# Will the Growth of the BRICs Cause a Shift in the Global Balance of Economic Power in the 21<sup>st</sup> Century?

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#### Abstract:

Some 42% of the world's population (i.e. 3 billion people) live in Brazil, Russia, India and China, collectively known as BRICs. Of these four, India and Brazil also have a higher than average birth rate. The combined economy of the BRICs made up 25.6% of the global GDP in 2015 and has been projected to increase to 33% by 2020. Studying the BRICs economies is important for a number of reasons including: their rapid economic growth rates, large populations, and fast-growing markets for goods and capital. Their average per capita annual income ranges from about US\$ 3,000 to nearly US\$ 15,000 in PPP terms. However, in 2015 their average annual GDP growth exceeded 6%, which is much higher than the 1.9% of the OECD countries. It is estimated that their share in the world economy could double over the next two decades, from 25.6% to 40%.

Key words: BRICs economies, GDP growth, neoliberal policies and external vulnerabilities.

JEL classification: F02, P59

#### Introduction

The combined economies of Brazil, Russia, India and China (BRICs) could emerge as a dominant economic block in the world. However, BRICs also face many external and internal challenges that could compromise their ability to challenge the current power balance: lack of soft power and military power (China, for example, can't even challenge US naval power in their coastal waters), slowing growth, lack of robust internal institutions; lack of social provision and healthcare etc.

The economic development of Brazil, Russia, India and China (BRICs) in the past decades is projected to emerge as a dominant economic block in the world's economy. The BRIC thesis has been said to be a very optimistic proposition derived from the 'demographic weight' of the large developing countries. However, the idea that "demography is destiny" in this context is based on two assumptions: firstly, that the policies and the institutions of the BRICs are fully compatible with neoliberal policies that could foster growth when the international environment is stable, and secondly that their global political and economic power will rise to a level similar to that of the G7 in the near future (Hawksworth and Cookson, 2006). This article seeks to summarise the distinctive features of each of the BRICs economies and to analyse these in the context of this forecast.

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I think it is important to examine the developments taking place in BRIC economies. At present, the average annual economic growth of BRIC countries exceeds 6% and their share in the world economy is expected to nearly double in the next two decades, from the current 25.6% to 40%. BRICs account for 42% of the world's population, 25% of global GDP, 15% of world trade and 40% of its currency reserves (*The Economist*, 2015). The BRIC economies' share in global GDP has risen sharply to 25.6% in 2015 from 16.4% in 2000. (Soederberg, 2015; UNDP, 2013) Most importantly, the BRIC rise is taking place at a time when capitalism is experiencing one of its worst crises since 1930. This raises the question as to how the BRIC economic development might affect the world economy and global governance and what form the capital accumulation strategies adopted by companies in the BRICs might take in coming decades.

Moreover, it is projected that by 2050, China will become the largest economy in the world in terms of output and India the third, with Russia and Brazil ranking fifth and sixth respectively behind Japan. *The Economist* (2015:15) notes, "The developing world, which accounts for over half of the global economy (in purchasing power parity terms), matters far more than it once did. Lower growth in emerging markets hits the profits of multinationals and the cash flows of exporters." A Development Bank was set up in 2015 that would lend money to all members for infrastructural projects and balance of payments problems.<sup>2</sup> It is said that such steps would increase the "weight of the South" in global governance and reduce dependence on the IMF and World Bank. Such a development should be welcomed. Analysing the class forces within the BRICs countries will help us to understand the class nature of these regimes and this will have a crucial bearing on the direction that the BRICS bank will ultimately take.

Despite the fact that there is heterogeneity among BRICs countries and the per capita income ranges from US\$ 3,015 to US\$ 14,913 in purchasing power parity terms as shown in Table 1. I find their economies do have some important common features such as higher growth rates over the past decades, large population and market size, possession of natural resources and abundant supply of labour, especially in the rural sector. All of them have adopted pro-market policies, but at different levels, and the state has promoted growth directly by increasing aggregate demand through higher investment in infrastructure and the energy sector. It seems that two BRICs, namely China and India, will need greater amounts of natural resources: many developing countries are abundantly endowed with these resources and can supply them in exchange for comparatively lower priced manufactured goods. (Bond and Garcia, 2015) With a large population base and relatively low per capita income the BRICs role in the world economy will most likely increase over time and they will be able to narrow the gap with developed countries.

