aged between 15 and 65. As the number of children declined, more women were able to go out to work, which led a rise in per capita income. Households also had more disposable income, which they were able to spend on their own and their children's education. Rather than investing in the number of their offspring, they invested in their skills. This made it possible to devote all the factors of production – labour, capital and human resources – to the production process on a larger scale.

### Consequences for the financial markets and current accounts

Demographic change in East and South-East Asia, however, began at a particularly favourable time, when the demographic dependency rate was extremely low and the savings ratio very high in the more advanced countries of the North. This period began in the 1980s with the baby-boom generation's entry into the labour market and will continue roughly until their retirement between 2020 and 2035. The members of this unusually large age-group are currently seeking ways of providing for their retirement years, leading to a decline in

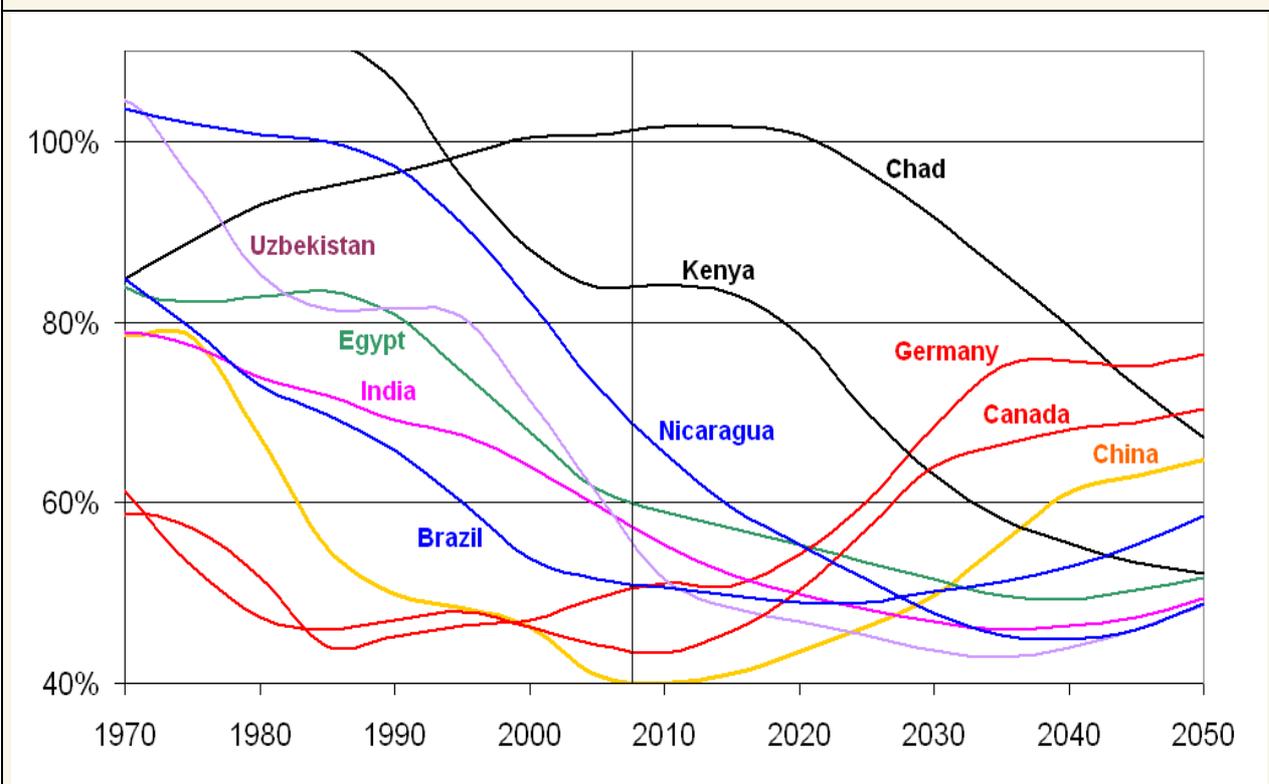
interest rates in Europe, North America and Japan and driving up share values, persuading many investors to look to the financial markets in Asia and so fuelling the boom there with further capital.

