

DEMOGRAPHIC CHANGE AND ECONOMIC GROWTH

WITH FOCUS ON THE BRICS



WORLD BANK GROUP

Philip Schellekens (Lead Economist, DEC Prospects Group)

With thanks to: Syud Amer Ahmed, Pinyi Chen, Marcio Cruz and Bryce Quillin

Historical data: a positive association between demographic change and per capita GDP growth

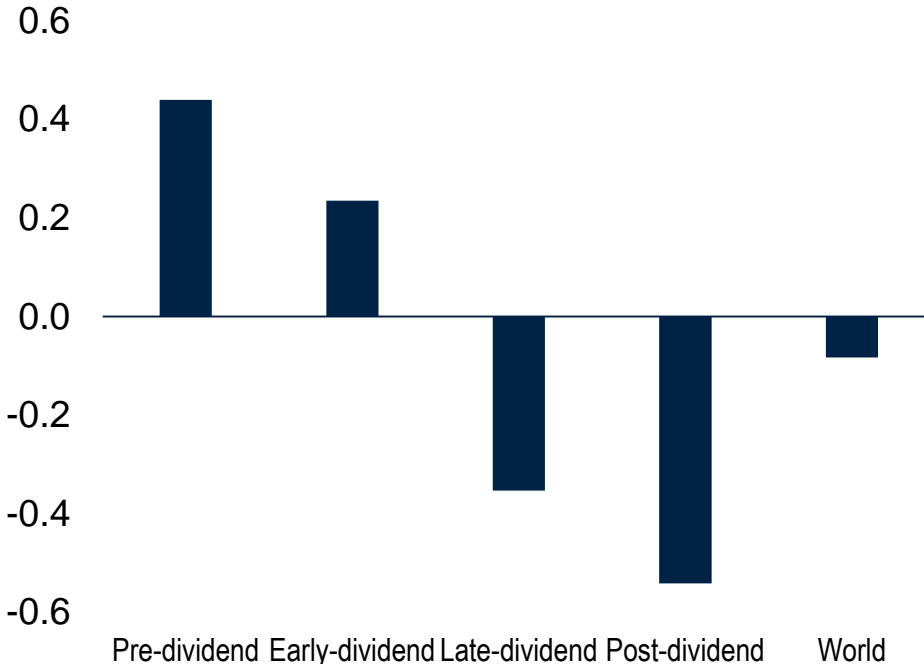


Source: Global Monitoring Report 2015/2016.

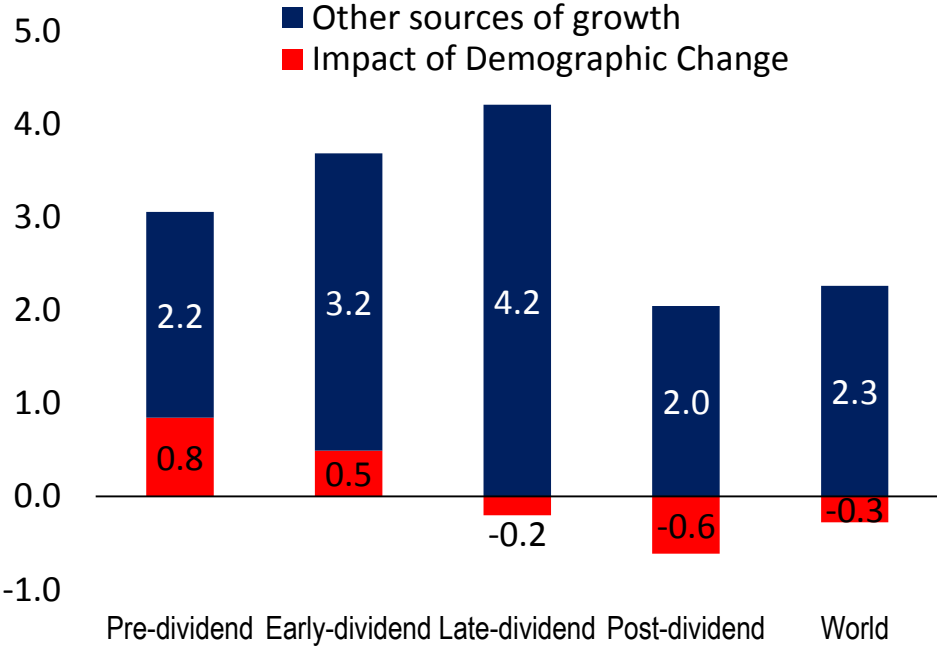
Note: A rising working-age population share is positively correlated with GDP per capita growth. An increase of 1 percentage point in the working-age population share is estimated to boost GDP per capita by 1.5 percentage points, on average.

Simulations into 2030: a differentiated impact according to demographic type

A. Average change in the share of working age population, 2015-30 (percentage points)



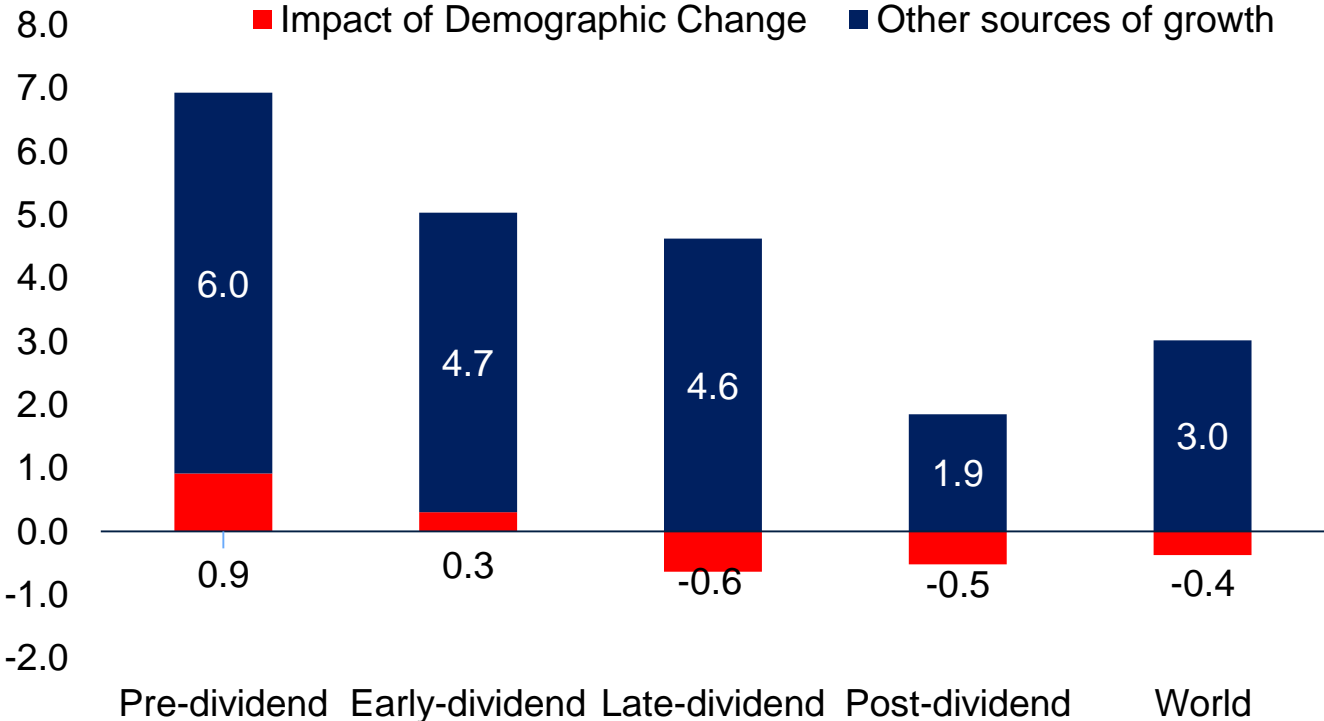
B. Average GDP per capita (annualized) growth, 2015-30 (percentage points)



Source: Global Monitoring Report 2015/2016.