I also think that it is important to study the BRIC economies for the following reasons: their large population which still consists of large numbers of poor people, the unprecedented economic growth of these countries in the last two decades or so, and their huge growth potential. Moreover, some studies have emphasised that market size, trade openness, natural

<sup>&</sup>lt;sup>2</sup> Although South Africa is also a member of this bank, this is not included in this discussion since it has a relatively small economy and population, and its growth rates have recently declined sharply.

resources and macroeconomic variables are important determinants of foreign capital inflows and investments (Bhavan et al 2011). They have found a positive relationship between capital inflows and GDP growth rates, and called for more favourable conditions to encourage foreign capital. Other studies have found no consistent relationship, nor any evidence that an increase in foreign capital inflows directly boosts growth or that financial globalisation has generated increased investment or higher growth in developing economies. (Prasad, et al, 2007; Rodrik and Subramanian, 2009) The former studies also focus on factors that are seen as important in influencing FDI such as purchasing power and market size, which may mean there is potential to earn higher returns on investments (World Bank, 2013).

The study is primarily based on secondary information and published studies and the intention is to critically examine the relevant empirical and theoretical studies, comparisons of international statistics providing the main means of addressing the research questions and objectives of this paper. Analysing existing secondary data is the only possible way to obtain macroeconomic data. These data come from official sources and international institutions such as the IMF, World Bank and OECD.

#### **Development and Crisis**

The first factor to boost the economies of the developing countries for the last twenty-five years is international trade, which has played a significant role in driving the economic expansion, particularly in China and other East Asian economies. (Siddiqui, 2016a) And also the trade among the developing countries is increasing, but trade between developed and developing countries still occupies a significant role in world trade, which at present is nearly 40%. The second factor has been inflows of capital, which has contributed towards rapid expansion in capital investments in the BRICs economies. (Bond and Garcia, 2015) However, FDI in China went largely into manufacturing sectors, while in India to services and financial sector. As a result of expansion of manufacturing sector, China witnessed huge expansion of employment in the manufacturing sector, while in India, the expansion of IT, real estate and financial sector, which were more capital intensive, did not create much employment opportunities, as happened in China. Since 2010 the net financial flows to BRICs have slowed down and reserve accumulation has declined somewhat since its peak in 2012. The third factor could be the prices of the primary commodities, which affect them both as exporters and importers. Prices of the most of the primary commodities have declined from their peak at 2011. (World Bank, 2013)

In India, the ruling elites saw the opportunity to emerge as a great power in a globalised world driven by market forces (Ghosh and Chandrasekhar, 2009). The higher growth rates of the post-reform period compared to the pre-reform period provided them a new sense of optimism and they were able to re-enforce these preconceptions although such claims ignored historical, institutional and domestic factors (Leys, 1996). Desai summarises the situation thus:

"For it was more than a narrative about the sources of new growth in the world economy: it was a directive to first world political and corporate world leaders about where new opportunities lay and another to third world political and corporate leaders about the conditions – mainly consistency of neoliberal policy – they must secure if fruits foreseen were to be theirs" (Desai, 2007:784-85).

The BRICs were seen to offer the promise of significant growth but are now experiencing economic difficulties and things will perhaps get worse. The economic growth rates in these countries have slowed down in recent years, including those of China, despite viewed as being the most important economy. Problems of declining exports and slowdown in domestic investment and economic activity are being compounded by capital flight from these countries which will have long term impact on their economies (Ocampo and Stiglitz, 2008). Due to on-going global recession in the developed economies, the BRICs too are facing a slow-down in economic growth rates and declining export markets. This is somewhat ironic because until few years ago the BRICs along with the MINT countries (Mexico, Indonesia, Nigeria, and Turkey) were seen as the hope for rescuing global capitalism. Initially they were less affected by the 2008 global financial crisis. In fact, the wage share of national income has declined since 2009 across the world, especially in the BRICs countries. Financial crisis in 2008 and the subsequent worldwide recession in 2009 led to a decline in exports from the developing countries. However, initially the most important economies such as China were less affected, not because of "decoupling" from the developed economies but because these countries put into place substantial recovery packages designed to prop up domestic demand and expand markets (Jacques, 2012).

