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How solid are the BRICS? An economic overview

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I. Introduction

Over recent decades the metamorphosis of many developing economies into emerging economies has significantly boosted global economic output, raised income levels and enabled hundreds of millions of people to escape poverty around the world. The BRICS, an acronym coined by Goldman Sachs economist Jim O'Neill in 2001, originally grouped Brazil, Russia, India and China together on the grounds that they were the most prominent subset of fast growing emerging economies. South Africa joined the group in 2011, turning BRICs into BRICS.

Although they are drawn from four different continents and have alternative systems of government, the BRICS were combined on the grounds that they are populous emerging economies whose living standards measured on an income per head basis have grown quickly over past decades. As a result, they have spawned sizeable middle classes and are each destined to become major players in the world economy by 2050, even though per capita incomes still fall considerably below OECD economy levels.

The BRICS account for roughly forty per cent of the world's population and about thirty per cent of the world's Gross Domestic Product and, according to the IMF (2011) will contribute more than half of world economy growth in coming years. The BRICS like all emerging economies have generally benefited from the globalisation phenomenon of recent decades, as manifested in increased international trade flows and higher levels of foreign direct investment affecting all parts of the world.

The BRICS economies have proven quite resilient to global shocks due to the flexibility of their product and factor markets and policy frameworks. Through

increased trade and investment linkages the BRICS have increasingly also become growth drivers of Low Income Countries (IMF 2011). Nevertheless the BRICS' growth rates have slowed since the North Atlantic banking and Eurozone public debt crises, especially in Brazil and India, due in part to lower spending on imports by the United States and European economies, major sources of demand for their exports.

Apart from having solid growth rates and sizeable populations, there are points of difference between the BRICS that make their somewhat arbitrary economic alliance all the more remarkable. For instance, their economies are dissimilar in many respects and not necessarily highly complementary. China is manufacturing oriented, while India depends relatively more on services. Meanwhile Brazil, Russia and South Africa remain reliant on commodity production. China is the heaviest of the BRICS, with a level of GDP that exceeds the combined total of all other members and is the world's second largest economy. China is also the world's largest manufacturer and exporter.

In what follows we focus on the salient economic characteristics of the BRICS and the main determinants of their success. However it should be acknowledged at the outset that there is a degree of arbitrariness about the selection of these economies. Cases can easily be made for expanding the grouping to include a number of other sizeable, fast growing emerging economies. Most notably Indonesia should be included, making it BRIICS, a version of the acronym actually preferred by the OECD in its publications. Other emerging economies that could be considered are Turkey, Vietnam, Philippines and Nigeria.

The remainder of the chapter is structured as follows. Section 2 presents a brief summary of main macroeconomic characteristics of the BRICS, while Section 3

examines some of the major underlying reasons for their impressive economic performance. The final section concludes.

II. BRICS: Key economic characteristics

In this section we canvass the distinguishing macroeconomic features of the BRICS, highlighting population growth, production, saving and investment and unemployment.

Population

The population of the BRICS has grown by close to 30 percent since 1990. See Figure 1.

Insert Figure 1 here

However population growth over the past two decades has differed greatly within the group. China (with over 1.3 billion people) and India (with over 1.2 billion) account for around 87 per cent of the combined population of BRICS, now approaching 3 billion. Yet since 1990 India's population has grown 42 per cent, more than double China's rate of 18 per cent, reflecting the effect of China's one child policy over this time. This means India's population is much younger on average than China's, with important future implications for their relative productivity levels. Meanwhile Brazil's population has grown from 150 to 197 million and that of South Africa, the minnow of the group, from 35 to 51 billion. Surprisingly, Russia's population has actually fallen over this time from 148 to 142 million.

The proportion of the population in the age group 65 and above in China is almost twice that of India's. Among other BRICS, Russia and Brazil also have rapidly

ageing populations. Ageing populations have implications for economic growth due to the associated fall in savings, lower labour force participation and increased expenditure on health care and pensions. To the extent that, with government encouragement, older employees in these economies extend their working lives, thereby sustaining labour force participation rates, the impact of population ageing on economic growth will be less severe (Bloom, Canning & Fink 2011). In contrast, labour force participation is expected to increase strongly in India and South Africa given their relatively younger populations. Figure 2 illustrates the demographic trends in BRICS on a consolidated basis.

Insert Figure 2 here

National income measures

The BRICS have steadily increased their share of total world output over recent decades, as shown in Table 1 below. These data reveal that the relative shares of global GDP of the BRICS and other emerging market economies (EMEs) have grown strongly since the early 1990s, while the shares of the United States and the Euro Area of world output have correspondingly shrunk.