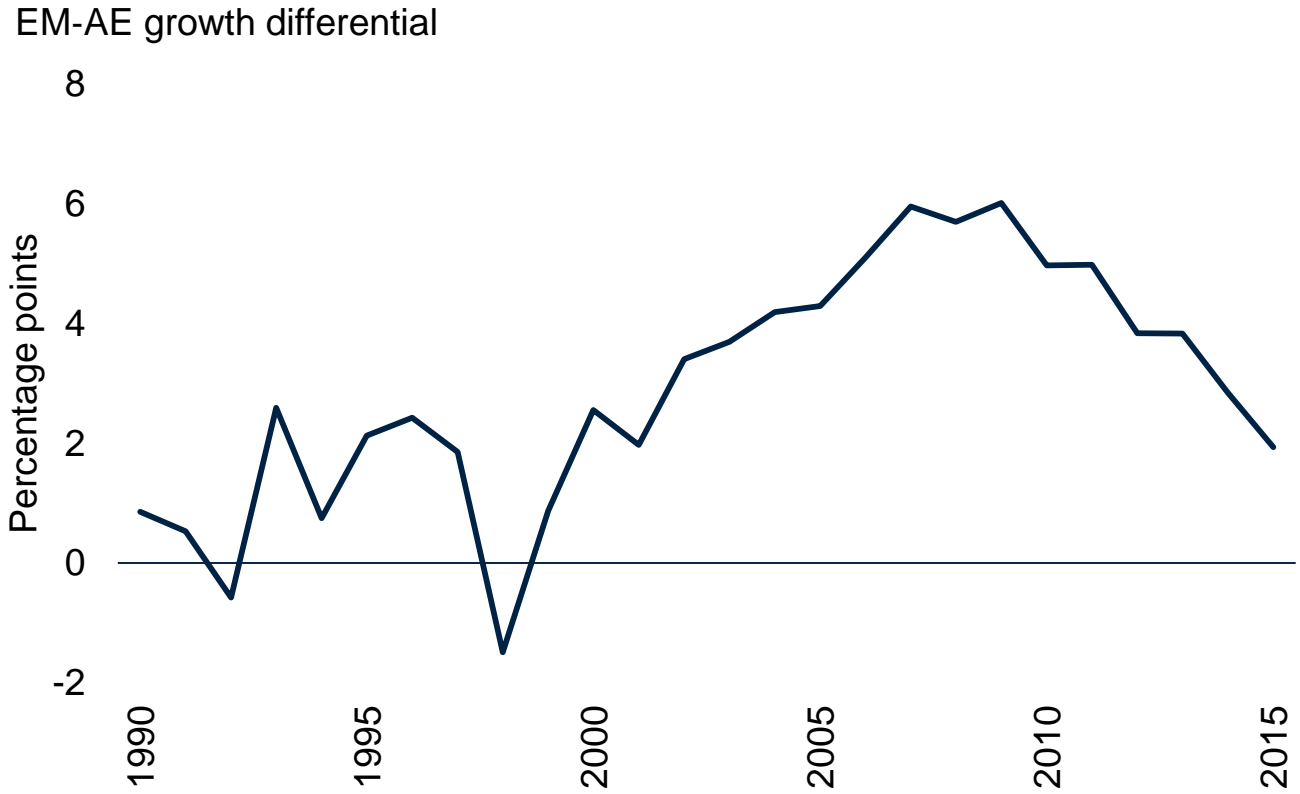
Aggregate GDP growth: non-trivial effects

Average aggregate GDP (annualized) growth, 2015–30 (percentage points)



Source: Global Monitoring Report 2015/2016.

Emerging markets have shown a persistent growth differential during the 2000s, but this has started to fade in strength

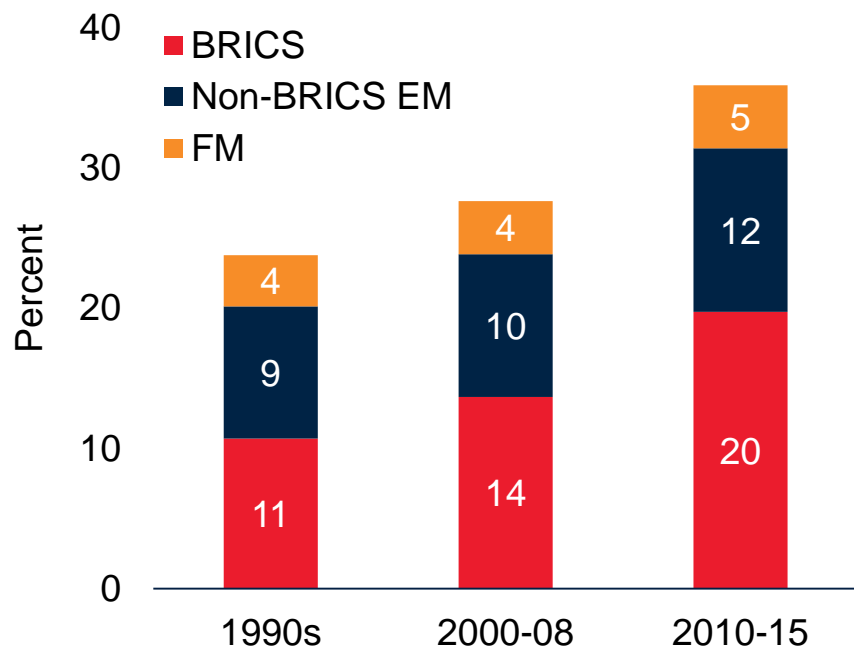


Source: World Bank Global Economic Prospects (GEP), IMF World Economic Outlook (WEO), Consensus Forecasts, World Bank, Haver Analytics.