At present, the BRIC countries are in economic crisis, as they relied on international growth, and the on-going recession in the developed economies has aggravated their crisis. Chinese economy in recent years has slowdown, which indicates the limits of the export-led growth. As a result the Chinese imports have slowed down and has dampened the import prices. After Dilma took over the government, she tightened the economy against the risks of overheating and also to gain confidence of the banking sector. As growth fell sharply, the interest rates were reduced and the currency was devalued, but far from any stimulus, the growth slowed down 2.7% in 2011 and to mere 1% in 2012. (BCB, 2014) Amid of deepening crisis, the government reduced public spending, auctioned public property and allowed interest rates to rise again, but economy growth continued to fall and nil growth was recorded in 2015. As recession deepened, the investment fell, worsened the deficit and public debts. The Workers' Party (PT) model of growth itself is being questioned now, as Anderson (2016) comments,

"From the outset, the success relied on two kinds of nutrient: a super-cycle of commodity prices, and a domestic consumption boom. Between 2005 and 2011, the terms of trade for Brazil improved by a third, as demand for its raw materials from China and elsewhere increased the value of the principal exports and the volume tax receipts for social expenditures. By the end of Lula's second term, the share of primary commodities in the Brazilian export package had jumped from 28%, and manufactures had fallen from 55 to 44% by the end of Dilma's first term, raw materials accounted for more than half the value of all exports. But from 2011 onwards the prices of country's leading tradable goods collapsed: iron ore dropped

from \$180 to \$55 a ton, soya from \$18 to \$8 a bushel, crude oil from \$140 to \$50 a barrel".

In past decades, economic crisis in developing countries had led to a shift in their strategy from active role being played by the state (i.e. state capitalism) to neoliberalism based on market forces. As a result, more integration has taken place with the developed economies but it may lead local productive capacity and economic sovereignty to be neglected. Greater integration with the global economy is taking place, which also means increased vulnerability to externally generated crisis. This raises the question as to how these countries, especially Brazil and India, would ever be able to eradicate poverty by complying with neoliberal policies. It also begs the question as to whether BRIC countries will emerge in the near future as a collective force that will reject the neoliberal order and seek to promote a more progressive socially inclusive welfare form of capitalist development, which might reduce inequality and poverty, and build a more equal society.

#### The BRICs

These four countries contain more than 42% of the world's population and also have a higher than average birth rate, especially India and Brazil. Each country's profile is presented in Table 1. Thus, their numerical weight of the world's population will not drastically decline during the next few decades. At present, the share of these economies in the global capital markets is about 3.5%. (Katz, 2015)

What tends to be ignored about the BRIC countries is that despite the reduction in the number of poor people in recent years, especially in India and Brazil, poverty is still widespread. (Bond and Garcia, 2015; Cornia, 2014) Inequality in China is increasing as its Gini Coefficient has risen sharply in the last two decades; the same is true for Russia. India's Gini Coefficient is officially calculated on the basis of consumption expenditure, which has been criticised for not providing very reliable income data. Inequality has accelerated since the neoliberal economic reforms were launched in 1991 and as a result the number of US dollar billionaires has grown rapidly in India. Over two decades of neoliberal economic policies in India have failed to reduce poverty and unemployment. Three-quarters of the country's population relies on the agriculture sector for their incomes and this remains stagnant; moreover, the manufacturing sector has not experienced any breakthroughs, especially in employment opportunities (Siddiqui, 2014a).

