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Population Growth and Ageing in the BRICs

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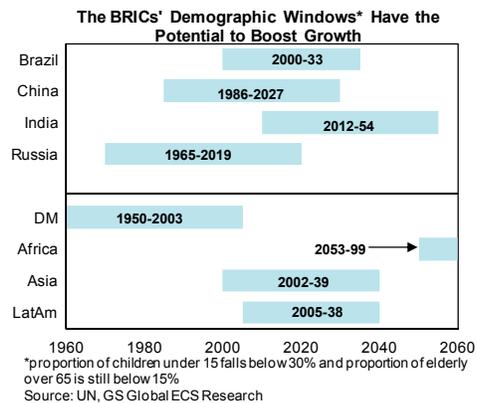
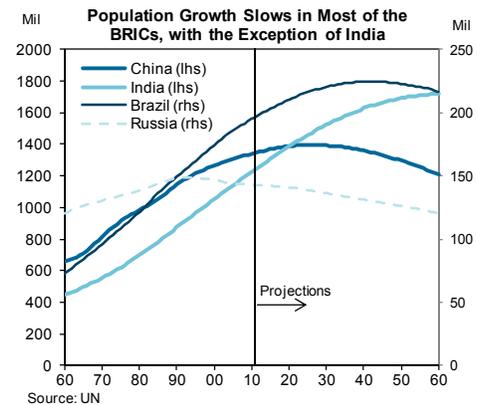
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Population growth is expected to slow in the BRICs over the next few decades, pushing down their aggregate share of the global population. The age structure of the BRICs will also continue to shift progressively towards older populations. In the process, each of the BRICs will encounter—or is already encountering—an advantageous ‘demographic window’ in which the working-age population is disproportionately large. With an appropriate policy framework, this could provide a boost to growth in Brazil, China and India for several years; Russia’s window of opportunity has probably already passed.

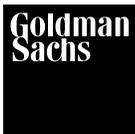
Over the past 50 years, the population of the BRICs has more than doubled. However, population growth is expected to slow notably over the next several decades, producing a concurrent fall in their share of the global population. Only India should continue to see its population size and global share continue to expand.

The age structure of the BRICs will also shift progressively towards older populations over the next several decades. This shift reflects a ‘demographic transition’, during which a rapid fall in mortality rates and a more gradual fall in fertility rates produces a temporary population ‘bulge’. As this ‘bulge’ cohort passes into the working-age bracket, it has the potential to boost economic growth because this segment of the population provides relatively more labour and savings. This period of advantageous demographic profiles, known as the ‘demographic window’, is expected to last for several decades in Brazil, China and India, while it is likely nearing its end in Russia.

To harness the potential benefits of the ‘demographic window’, the BRICs must have in place an appropriate policy framework, particularly with regards to labour and financial markets and old-age pension preparations. One way to track the strength of current policies is our Growth Environment Score (GES) framework. This suggests that India, in particular, will need to make substantial improvements in order to take advantage fully of its ‘demographic window’.



*proportion of children under 15 falls below 30% and proportion of elderly over 65 is still below 15%
Source: UN, GS Global ECS Research



Population Growth in the BRICs is Slowing....

The BRICs, along with much of the world, have seen a rapid expansion in population over the past half century. Over 2.9bn people currently reside in the BRIC nations, more than double the number in 1960 and representing approximately 42% of the world’s total population.

However, BRICs’ aggregate population growth is set to slow in the years to come, according to the most recent revision of the United Nations population projections.¹ These long-range projections necessarily rely on several assumptions, but provide a good directional sense of future population trends. Over the next 50 years, only India’s population will continue to expand, reaching nearly 1.7bn people by 2060. Brazil’s population is expected to stabilise in the next 25-35 years, while China’s population is forecast to start to decline within the next two decades. The number of people in Russia has been shrinking for nearly two decades already, and the pace of decline is expected to accelerate to nearly 0.5% per year over the next few years.

As a result, India is projected to overtake China as the most populous nation in the world in 2021, a position China has held since the UN data begins in 1950. India also is expected to be the only BRIC to maintain its share of the global population. China will see a significant drop in its share from nearly 20% currently to 13% in 2060, and Russia will see its already small share cut in half. Brazil will also see a small decline. A similar drop in global population weight is expected to occur in the developed world as well, as the centre of population gravity shifts increasingly toward Africa in the decades to come.

...And the Age Structure is Shifting

The age structure of the BRICs also will shift meaningfully over the next several decades. While the expected ageing of the developed world has commanded public attention, the greying of the BRICs will occur much sooner and faster. The median age in the BRICs is forecast to increase from 32 at present to over 45 by 2060, compared with a rise of just four years (from 40 to 44) in the developed world.