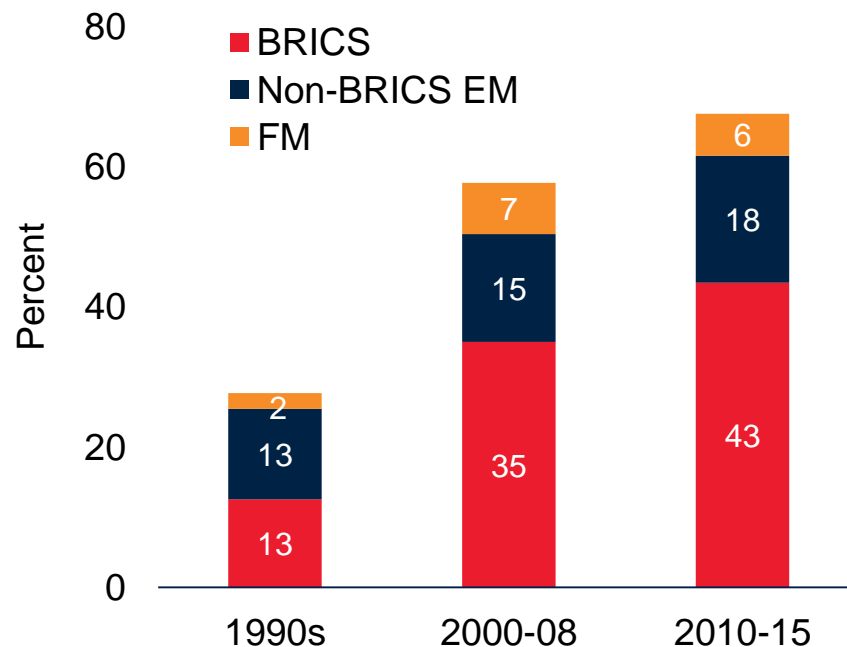
Note: Difference between weighted average EM growth and weighted average AE growth.

The BRICS have accounted for a significant share of EM performance

A. Share of world output



B. Contribution to world growth

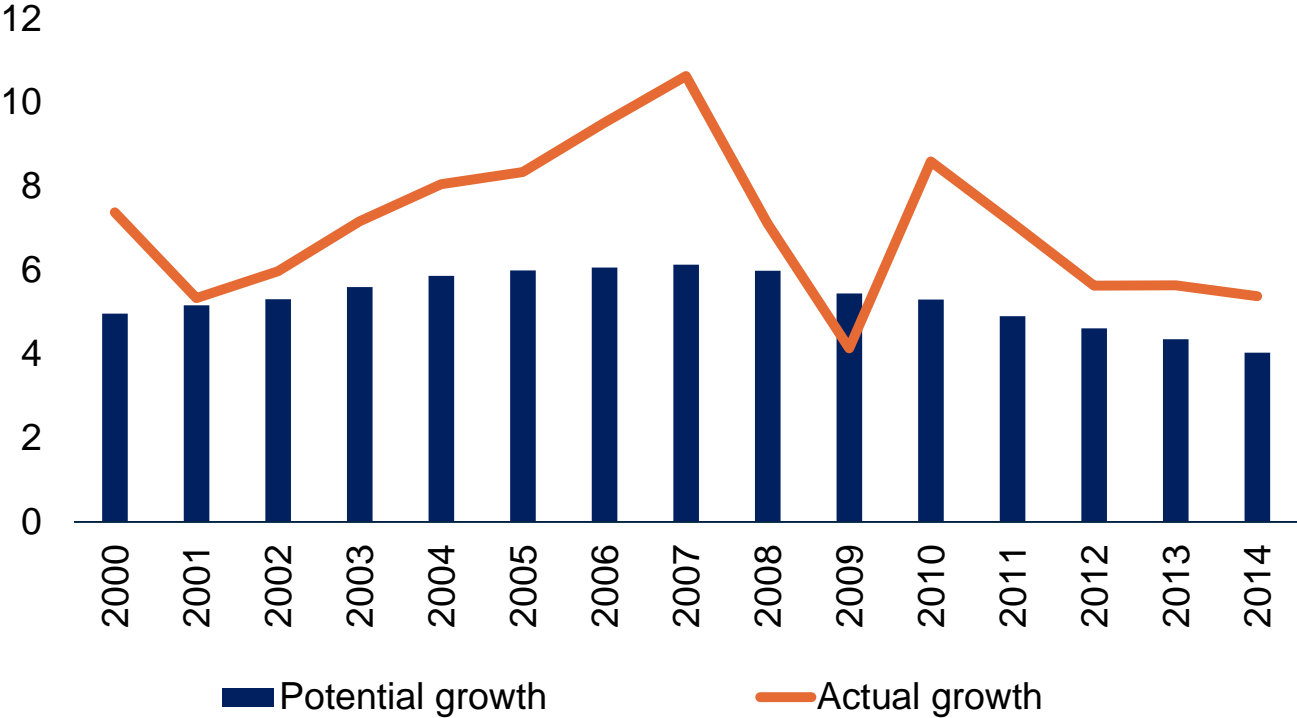


Source: World Bank, IMF World Economic Outlook, World Development Indicators.

Note: A. Each column shows the period weighted average of the share of global output contributed by each group denoted. 1990s average starts in 1992. Data for 2015 are forecasts. B. The columns denote the percent contribution of each group to global growth over the periods denoted. Data for 2015 are forecasts. GDP is measured by constant 2010 US dollars.

The recent performance of the BRICS has been marked by cyclical weakness compounded by a structural slowdown

Actual and potential real GDP growth: BRICS, 2000-14

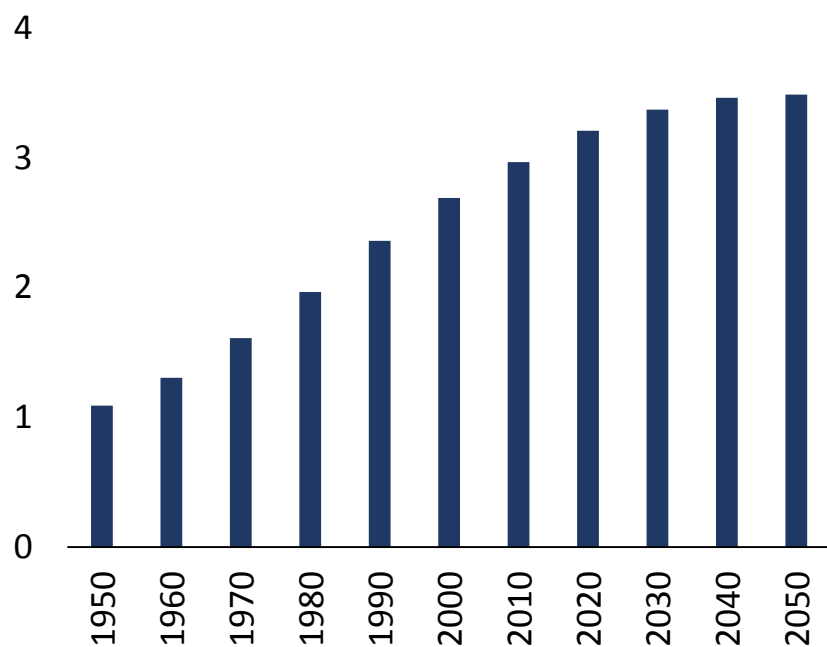


Source: World Bank (2015).
Note: Unweighted averages.

Looking ahead, BRICS potential growth is expected to be dampened further by decelerating population growth....