As shown in Table 1, the GDP growth rates and values of exported goods differ among the BRIC economies. China has been the most successful in terms of higher GDP growth rates and exports, while India's growth performance has been second. Similarly, in terms of the inflow of foreign capital, which is seen as the most important component in neoliberal growth strategy, China is also seen as the top FDI destination country, as shown in Table 2. For foreign investors, Russia was the second destination after China. However, we find FDI into Russia rose sharply from US\$ 12.89 billion in 2005 to US\$ 36.75 billion in 2010, but still less than half amount of the total foreign investment into China. India too was successfully able to attract foreign investment from US\$ 7.61 billion in 2005 to US\$ 34.58 billion in 2010. (World Bank, 2012) In 2005 Brazil received US\$ 15.07 billion, which was higher than India,

but despite the rise in foreign investment to US\$ 25.95 in 2010, Brazil had fallen substantially behind India (Bond and Garcia, 2015).

Indicators	Brazil	Russia	India	China
Population (2012)	195 million	142 million	1.17 billion	1.33 billion
GDP (US\$)	1,573 billion	1,232 billion	1,310 billion	4,991 billion
GDP per capita (PPP, US\$ in 2012)	\$10,499	\$14,913	\$3,015	\$6,778
GDP Growth Rates % (1990-2012)	2.5	0.5	6.3	10.2
Merchandise Exports (US\$ bn)	153 bn	303	162	1,201
HDI % Change (1999-2012)	7.6	3.8	33.3	44.2

Table 1: BRICs Development Indicators

Source: World Bank, IMF, UNDP Human Development Report, www.globalsherpa.org

Rank	Country Name	2005	2006	2007	2008	2010
3	China	79.13	78.09	138.41	147.79	78.19
8	Russia	12.89	29.70	55.07	75.00	36.75
9	India	7.61	20.34	25.13	41.32	34.58
13	Brazil	15.07	18.78	34.58	45.06	25.95

Table 2: Foreign Direct Investment, Net Inflow (BoP) (in billion US\$)

Source: World Bank, 2012, World Development Indicators, Washington D.C.

China's GDP is more than twice that of the India and it its economy has the highest average GDP growth rates. However, India's annual growth rate is higher than the global average meaning that it would be able to catch up again in the future. In contrast to this, Brazil and Russia show lower GDP growth rates. When we compare the BRIC's GDP growth rates with those of the developed economies, we find a wide difference in their performance. The export growth in BRICs has steady increased from 2003 to 2010. However, not all four countries experienced similar performance. Here again we find that China's export performance was outstanding during this period and also during 2003 - 2010, Brazil's and Russia's exports growth performed well. (Bond and Garcia, 2015) In Brazil's case this was mainly due to a rapid increase in exports of agro-based commodities, especially as a result of rising demands from China. The increase in Russia's exports was mainly due to the rise in demand for oil and gas. However the recent slowdown in both Chinese growth rates and oil prices has adversely

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affected both economies. With regard to the foreign exchange reserves in the BRIC countries between 1991 and 2015 (as shown in Figure 1), we find that since the adoption of neoliberal reforms among these economies (Girdner and Siddiqui, 2008) inflows of capital have rapidly increased as indicated in Table 2.

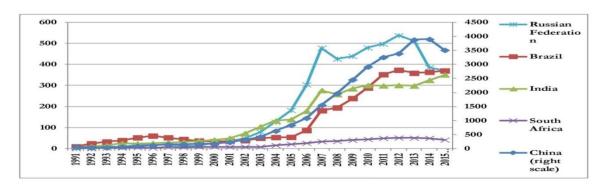


Figure 1: Foreign Exchange Reserves of BRICS countries, US\$ billion

Source: World Bank, World Development Indicators; various years.

Table 3 shows that BRICs share in the world labour force has slightly declined from 47% in 1991-1994 to 44% in 2015. The US share also declined over this period, but notably the EU labour force share fell sharply i.e. from 5.7% to 4.5%. In exports we find that major changes took place. For example, BRICs' exports share in the global economy was 4.2% in 1991-94, but estimated to rise sharply to 18.8% in 2015; a similar trend was observed in imports. However, the US share of global exports estimated to rise to fall sharply from 13.3% to 9.3% and the EU share from 34.6% to 23.2% for the same period as shown in Table 3. Per capita growth rate was remarkably high for the BRICs. For example China's per capita growth was also high at 251% as shown in Table 4.

Table 3: BRICs in the Global Economy 1991-2015\* (in percentage of world total; period average).