	1991-94	2000-04	2005-09	2018
BRICS	5.8	8.5	13.1	21.6
Other EMEs	10.6	10.8	13.3	15.4
United States	26.2	30.6	25.6	22.0
Euro Area	24.8	21.3	22.0	16.6

Source: IMF (2011).

Table 1: Relative Shares of World GDP

The volume of total output produced by the BRICS rose by some 3.6 times from 1990, due mostly to China's superior growth rate over this time, averaging around 9 per cent per annum. See Figure 3. However the make-up of GDP in each of the BRICS is quite different due to dissimilar industry structures. For instance Brazil is rich in resources such as coffee, soybeans and sugarcane, Russia is endowed with sizeable energy resources, India has strengths in software development and services provision and China produces a wide range of manufactures for the rest of the world (BRICS 2012).

Insert Figure 3 here

Per capita incomes of BRICS rose from US\$9808 in 1990 to US\$14 580 in 2010, which is around a 50 per cent increase. Nevertheless per capita income levels within the group vary significantly. India is the outlier among the BRICS, with the lowest per capita income and with a significant portion of its population still poverty

stricken. The average per capita income of BRICS (excluding India) was US\$3448 in 2010 (Figure 4).

Insert Figure 4 here

The divergence between the per capita incomes of the two most populous BRICS is especially noteworthy since they were at similar levels of development at the start of the 1990s. See Figure 5. The gap between income per head in China and India accelerated from the turn of the century, reflecting the combined effects of China's persistently higher economic growth and India's much faster population growth. Indian per capita income is presently only around a third of Chinese per capita income.

Insert Figure 5 here

Consumption, saving and investment

The composition of domestic spending in the BRICS also varies significantly. Domestic consumption, the sum of household final consumption expenditure and general government consumption, predominates in Brazil, forming about 80 per cent of GDP with investment around 20 per cent of GDP. In Russia and South Africa domestic consumption also significantly exceeds investment spending. The Chinese economy, on the contrary, is driven by investment financed by high domestic savings. There, household consumption is around 35 per cent, the lowest among the BRICS, implying that its saving rate is easily the highest in the group. See Figure 6.

Insert Figure 6 here

Employment and unemployment

Among the BRICS, the employment to population ratio is much higher in China compared to the other BRICS. However this will decline in coming years due to China's greying population. Strategies proposed to address declining employment rates due to ageing include promotion of lifelong learning to maintain employability in later years and increasing labour force participation. In contrast to China, India's labour participation rate is expected to increase with its young population expected to join the labour force in coming years, although the labour participation rate has fallen in India in recent years due to increased education enrolment by women in particular.

Unemployment rates vary considerably across the BRICS also. Unemployment has been persistently lower in China than other BRICS, and is especially high in South Africa, as shown in Figure 7.

Insert Figure 7 here

III. Underlying determinants of BRICS growth

Numerous factors account for the high economic growth rates experienced by the BRICS since 1990. The most notable are their low inflation, economic reforms, increased international trade and investment, increased labour mobility, foreign investment and infrastructure spending.

Low inflation environment

Inflation rates fell dramatically around the world through the 1990s from the historically high inflation rates of the 1970s and 1980s. Indeed the worldwide fall in

inflation to the relatively low levels experienced by the 1990s and early 2000s was one of the most remarkable global economic phenomena of the past half century, from which the advanced and emerging economies, including the BRICS, all benefitted (Makin 2009). Low inflation assists economic growth by reducing investment uncertainty and by eliminating the extra real costs that arise when relative price signals become difficult to discern and when resources are misallocated.

Rampant inflation had been a major problem for Brazil and Russia in particular before their economic growth rates accelerated. However except for India in recent years, the BRICS have generally maintained low inflation since the early 1990s. See Figure 8. Hence monetary policy in the BRICS has been pro-growth, but with price stability as a primary objective. Inflation targeting was introduced in Brazil in 1999 and has worked well to bolster consumer and investor confidence (Kamal 2010; Arestis, Ferrari-Filho, & de Paula, 2011). The South African central bank also formally adopted inflation targeting as the modus operandi for monetary policy in 2000 where it has also proved effective in anchoring expectations.

Insert Figure 8 here

Economic reforms

Major economic reform initiatives sparked economic growth in the BRICS and were mostly introduced in the nineties, although the reform process had begun from the late 1970s in China under leader Deng Xiaoping. Numerous economic policy reforms in China contributed to its high rates of output and export growth. At the international level, the most important spur was the liberalisation of trade barriers and integration with global merchandise markets. Although China acceded to the WTO in 2001, it had

previously benefited from export growth at higher rates than experienced by Japan and South Korea during their take-off phases in the 1950s, 1960s and 1970s (Makin 2007).