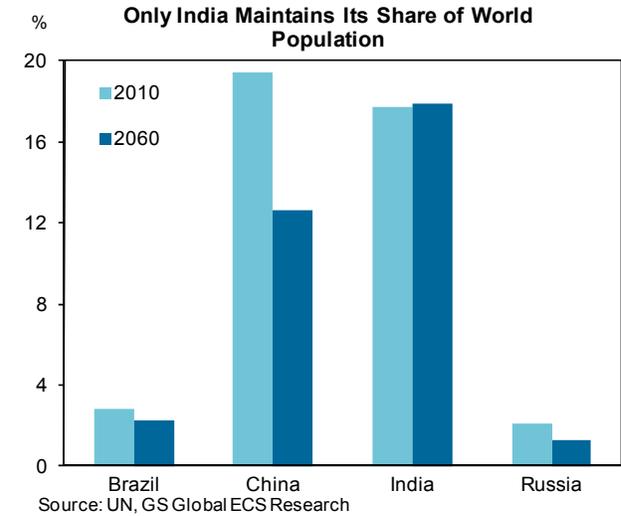
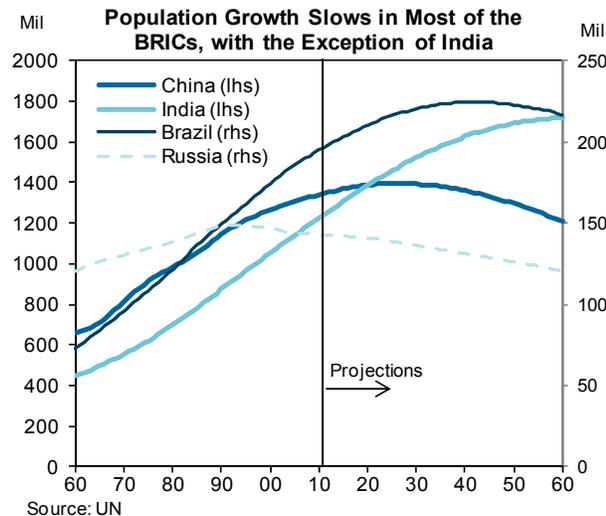
This dramatic shift in age structure reflects the ‘demographic transition’, a developmental phase through which the BRICs and much of the developing world are passing. This transition is typical of countries moving from the high fertility and mortality state common in less-developed countries to the low fertility and mortality equilibrium that characterises most developed countries, which have already undergone this transition.

This transition typically follows a standard pattern. First, mortality rates fall (particularly for the more-vulnerable infant/child segments of the population) and life expectancies increase as improvements in public health and sanitation reach developing countries. This step occurred in the 1970s in China and in the 1970s-80s in Brazil and India, but was absent in Russia, where the death rate has actually risen. Next, fertility rates decline gradually as parents realize fewer children will die during childhood and as it becomes more advantageous to have smaller families.² Birth rates in Brazil, China and India have fallen steadily over the past few decades and have also come down, albeit a bit more sporadically, in Russia.

The lag between the initial decline in mortality and the subsequent reduction in fertility produces a temporary boom in the population growth rate and a ‘bulge’ cohort that then works its way through the age structure. This produces an initial rise in the country’s dependency ratio (the ratio of working-age people to young and elderly ‘dependents’), followed by a 30/40-year-long fall as this cohort reaches the working-age bracket. This period—often referred to as the ‘demographic window’, when the working-age population is particularly large relative to dependents—can have potentially advantageous implications for economic growth and living standards.³