	1991-1994	2000-2004	2005-2009	2015*
Population				
BRICs	44.7	43.6	42.6	41.7
US	4.8	4.7	4.6	4.5
Euro Area	5.6	5.1	4.9	4.6
Labour Force				
BRICs	47.0	45.8	45.4	44.0
US	5.4	5.3	5.1	5.0
Euro Area	5.7	5.1	4.8	4.5
GDP				
BRICs	5.8	8.5	13.1	20.7
US	26.3	30.6	25.6	21.1
Euro Area	24.9	21.2	22.0	16.9
Exports				
BRICs	4.2	7.9	12.4	18.8
US	13.3	12.0	9.7	9.3
Euro Area	34.6	30.8	29.0	23.2

Imports				
BRICs	4.0	7.0	10.5	17.5
US	14.6	17.2	14.1	11.8
Euro Area	34.0	29.4	28.5	22.8

Source: IMF and World Economic Outlook, October 2010; Samake and Yang (2011: 6);

Notes: \* World Economic Outlook Projections for 2015.

Table 4: Per Capita Growth Rates at Inflation Adjusted Prices

	Total growth/increase 1978-2015*	Average annual growth 1978-2015*	Compared to US 1978-2015*
China	1,396%	7.4%	461%
India	431%	4.0%	251%
US	180%	1.6%	100%
Japan	182%	1.6%	
France	156%	1.2%	
UK	189%	1.7%	
Germany	177%	1.6%	

Source: Calculated from World Bank, World Development Indicators, various years.

Notes - \*Calculated in Parity Purchasing Powers of 2011 converted to 2014 prices.

The World Bank's data shows that in 2015 China's per capita GDP growth was 6.4% and India's 6.3%. These are the fastest growth rates of all the major economies. In particular, both China and India are growing far more rapidly the Western economies – in 2015 the EU per capita GDP growth was only 1.7% the US 1.6%, and Japan's 0.6%. The average annual per capita GDP growth of China over the longer period from 1978 to 2015 was 7.4%, compared to 1.6% for the USAs as shown in Table 4. Commenting on the recent rapid changes in BRIC economies and about their future economic prospects Samake and Yang (2011) argue that:

"Since the early 1990s, BRICs have more than doubled their share in global output. BRICs' GDP (based on market exchange rates) is now the third largest in the world after the US and the Euro Area. According to IMF projections, BRICs' GDP will surpass that of the Euro area before 2015...Over the past two decades, BRICs share in world exports have nearly tripled, overtaking that of US and catching up rapidly with that of the Euro area. The growth of BRICs imports has been less spectacular but still very impressive - nearly doubling their share in world imports over the past two decades and should catch up with the US soon". (Samake and Yang, 2011: 6-7)

The annual average rate of per capita GDP growth for instance, in China was 7.4% from 1978 to 2015, when China began economic reforms, while for the same period US average per capita growth was 1.6%, for UK 1.7%, France 1.2%, Germany 1.6% and Japan 1.6% as indicated in Table 4. Moreover, it is projected that by 2050, China will become the largest economy in the world in terms of output and India the third. Due to higher growth rates, the share that these countries have in the world economy will double over the next two decades. Thus the weight of these economies in the world economy would be doubled to 20 % (see

Table 5) and their share of the world capital market could exceed 15%. (Hawksworth and Cookson, 2006)

Country (indices with US=100)	GDP at Market exchange rates in US\$ terms		GDP in PPP terms	
	2005	2050	2005	2050
US	100	100	100	100
Japan	39	23	32	23
Germany	23	15	20	15
China	18	94	76	143
UK	18	15	16	15
France	17	13	15	13
Italy	14	10	14	10
India	6	58	30	100
Korea	6	8	9	8
Mexico	6	17	9	17
Brazil	5	20	13	25
Russia	5	13	12	14
Turkey	3	10	5	10
Indonesia	2	19	7	19

Table 5: Projected Relative Size of Economies (US=100) 2005 v 2050

Source: Hawksworth and Cookson, 2006:5

https://www.pwc.ch/user\_content/editor/files/publ\_tls/pwc\_the\_world\_in\_2050\_e.pdf