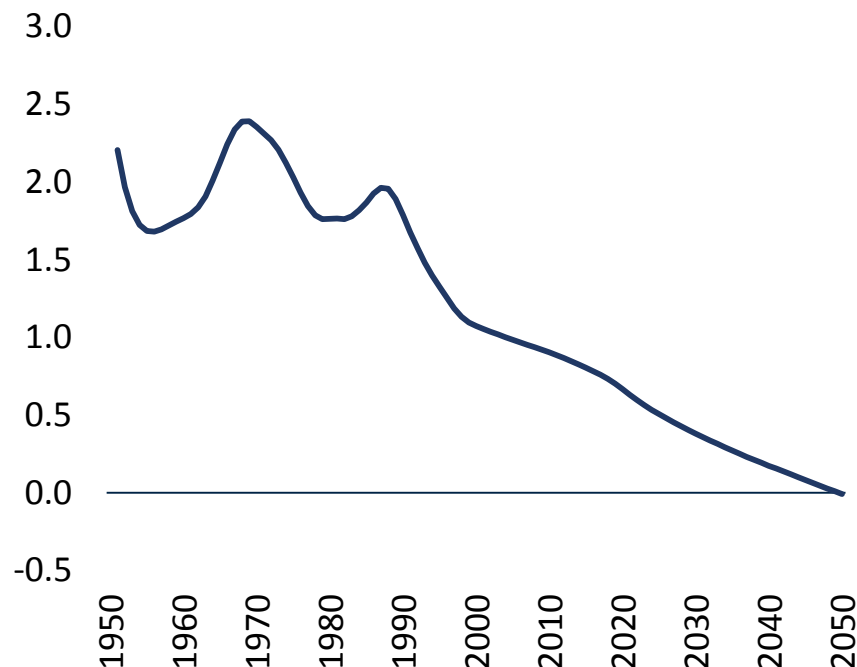
A. BRICS (total) population

Billions of people



B. BRICS population growth

Annual population growth rate, percent

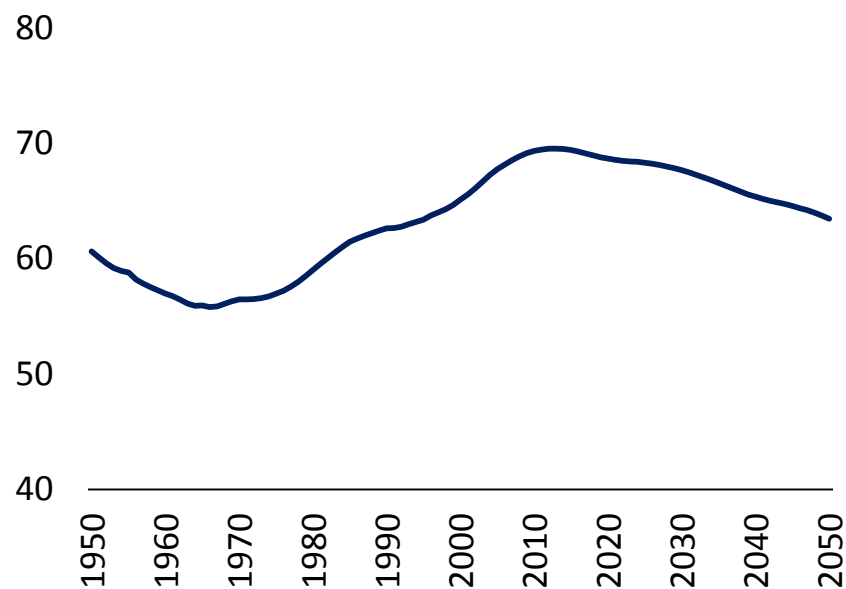


Source: World Population Prospects (2015)

... a declining working age population share and rapid aging

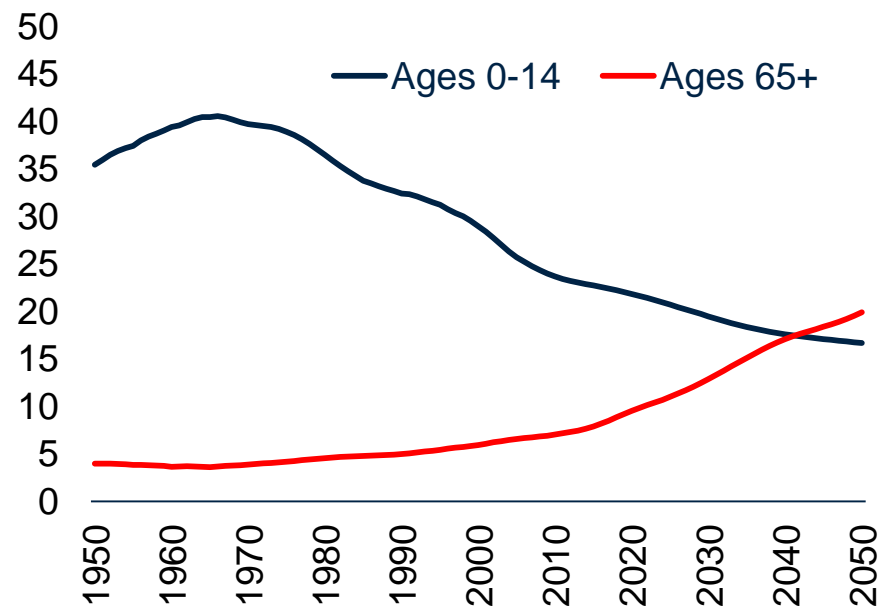
C. Share of working age population in BRICS

Share of population, aged 15–64, percent



D. Share of elderly and children population in BRICS

Share of population, percent

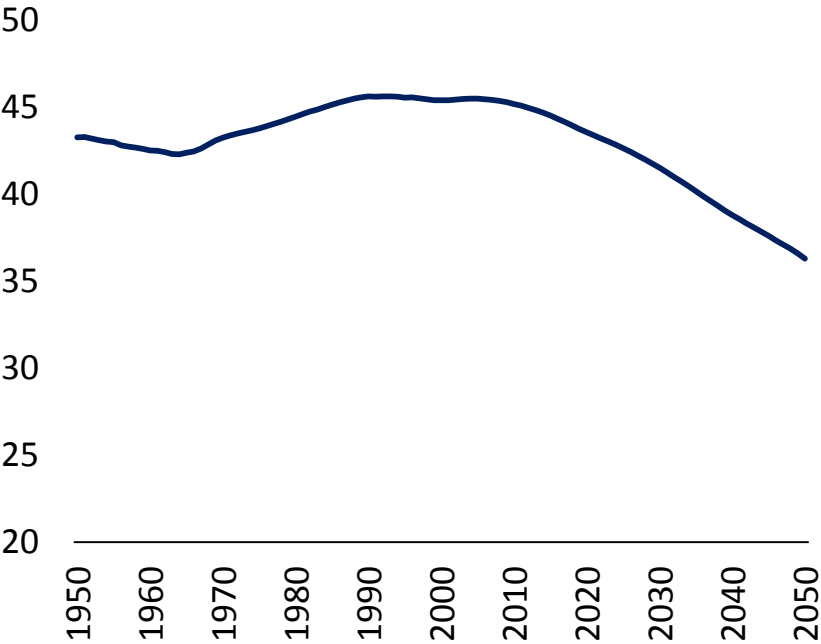


Source: World Population Prospects (2015).