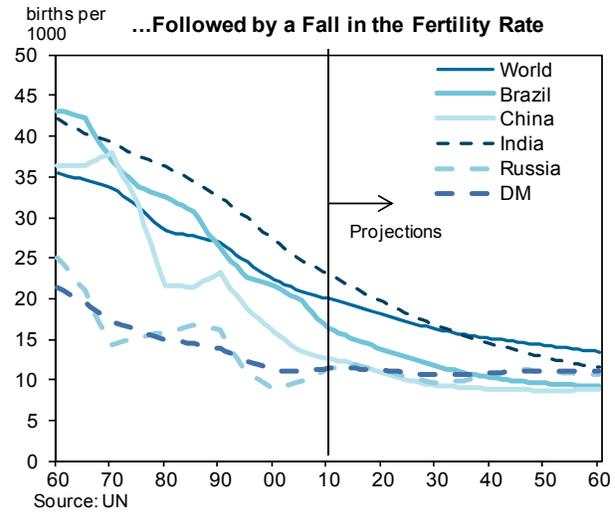
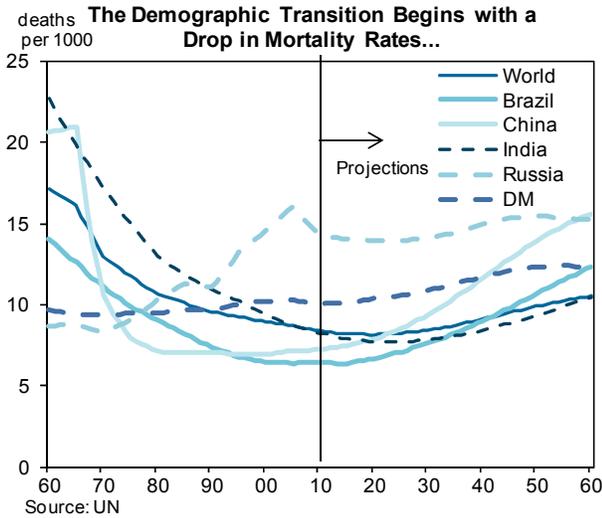
Implications for the Economy

There is a growing consensus that it is the age composition of the population, rather than the overall size or growth rate, that determines the economic impact of demographics. This stems from the fact that age groups behave differently: the young require large investments in health and



1. ‘2010 Revision of the World Population Prospects’, http://esa.un.org/unpd/wpp/unpp/panel_population.htm
 2. As children have a higher survival probability, parents have greater incentives to invest in education, which encourages them to invest more resources in fewer children.
 3. The UN defines the ‘demographic window’ as the period when the proportion of children under 15 falls below 30% and the proportion older than 65 is still below 15%.





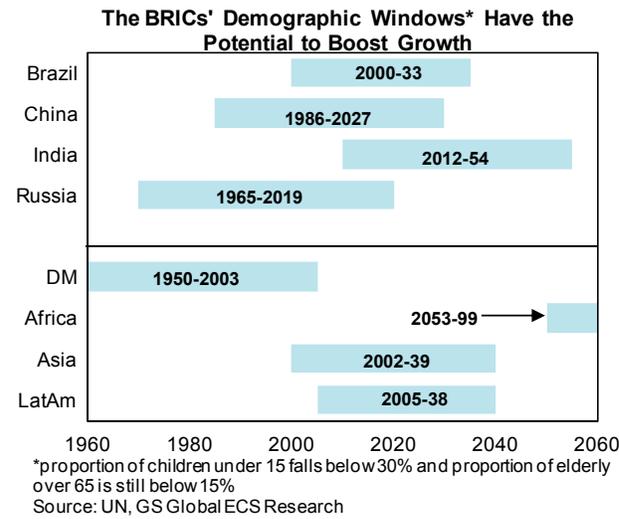
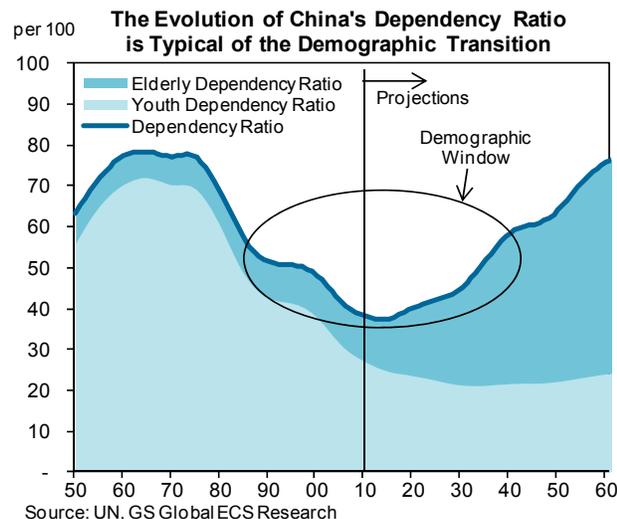
education, working-age adults tend to work and save more, and the elderly require health care and retirement support. Thus, the most favourable demographic profile occurs during the 'demographic window', when the working-age population is particularly large relative to the young or elderly segments. We incorporate the importance of the age structure into our own long-run growth projections, and have also explored how shifts in demographic profiles will influence global current account trends going forward.⁴

appropriate policy framework. The labour market must be sufficiently flexible to absorb the larger number of working-age people available to work. There must be adequate savings vehicles and trustworthy domestic financial markets to encourage this cohort to invest their savings domestically. And governments need to be sufficiently forward-looking to put in place programs, such as pension arrangements, in preparation for the eventual aging of their populations.