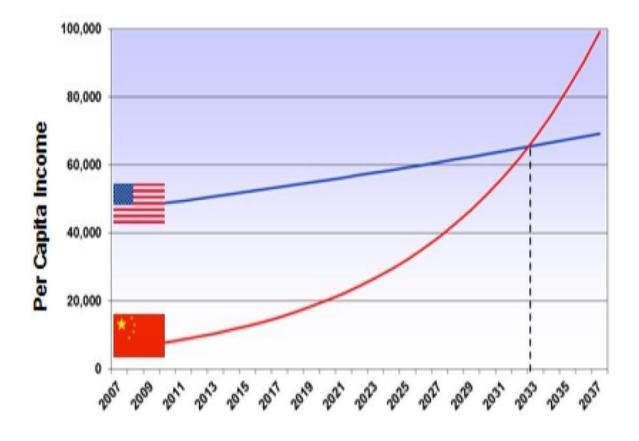
It is being said that that China and India will dominate the supply of industrial goods, while Brazil and Russia will emerge as the largest suppliers of vital raw materials. Brazil has the potential to increase its production of soya and iron ore, and Russia its oil. To become competitive these economies need to increase their investment in education and to upgrade the skills of their workforce along with their infrastructure. (Siddiqui, 2014c)

It is useful to look at the US-EU and BRICs share of the world economy. For example, the US-EU share in the world economy was 45% in 1994, which declined to 33.3% in 2014. Over the same period, the BRICs share of the world economy has risen from 17.25% to 30.1%. It is also estimated that by 2019, the US-EU share will further decline to 30.7%, while that of BRICs will increase to 32.7% (*The Economist*, 2015, OECD, 2015).

However, despite the optimism and rapid growth in recent decades projected by a number of studies, as shown in Figure 2, the average per capita income is quite low among the BRIC countries compared to that of G7 countries. The GDP per capita does not reflect the differences in the cost of living, but increases in GDP per capita can indicate rises in productivity growth and also growth in the economy of a country. GDP per capita in India and China relative to US was as low as 3% in 1960. India's relative GDP was 3% of that of the US in 2010, but China's GDP per capita more than doubled to 8% for the same year, as shown in Figure 2.

Figure 2: Per Capita Income Growth for China and US

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Source: The Economist, 2015; OECD, 2015

In May 2014, Russia signed a deal with China to supply gas, with payment to be made in local currency, rather than in US dollars. This also meant that Russia would be less dependent on gas exports to EU markets. While on the other hand Russia is experiencing growing problems with the West, as in 2015, Russia faced financial stress and the value of the rouble declined because of the rapid decline in oil and gas prices, which coincided with the western sanctions and the crisis in the Ukraine.

In 1997, there was a rapid build-up in debt followed by bust. Rising levels of debt meant that investors were most likely to dump assets in the developing countries, which could exacerbate their difficulties. As *The Economist* (2015:15) notes,

"In all three volumes of this debt trilogy, the cycle began with the capital flooding across borders, driving down interest rates and spurring credit growth [...] Money flowed from rich countries to poorer ones. That was at least the right way around. This was yet another binge: too much borrowed too fast, and lots of debt taken by the firms to finance imprudent projects or purchase overpriced assets. Overall debts in the emerging markets have risen from 150% of the GDP in 2009 to 195%. Corporate debt has surged from less than 50% of the GDP in 2008 to almost 75%. China's debt to GDP ratio has risen nearly 50 percentage points in the past four years. Now, this boom is coming to an end. Slower Chinese growth and weak commodity prices have darkened prospects...".