India's economic reforms date from 1991 with the abolition of license raj and other stringent industrial regulations and high taxes and tariffs (Das 2007).

Entrepreneurship combined with low cost advantages enabled computer software, IT related services, pharmaceuticals and telecommunications to emerge as flourishing sectors of the Indian economy.

Reforms were introduced in Brazil in 1994 and the focus lately has been on educational reforms. Russia has introduced major economic reforms more recently. This has led to increase in economic growth, increase in real incomes and reduction in poverty. Among the major reforms were reforms in tax systems leading to increase in tax collections through better compliance, budgetary reforms increasing transparency in budget, and pension reforms (BRICS 2012).

International trade and foreign investment

Increased international trade and foreign investment in the BRICS have been central to their elevated growth rates since 1990. Over this time the shares of exports and imports have risen significantly as a proportion their respective GDP levels as shown in Table 2. At the same time other emerging market economies (EMEs) have also experienced rising export and import shares. However the opposite has been true for the United States and the Euro Area.

	1991-94	2000-04	2005-09	2018
Exports				
BRICs	4.2	7.9	12.4	20.1
Other EMEs	13.0	15.8	18.6	18.3
United States	13.3	12.0	9.7	9.6
Euro Area	34.7	30.9	29.1	23.0
Imports				
BRICs	4.0	7.0	10.5	18.8
Other EMEs	14.4	14.8	17.2	18.0
United States	14.6	17.1	14.1	12.3
Euro Area	34.0	29.5	28.5	21.9

Source: IMF (2011).

Table 2: Relative Export and Import Shares as per cent of GDP

Although China is usually recognised as exports focused, Russia also increased its exports to GDP ratio as has India. On other hand other BRIC economies such as Brazil and South Africa noted smaller increases in exports during this period. Figures 9 and 10 show trends in exports and imports respectively, as a percentage of GDP for the years 1990 and 2010.

Insert Figure 9 here

Insert Figure 10 here

Foreign direct investment

Foreign direct investment inflows to the BRICS economies have also been relatively high since 1990, particularly into China, as Figure 11 reveals. This foreign direct investment has conferred productivity gains on the BRICS economies via technology transfer, international management practices and product development and spurred greater domestic competition and imitative behaviour by existing locally-owned firms. As domestic firms have grown, outward foreign direct investment from the BRICS has also increased in recent years.

Insert Figure 11 here

Increased labour mobility and entrepreneurship

Another major factor, although again not unique to the BRICS amongst the emerging economies, has been increased mobility of workers and the upgrading of labour skills through improved education and training. Inter-sectoral or occupational, inter-regional and international labour mobility have all generally increased in the BRICS relative to the 1980s. Inter-regional labour mobility in China is partly restricted by the *Hukou* system, although there has been some relaxation in recent years (Meng 2012). In India, where only 30 per cent of the population is urbanized, the movement of workers from rural to urban areas has been considerably lower than in China.

The rise of entrepreneurship has been another factor driving economic growth in the BRICS, fostering higher investment and employment and creating greater product choice for consumers (see Audretsch, Keilbach & Lehmann 2006, Ghani, Kerr & O'Connell 2012, and Van Praag & Versloot 2007 for related discussion). At the same time there has been extensive reform of what were once strictly government owned and operated enterprises, most notably in China's broad based manufacturing sector. Meanwhile Indian entrepreneurship through innovation and improvisation of existing technology with low cost advantages was particularly evident in computer software, IT related services, pharmaceuticals and telecommunications (Ghani, Kerr and O'Connell 2012).

Infrastructure spending

The governments of the BRICS economies have also spent very heavily on physical and social infrastructure, building basic infrastructure like roads, ports, railways, electricity and telecommunications facilities, while simultaneously improving basic education systems. Efficient infrastructure has proven important to maintaining international competitiveness and for participating in, and reaping the rewards of globalisation.

Modern telecommunications infrastructure in particular has been essential to facilitating transactions across and between the BRICS economies and with the rest of the world. This is because economic transactions between resident and foreign firms, consumers and governments increasingly occur via electronic means, especially in knowledge-based and technology driven industries and in the services sector. Meanwhile traditional infrastructure spending on ports, airports, highways, roads and

rail has grown at much faster rates than experienced over recent decades in the more mature advanced economies.

