



Talking point



Demographic outlook for BRIC countries differs sharply

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The demographic outlook for the BRICs varies greatly. The differences in the projected change in the working-age population are very significant in both absolute and relative terms. This will impact not only economic growth prospects, but also savings and investment behaviour and potentially financial market growth prospects. Brazil and India are demographically in a substantially more favourable position than China and Russia. With the exception of India, demographic developments in the BRICs are becoming, or will soon become, a net negative in terms of per-capita growth.

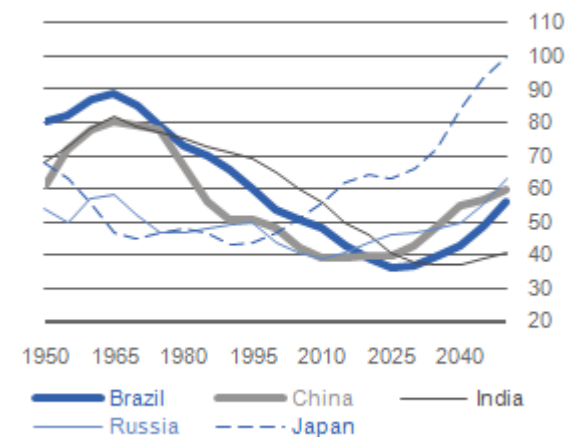
The demographic outlook for the BRIC countries – Brazil, Russia, India and China – could hardly be more different. In terms of the demographic transition model, India is at the beginning of stage three (declining fertility, population growth), Brazil and China are at stage four (low mortality and fertility, population trending towards stability), while Russia is already at stage five (sub-replacement-rate fertility, declining population). Not surprisingly, the differences in the projected change in the working-age population – the economically relevant variable – are very significant in both absolute and relative terms.

The working-age population in India will increase by a stunning 240 m (equivalent to four times the total population of the UK) over the next two decades, compared with 20 m in Brazil. The working-age population in Russia, by contrast, will decline sharply by almost 20 m, according to UN projections. China's working-age population will peak in 2015 and then gradually decline. By 2030 it will be merely 10 m larger than today – a negligible change given a total population of 1.35-1.45 bn. By 2030, India will also have overtaken China as the world's most populous country.

In the “population dividend” model, it is the dependency ratio (that is, dependent population relative to the working-age population) rather than the absolute increase (or decrease) in the size of the working-age population that is the economically most relevant variable. If the dependency ratio declines, i.e. the working-age population as a share of the total population increases, per-capita growth accelerates. By the same token, a rising dependency ratio is a “drag” on growth. Interestingly, empirical research suggests that the drag stemming from a rise in the dependency ratio due to rising old-age dependency seems to be somewhat smaller than the “dividend” stemming from an equivalent decline in the dependency ratio due to falling youth dependency.

It would be wrong to think of this process too mechanistically, however. To what extent (per-capita) economic growth rises also depends - amongst other things – on the capacity of the economy to absorb the rapid increase in the working-age population. China, like the East Asian tigers before, has been very successful in this respect, absorbing a rapidly increasing labour force into a productive, export-oriented manufacturing sector. By contrast, Brazil's inward-oriented economic strategy during the 1960s and 1970s made it more difficult to generate “East-Asian” per-capita growth, as many workers ended up in the low-productivity urban service rather than in the relatively more productive manufacturing sector. The existence of a relatively large, capital-intensive commodity sector did not help, either.

Diverse picture
Dependency ratio, %



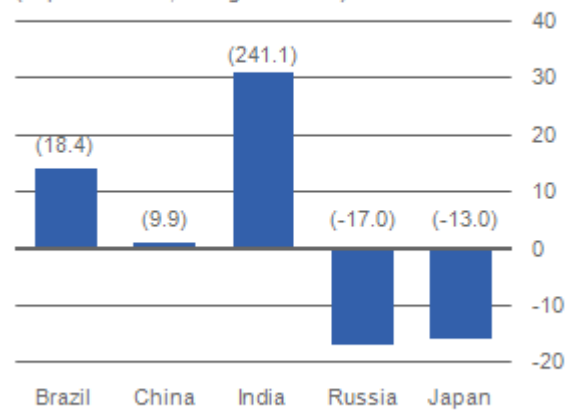
Source: UN



In the “population dividend” framework, changing demographics impact growth through two main channels: labour input and savings. First, per-capita economic growth accelerates on account of rising per-capita labour inputs. Naturally, labour input is determined not only by the share of the working-age population, but also by labour participation rates and hours worked per worker. However, if the working-age population increases as a share of the total population, per-capita labour input increases. If the working-age population declines as a share of the total population, the reverse is true. Second, as the youth dependency “burden” turns into a young adult “glut”, the savings ratio increases, underpinning a savings and potentially an investment boom. Again, to what extent this potential is realized will depend on several other factors (e.g. inflation, economic stability). Empirical support for this relationship is mixed, at best. However, more complex models such as the “variable rate-of-growth effect” model, which includes economic growth as an additional variable, has received a fair degree of support. Significantly, Bloom-Williamson (1998) estimate that demographic factors may account for as much as 1/3 to 1/2 of the East Asian economic “miracle” during 1965-90.

Stark differences

Working-age population, % change, 2010-30
(in parentheses, change in million)



Source: UN

The demographic developments in the BRICs over the next 10, 20, 30 years will vary greatly. This will impact not only economic growth prospects, but also savings and investment behaviour and potentially – if somewhat difficult to quantify – financial market growth prospects. Brazil and India are demographically in a substantially more favourable position than China and Russia. Brazil’s “demographic window” (defined here, non-technically, as a falling dependency ratio) will close around 2020-25, while in China and Russia it is closing right now. India, by contrast, will enjoy a very favourable demographic momentum for another three decades.

Naturally, economic policies can help buffer the negative demographic impact on per-capita (!) growth by, for example, encouraging urbanisation or greater labour participation. This will be especially relevant in relatively rural China and India. More importantly, demographic changes are not the only or even the most important factor determining economic growth. The BRIC economies’ relatively limited capital stock (per capita) and distance from the “technological frontier” mean that all four economies enjoy significant, if varying, “catch-up” potential. Thus, the demographically challenged among the BRICs, unlike Japan, have significant scope to offset the intensifying demographic “drag” by way of technological progress and capital accumulation – though the latter may be somewhat constrained by downward pressure on savings rates. The fact remains that demographic developments in several BRICs are about to become a net negative. Economists and financial market analysts would be well-advised not to disregard the sharply differing demographic outlook in the BRICs.



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