During the global recession, there has not been any policy initiative in the BRICs to increase real wages and expand demand in domestic consumption but such a move is seen to undermine export-led growth. Any rise in wages is supposed to increase cost of production and as a result competitive edge will disappear and also scare off potential foreign investors. On the other hand, debt-led demand is seen as the BRIC countries an easy option to take, particularly in auto industries, real estate and the housing sector. As a result these sectors experienced expansion, ultimately, building up bubbles and leaving large debt overhangs. Moreover, the recent slowdown in Chinese growth rates resulted in a decline in its import demands, especially raw material from developing countries. (Siddiqui, 2015c) Recently, exports of primary commodities have declined with prices dropping dramatically, along with import volumes. Under these circumstances, devaluation will only exacerbate and deepen the on-going crisis in the BRIC economies. (The Economist, 2016)

China joined the WTO in 2001, which led to further tariff reductions and the liberalisation of the services and agricultural sector. In recent years, China has developed into the world's largest exporter in comparison to other BRICs countries, maintaining a high level of exports as a proportion of GDP, which is about 36% in 2010. Like India, China also kept its financial sector liberalisation rather limited. The government has kept a firm control over monetary policies and capital flows (Schmalz and Ebenau, 2012). As *The Economist* (2015:15) notes: "It [China] still has formidable defences to protect it against an exodus of capital. It has an enormous current –account surplus. Its foreign exchange reserves stood at US\$ 3.5 trillion in October [2015] roughly three times as much as its external debts."

Despite higher growth rates in the BRIC countries, their technological innovation seems to be much less compared to that of developed economies. Technological innovation in the BRIC economies is important to understand their increasing weight in the global economy. In knowledge-based economies, innovation in the services and manufacturing especially is very important and can affect a country's economic growth and prosperity. Technical innovation can help to maintain competitiveness in the global economy, increasing productivity and circumventing entry barriers. Those countries that are unable to develop new products and technologies, and to build competitive edge, can be side-lined in a competitive world. Technological innovation includes investment on new product development, patents and R&D. The granting of new patent rights is recorded and quantifiable (Bond and Garcia, 2015). The available data on science linkage show that Russia (5.46) ranks higher than other BRIC countries in scientific research. Technological innovation in Russia is expected to reflect latest scientific developments. Compared to Russia, Brazil and China have relatively lower science linkage ratio and seem to be focusing more on applied innovations (Hung, 2015; Siddiqui, 2015c; Jacques, 2012).

The strength of both absolute and relative innovation is measured. Absolute strength is estimated by the number of patents invented by a country in a specific technological field. Brazil shows strength in surface technology, material processing, thermal processes, engines, food processing, and consumer goods, etc. Russia's strength lies in absolute innovation, organic chemistry and civil engineering. India demonstrates absolute innovation strength in audio visual technologies, telecommunications, semiconductors, bio-technology and nuclear

technology. In the case of China, this strength lies in absolute innovation in electrical engineering, optic, medical technology, chemical engineering, and machine tools and transport (Bond and Garcia, 2015).

# Brazil

Brazil is the world's fifth largest country in terms of population and seventh largest in terms of economy. President Lula's coming power in 2002 was greeted with great optimism both inside the country and outside. Lula had a long period of struggle both as leader of Workers' Party (PT) and the trade union movement. The country has a vast territory and abundant natural resources and workforce. Lula's radical and trade union image worried global finance and businesses and it was thought that the country might default or reschedule foreign debts. However Lula followed his predecessor Cardoso's neoliberal economic policies. Neoliberal policies also transformed the economy. For instance, its industrial base was built under the ISI (import substitution industrialisation) policies during the 1930-80. Since the early 1990s, the manufacturing sector has been disarticulated and largely merged into the value chains of global companies (Pedersen, 2008).

In his second term (2006-10) President Lula made attempts to implement an income redistribution programme. In 2005, in a bold step, Brazil repaid IMF's loan of US\$ 23.3 billion prior to the due date. This certainly boosted confidence in global finance and averted the possibility of a balance of payments crisis. Moreover, in 2007 the government launched a "growth acceleration programme", to focus on rebuilding infrastructure, transport and energy and in order to achieve this, public investment was increased from 0.4% to 0.7% of the GDP within a year. Increased public sector investment and expansion of social provisions did not destabilise public finances, largely because such policies were funded by the additional tax revenues and social security contribution, and as a result, domestic demands expanded (Morais and Saad-Filho, 2012).