The BRICS share in the global working age population is falling and their share in the global elderly population is rising rapidly

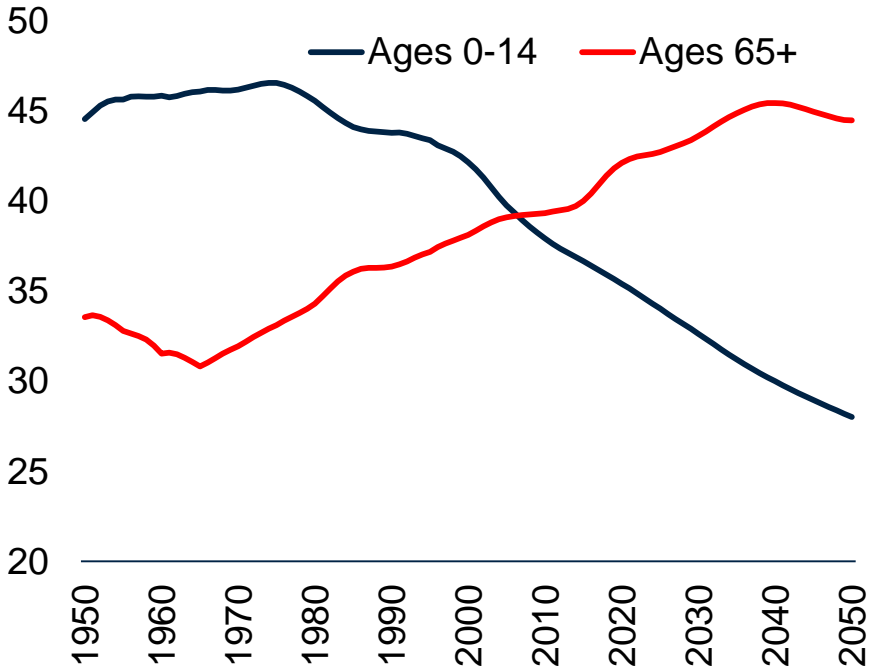
E. BRICS share of global working age population

Share in global population, aged 15–64, percent



F. BRICS share of global elderly and children population

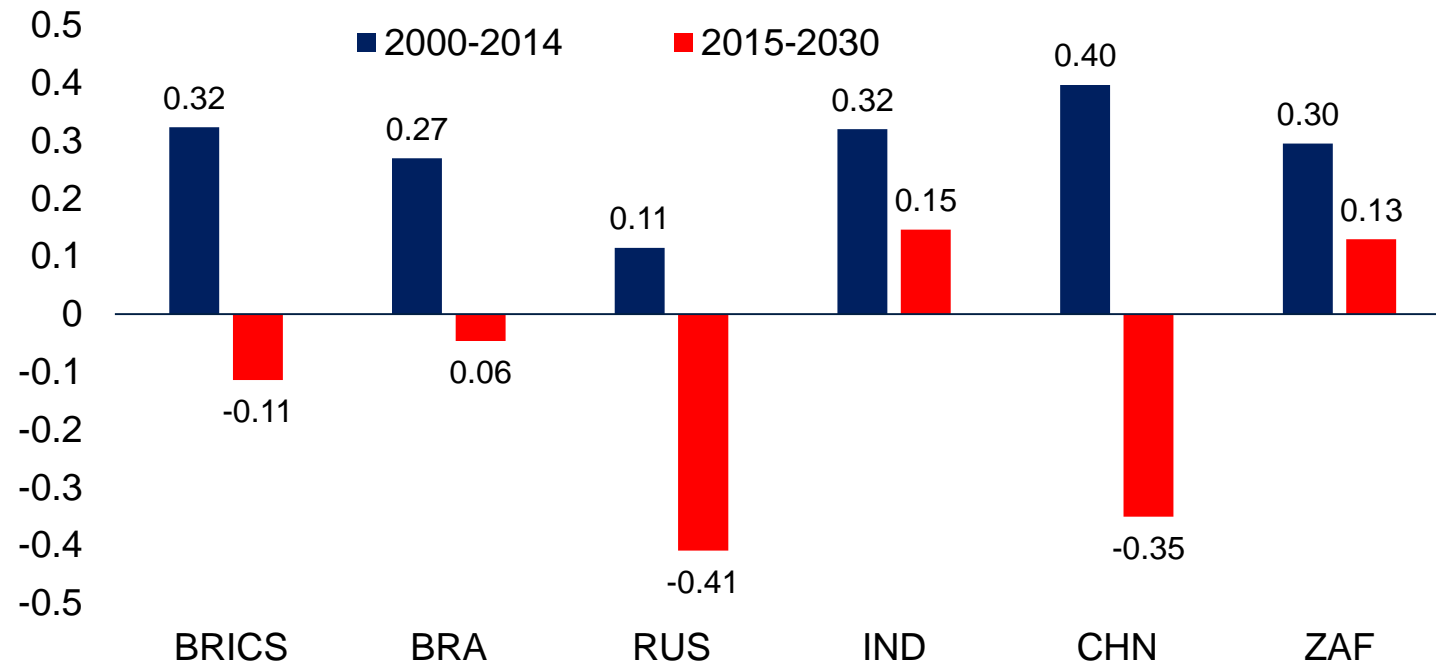
Share in global population, percent



Source: World Population Prospects (2015).

Examining the heterogeneity across BRICS, significant demographic differences are notable

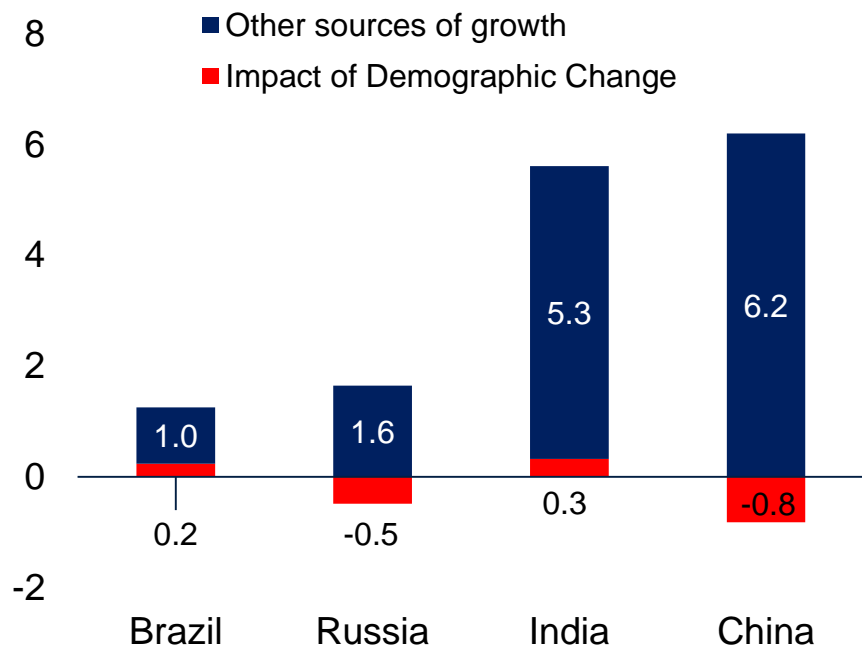
Average change in the share of working age population (percentage points)