Among the BRICs, India has the highest potential to reap future benefits from its demographic window, which it is poised to enter next year. Brazil and China have already entered this phase, and are forecast to emerge from it within the next two decades. Russia, on the other hand, is nearing the end of its window and has already seen its dependency ratio turn upwards as its population begins to age noticeably. These differences are reflected in our BRICs' growth projections, in which growth in the labour force (as proxied by the working-age population) contributes relatively more to growth in India and actually detracts from growth in Russia.

We can use our Growth Environment Scores (GES) as a measure of the strength of economic, political and social conditions that influence growth. India's weak GES performance indicates that it will need to make significant policy improvements if it is to take advantage fully of the potential benefits of its demographic window. Brazil and China, on the other hand, have made continued progress in their GES, which helps to explain their demonstrated ability to harness their advantageous demographic profiles over the past decade. Russia's volatile GES performance helps to explain in part its inconsistent growth trajectory, and suggests that it has probably lost the growth bonus opportunity provided by its now-closing demographic window.

However, it is important to emphasise that the benefits of the demographic window can only be harnessed with an



4. See Global Paper 202, *Current Accounts and Demographics: The Road Ahead*.

Main Economic Forecasts

	2009	2010	2011	2012	2011				2012			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Real GDP Growth (yoy%)												
Brazil	-0.6	7.5	4.5	4.0	4.7	4.1	4.5	4.6	4.2	3.9	3.9	4.1
China	9.2	10.3	9.4	9.2	9.7	9.7	9.4	8.9	8.9	9.2	9.3	9.3
India	8.0	8.5	7.5	7.8	7.7	7.6	7.4	7.5	7.9	7.9	7.6	7.7
Russia	-7.9	4.0	5.3	5.6	3.7	4.4	6.0	6.6	6.3	5.9	5.3	5.2
BRICs	5.0	8.7	7.6	7.6	7.6	7.6	7.7	7.6	7.6	7.7	7.6	7.6
World	-1.8	4.2	3.6	4.1	3.6	3.3	3.5	3.6	3.9	4.1	4.0	4.0
Inflation (yoy%)												
Brazil	4.9	5.2	6.6	6.5	6.3	6.6	6.9	6.5	6.0	5.7	6.1	5.9
China	-0.7	3.3	4.7	3.0	5.0	5.4	5.0	3.6	3.0	2.8	2.9	3.2
India	3.8	9.6	8.1	5.1	8.8	8.9	8.2	6.3	5.2	5.0	5.0	5.4
Russia	11.7	6.8	8.4	6.2	9.5	9.5	8.3	7.1	6.2	6.2	6.2	5.9
BRICs	2.6	5.1	6.1	4.3	6.4	6.7	6.3	5.0	4.3	4.1	4.2	4.3
World	1.2	2.7	3.9	3.0	3.4	3.9	4.0	3.6	3.1	2.7	2.8	2.8
Exchange Rate (eoq)												
Brazil	1.74	1.66	1.62	1.85	1.63	1.55	1.60	1.62	1.70	1.75	1.80	1.85
China	6.83	6.62	6.23	5.82	6.55	6.45	6.36	6.26	6.17	6.07	5.97	5.87
India	45.14	44.70	47.00	47.00	46.00	46.20	47.00	47.00	47.00	47.00	47.00	47.00
Russia	30.24	30.54	26.12	25.25	28.22	28.81	27.86	26.12	25.71	25.25	25.25	25.25
Policy Rate (eoq)												
Brazil	8.75	10.75	13.25	13.25	11.75	12.25	12.75	13.25	13.25	13.25	13.25	13.25
China	5.31	5.81	6.56	6.56	6.06	6.56	6.56	6.56	6.56	6.56	6.56	6.56
India	5.00	6.75	8.00	7.50	7.25	7.50	8.00	8.00	8.00	7.75	7.50	7.50
Russia	6.25	5.00	6.50	7.25	5.25	5.50	6.00	6.50	7.00	7.00	7.25	7.25
Nominal GDP per Capita												
Brazil	8223	10641	12986	13201								
China	3739	4394	5244	6329								
India	1194	1440	1640	1812								
Russia	8777	10412	13268	14814								
BRICs	3238	3873	4582	5269								
EM	3517	4164	4904	5534								
DM	38274	39510	43009	44998								
World	12062	12764	14135	15068								

Source: GS Global ECS Research

We, Dominic Wilson, Constantin Burgi and Stacy Carlson, hereby certify that all of the views expressed in this report accurately reflect personal views, which have not been influenced by considerations of the firm's business or client relationships.

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