IV. Concluding comments

Since 1990 the contribution of the BRICS, especially China, to global GDP has been nothing short of astounding. As a corollary, the importance of the major advanced economy regions, the United States, European Union and Japan as drivers of global economic growth has diminished (see Makin 2009, and Lin and Rosenblatt 2012). More recently the BRICS along with other emerging economies have powered the global economy in the wake of the North Atlantic financial crisis of 2008-09 and through the Eurozone sovereign debt debacle that followed.

The development success of the BRICS has many common causes, such as keeping inflation under control and major reform initiatives. Other key reasons for their high growth rates include increased international trade and foreign inward investment, and to varying degrees privatisation and reform of state owned enterprises. Massive sums have also been spent building infrastructure, the demand for which will persist as rising middle classes require more electricity, roads, airports and telecommunications networks. Improved education levels, enhanced labour mobility and the emergence of entrepreneurial classes in these economies have also been pivotal to their ascendancy.

Although the solid economic growth performance of the BRICS has been widely acknowledged, it is less well known that except for South Africa, the BRICS have persistently failed to feature among the top 50 countries in the World Bank's *2012 Doing Business Index*. Among 185 countries, Brazil and India continue to perform poorly coming in at 130 and 132 respectively and none of the BRICS was ranked

among the top 10 most improved countries. This suggests considerable scope exists for improving the quality and durability of their growth by further liberalising the environments in which business operates.

Corruption also detracts from the sustainability and quality of economic growth, with the four original BRICs ranking poorly according to corruption measures published by Transparency International. Better governance and greater transparency would encourage more foreign investment and safeguard against capital flow reversals and the relocation of firms to other countries (Smith & Driemeier 2005). In India's case, where the scale of poverty remains greater than in the other BRICS, uncertainty about foreign investment policy along with higher inflation and interest rates has recently worsened India's overall investment climate (RBI 2012), leading to what may be more than a temporary slowdown in India's growth.

Concrete proposals are now emerging from BRICS leaders' summits which have implications for the rest of the world. At the 2012 New Delhi BRICS summit, measures were announced that aim to improve trade links amongst the BRICS as a way of reducing reliance on Europe and the United States. These include easing inter-BRICS visa requirements to facilitate business linkages. Steps have also been taken toward establishing a South-South development bank along the lines of the Asian Development Bank to provide new avenues of funding for member economies.

REFERENCES

- Arestis, P., Ferrari-Filho, F., & de Paula, L. F. (2011). Inflation Targeting in Brazil. *International Review of Applied Economics*, 25(2), 127-148.
- Audretsch, D. B., Keilbach, M. C., & Lehmann, E. E. (2006). *Entrepreneuership and Economic Growth*. London: Oxford University Press.
- Bloom, D. E., Canning, D., & Fink, G. (2011). *Implications of Population Aging for Economic Growth: Program on the Global Demography of Aging*, Harvard University.
- BRICS (2012). *The BRICS Report: A Study of Brazil, Russia, India, China, and South Africa* New Delhi, India, Oxford University Press.
- Das, G. (2007). Entrepreneurship In K. Basu (Ed.), *The Oxford Companion to Economics in India* (pp. 141-145). New Delhi: Oxford University Press.
- Ghani, E., Kerr, W. R., & O'Connell, S. D. (2012). *What Makes Cities More Competitive? Spatial Determinants of Entrepreneurship in India*. Washington DC: World Bank.
- IMF. (2011). *New Growth Drivers for Low-Income Countries: The Role of BRICs*. Washington DC: World Bank.

- Kamal, M. (2010). Inflation Targeting in Brazil, Chile and South Africa: An Empirical Investigation of Their Monetary Policy Framework. *William Davidson Institute Working Paper Number 1004*, University of Michigan.
- Lin, J. Y., & Rosenblatt, D. (2012). Shifting Patterns of Economic Growth and Rethinking Development. *Journal of Economic Policy Reform*, 15(3), 171-194.
- Makin, A. (2007) "Does China's Huge External Surplus Imply an Undervalued Yuan?" *China and World Economy*, 15(3), 89-102.
- Makin, A. (2009) *Global Imbalances, Exchange Rates, and Stabilization Policy*, Palgrave Macmillan, Basingstoke, UK.
- Meng, X. (2012). Labor Market Outcomes and Reforms in China. *Journal of Economic Perspectives*, 26(4), Fall, 75-102.
- Reserve Bank of India (2012). *Macroeconomic and Monetary Developments: Second Quarter Review 2012-13* Mumbai: Reserve Bank of India.
- Smith, W., & Hallward-Driemeier, M. (2005). Understanding the Investment Climate. *Finance and Development*(March), 41-43.
- van Praag, M., & Versloot, P. (2007). What is the value of entrepreneurship? A review of recent research. *Small Business Economics*, 29(4), 351-382.