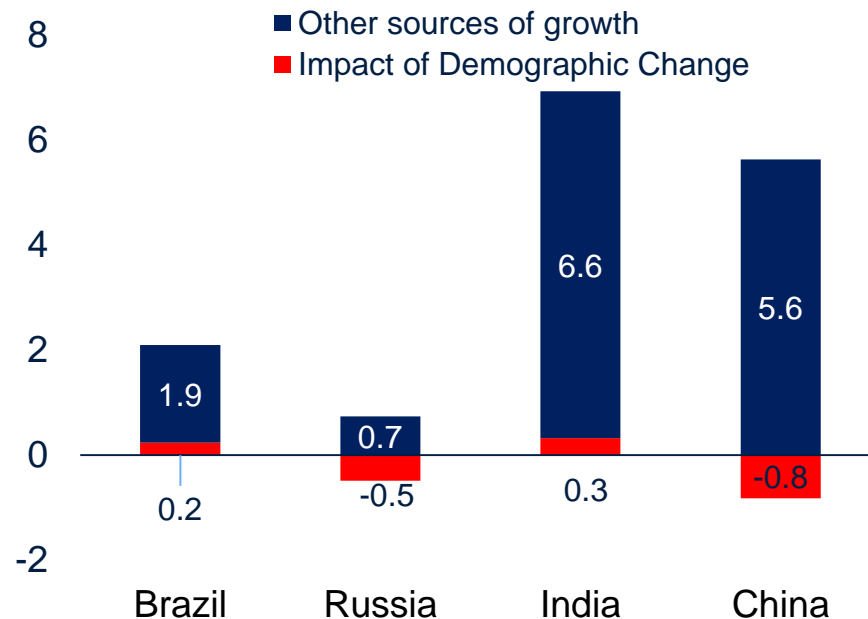
Source: Global Monitoring Report 2015/2016.

Thus, the impact of demographic change will be felt differently

Average per capita GDP (annualized) growth, 2015–30 (percentage points)



Average aggregate GDP (annualized) growth, 2015–30 (percentage points)



Source: Global Monitoring Report 2015/2016

Some concluding observations

- Demographics has played a key role in driving convergence between advanced and emerging economies
- And as demographic trends in many EM evolve, growth prospects slow, including in many BRICS
- Though BRICS growth may be slowing, demographics is neither a blessing nor curse: policies matter

Thank You!

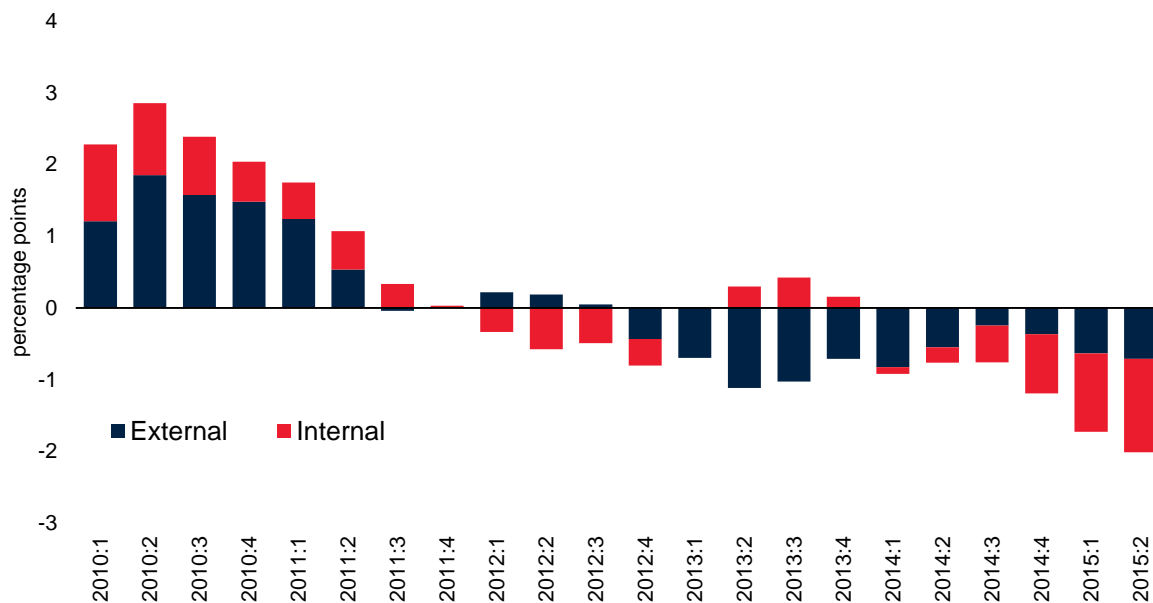
Global Monitoring Report 2015/2016

www.worldbank.org/gmr

Additional slides

The slowdown in BRICS growth has been driven by external and domestic factors

External and domestic drives of real GDP growth in BRICS (percentage points), Q1 2010 - Q1 2015