It will not stop at this. From 2020 the baby-boomers will probably begin to save less. The North American pension funds in particular will then liquidate their reserves on an enormous scale and even recall capital invested abroad. What makes this all the worse is that the demographic dependency rate in China is likely to rise sharply at exactly the same time, with the result that there, too, the savings ratio will fall from 2030 (see Figure 2).

In both the countries of the North and China the proportion of the population of employable age is declining. This may result in a reduction not only in the supply of capital but also in the demand for it, since businesses may cut back production capacities or investment in new equipment because of the shrinking size of the labour force.

Most experts believe, however, that the first of these two effects will dominate and that the supply of capital (household savings) will therefore fall more sharply than the demand for capital in the industrialized countries and China. The countries of the North will thus be able to export less and less capital and, in certain circumstances, may even become net capital importers. This is particularly true of countries in which techno-

Figure 2: Trend in overall dependency rates in selected countries, 1970-2050



Based on data from UN (2006)

logical progress is slowing or where pensions are based primarily on private or company schemes and are thus funded. It is likely, for example, that the US pension funds will sell securities *en masse* when the baby-boomers reach retirement age, forcing stock exchange prices down and interest rates up. This will attract capital from abroad. In countries like Germany, however, where there are large social security systems financed from current incomes, public indebtedness will rise further and be fundable only if loans are raised abroad (IMF 2004).

The North will thus become increasingly incapable of making capital available to the South for its development. Conversely, however, the shrinking population of the North will produce fewer and fewer goods, and the developing countries' export opportunities will improve. The main beneficiaries here will be countries whose dependency rate is still in the process of falling: India, Central Asia, the Middle East and especially Africa, where the savings ratio is likely to rise at the very time when not only Europe and Japan but also China and South-East Asia are exporting less and less capital or even seeking it abroad (IMF 2004). In Asia China may thus give way to India as the growth pole.

From 2020, then, it may well be that the current accounts of the least developed countries in particular improve solely because of the global demographic changes. This does, however, presuppose more than declining demographic dependency rates, since little will be gained if a growing proportion of the population is of employable age, but unable to find employment. It makes little difference whether someone who is gainfully employed has to provide for two children or one as well as for an unemployed adult.

Consequently, if the developing countries are actually to benefit from demographic change, they must combat unemployment in particular. They must ensure that at least domestic investors have confidence in the national economy, invest at home and so create jobs for a growing labour force. They do not have much to lose, but they may have a great deal to gain. The countries of South-East Asia have shown them how.

### Consequences for social policy

Initially, demographic change will also have favourable consequences for the developing countries' social policies. As the proportion of the population of employable age grows, so will the number of potential contributions to social insurance schemes, and the financial burdens of tax-financed social assistance, health care and education systems can be distributed among a larger number of tax-paying workers.

However, a danger inherent in this situation is that the aging process in the developing countries, too, is con-

tinuing in such a way that one day the proportion of pensioners in the population will grow faster than the proportion of children and young people dwindles. Then the dependence rate will also rise further in the developing countries, as is already the case in the industrialized countries. This trend reversal will occur as early as 2010 in China, 2030 in Latin America and around 2040 in South and Central Asia, North Africa and the Middle East.

The developing countries should prepare for this in good time, to ensure that they are better able than the present industrialized countries to cope with the problems their social security systems are likely to face. One option open to them is to change, in part at least, from the pay-as-you-go financing of social security systems to funding. Pay-as-you-go systems finance their disbursements from receipts in the same period. They must therefore reduce their payments or raise their contribution rates when the number of beneficiaries (e.g. pensioners) rises in relation to the number of contributors. Funded systems, on the other hand, are exposed to little danger, since the benefits received by their members after their retirement are funded by them during their qualifying period. But they do call for efficient capital markets.



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#### Further reading

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