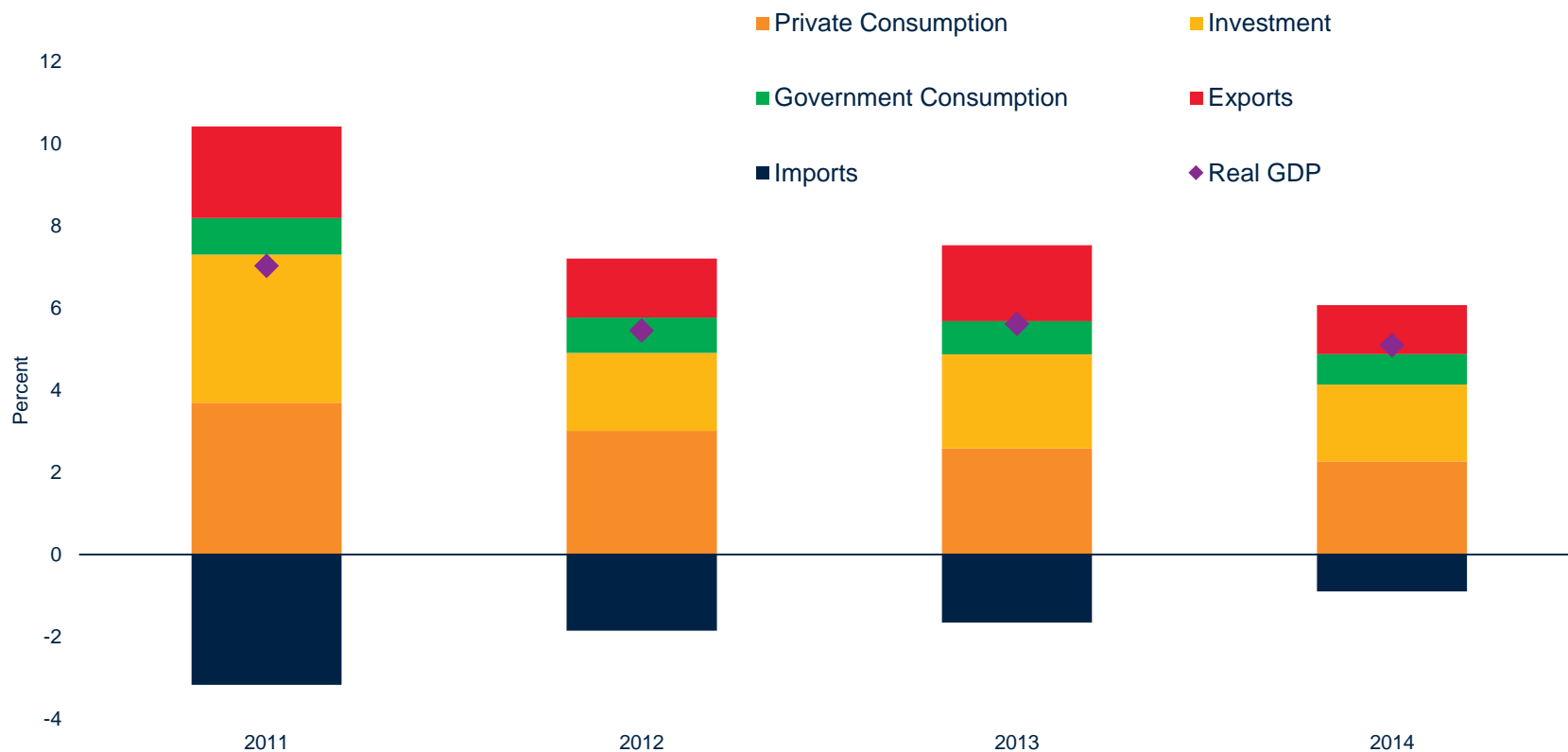


Source: World Bank (2015).

Note: Based on a Bayesian vector autoregression estimation using data for 1998:1 to 2015:2. Each bar shows the percentage point deviation of growth from the sample mean. In estimates for China, its growth is not separately included as an external factor. Unweighted average contribution to BRICS growth, including China.

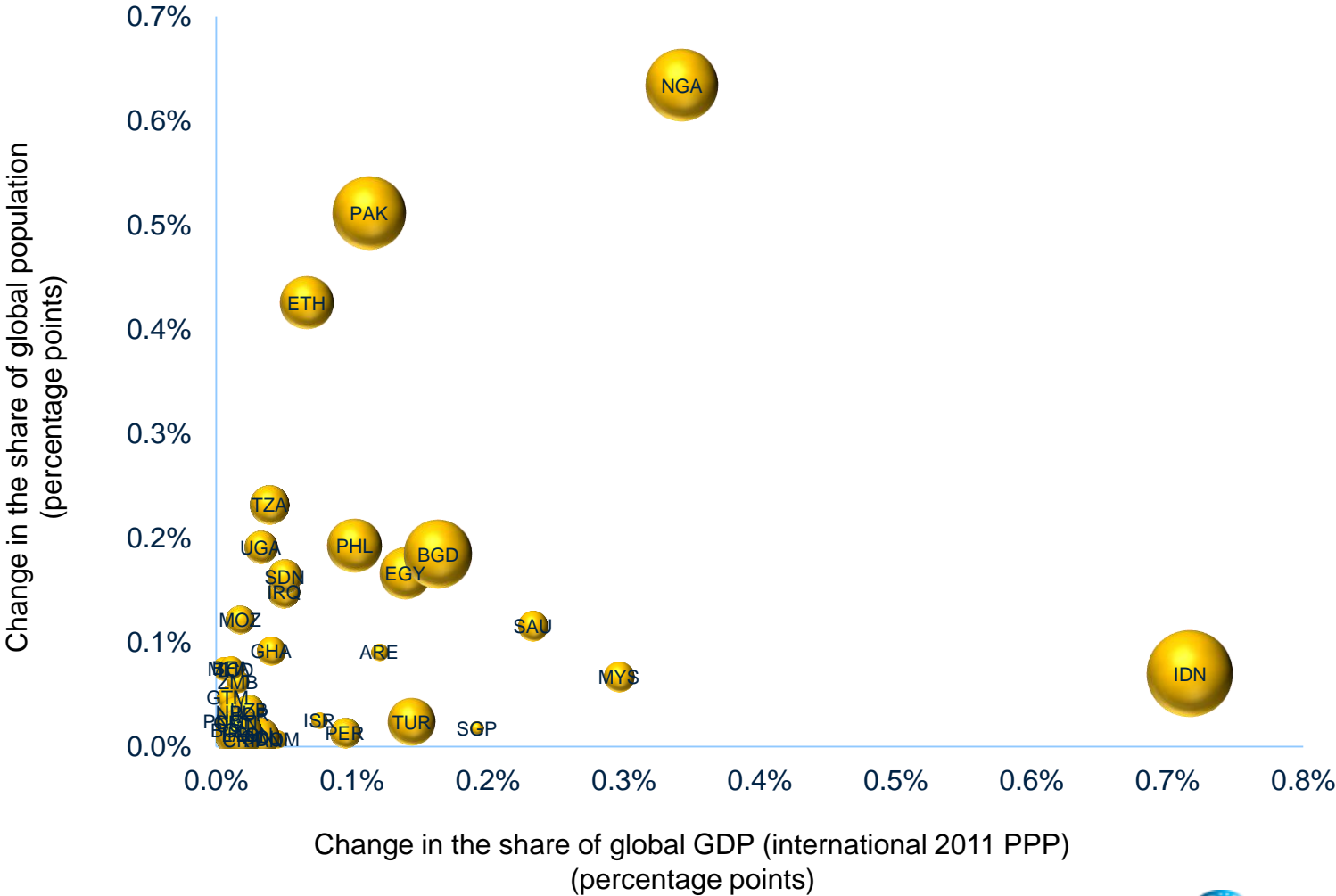
Since the global financial crisis, the sources of the BRICS slow down has been broad-based

Contributions to real GDP growth in the BRICS, 2011-14 (%)



Source: World Bank (2015).

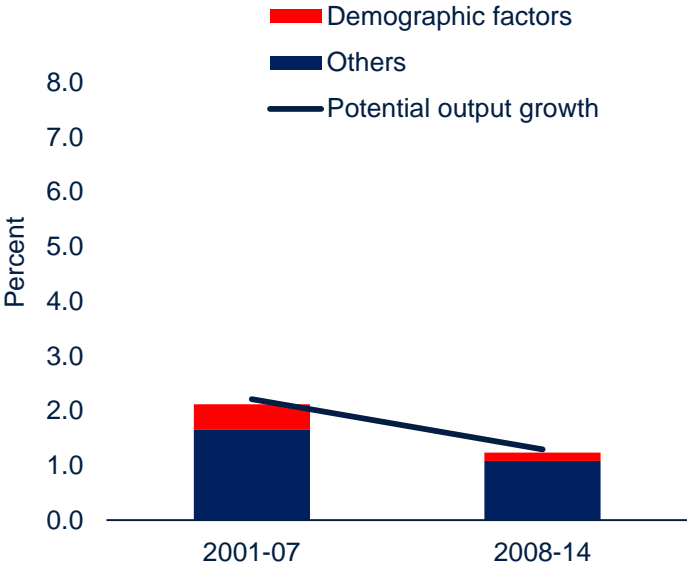
Where are the next “BRICS”?



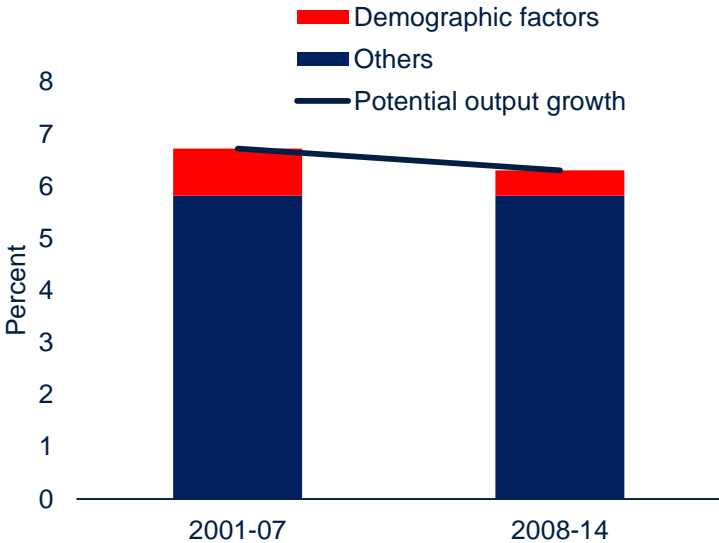
Demographic factors made a substantial contribution to potential growth in advanced and emerging market economies during 2000-07, though this has fallen since the 2008 global crisis

Contribution of demographics on potential growth

A. Advanced economies

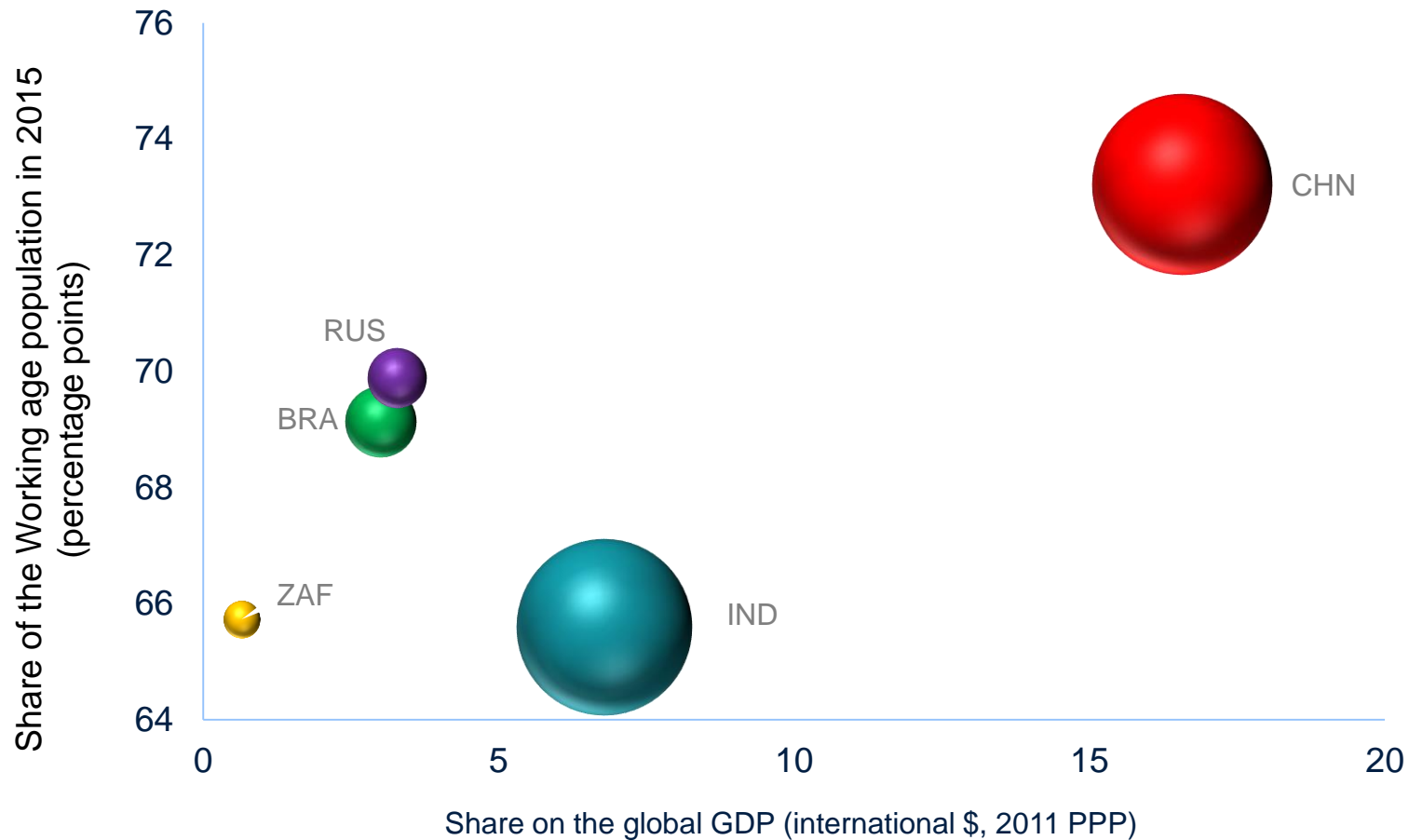


B. Emerging market economies



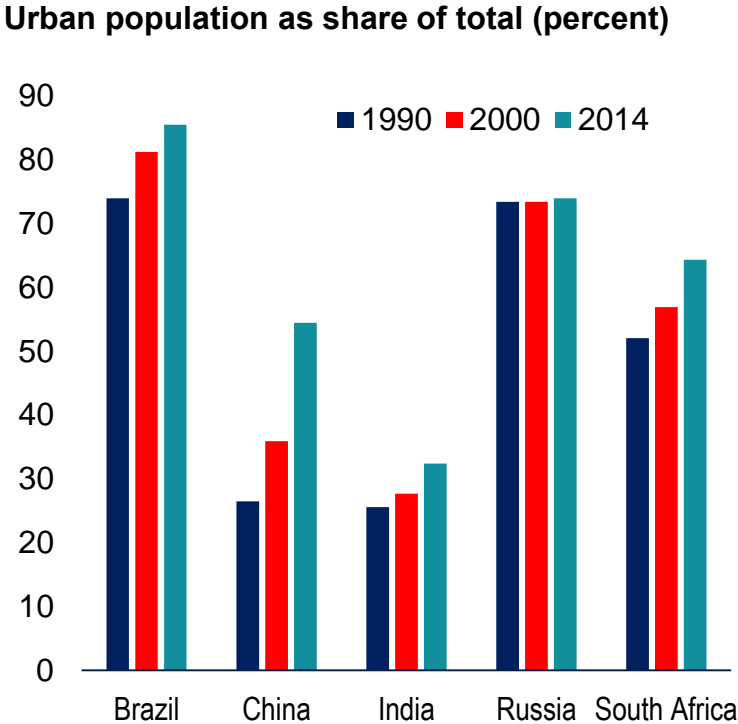
Source: World Economic Outlook April 2015
 Note: Growth is calculated using purchasing power parity weights.

Demographic change may contribute to a larger share of India and South Africa on global GDP



The pace of urbanization is also slowing as some countries

Urbanization in BRICS economies in 1990, 2000, and 2014



Source: World Development Indicators