As Brazil's president from 2003 to 2010, Lula da Silva had to face major challenges despite making impressive gains in economic and social spheres. Moreover, higher economic growth enhances wealth and raises expectations. Lula's government managed to achieve good results in socio-economic areas compared to its predecessors. For instance, millions of people witnessed a net rise in their incomes, mainly due to effective cash transfer and other schemes directed at the redistribution of wealth in what continues to be a highly unequal society. Unemployment came down and working conditions improved in comparison to previous governments. Moreover, minimum wages rose in real terms despite the global financial crisis of 2008. The number of undernourished people fell by more than 70% within the past decade. In 2010 Brazil's GDP grew at 7.5% per annum but then slowed down to 2.7% in 2011 and 2.3% in 2013 and remained at this rate in 2014. (Katz, 2015; Bond and Garcia, 2015)

However, foreign currency holdings and inflows of foreign capital have declined after the 2008 financial crisis. Brazil's gross debt is far less than that of other developed countries. For example, it is one third that of Japan, but its debt servicing costs are almost fifteen times higher than those of Japan. In Brazil, household debts have grown rapidly in recent years

from 20% of income in 2005 to 43% in 2013. Consumers are also charged very high rates of interest with households having to pay an average of 150% on their credit cards (Bond and Garcia, 2015).

The Workers' Party adopted a significant policy of fiscal transfer to the poor and began to decrease poverty under Lula's government. Morais and Saad-Filho (2012:4) found that, "Several neo-developmentalist policies were adopted by the second Lula administration (2006-10), and have continued under Dilma Rousseff. Remarkably, they did not replace the previous neoliberal policy framework based on inflation targeting, floating exchange rates and low fiscal deficits." Since 2006 significant structural changes have taken place in the country. For instance, Brazil's foreign assets have increased sharply, especially the role of FDI and commercial credits. Brazil's FDI stocks have increased from US\$ 55 billion in 2003 to US\$ 175 billion in 2012 and commercial credits have also risen from US\$ 100 million to US\$ 171 billion during the same period. (Bond and Garcia, 2015; Morais and Saad-Filho, 2012) Moreover, the country's external liabilities stabilised at below 40% of the GDP. However, the high domestic interest rates has adversely affected investments and fostered speculation and the overvaluation of the Brazilian *real* has reduced competitiveness in the export sectors and fuelled rising current account deficit since 2008 (Morais and Saad-Filho, 2012).

Soon after Lula's administration took control in 2003, they launched a new social policy and consolidation of federal cash-transfer programmes to the poor known as the Bolsa Família programme (PBF). Despite the fact that it had a very low budget (slightly more than 0,4 % of the Brazilian GDP) and also constituted a small proportion of household incomes (slightly less than 0,7 %) the effect of the programme in reducing income inequality and extreme poverty has been widely accepted (Cornia, 2014). The programme was able to improve the economic conditions of poor households (Soares, 2012:7). Moreover these redistributive policies in favour of the poor were also accompanied by relatively high economic growth and improvements in social indicators: unemployment rates declined and formal employment and average earnings increased. However, since the global economic crisis of 2010 Brazil has witnessed a sharp decline in growth rates, as The Economist notes: "Brazil is suffering its worst recession since 1930s, perhaps of all time. On the June 1<sup>st</sup> the government reported that GDP contracted by 0.3% in real terms in the first quarter of this year, it is 5.4% smaller than it was a year earlier...Over that period GDP per person dropped by more than it did during the hyperinflationary "lost decade" from 1981 to 1992...Over two years the number of jobless Brazilians rose from 7 million to 11 million" (The Economist, 2016: 44).

Brazil has few advanced competitive sectors. However, in recent years new forms of dependency have deepened. The Brazilian economy has widened its internal market through a number of government measures, which led to the rise in the incomes of poor households and of minimum wages and the government helped to facilitate the increased levels of credits available to the middle classes and reduced taxation. All these measures helped the country to be less affected by the global financial crisis of 2008. Lula administration looked for accommodation with neoliberalism and compromised in order to appease both domestic and global corporate businesses. Under his administration the growth was based on fragile

economic model based by some help for poor, rising commodity prices and rising imports demands, particularly from China. Brazil also relied on market-based exchange rates and prioritised a neoliberal agenda that included keeping inflation low, running a fiscal surplus and attracting foreign capital investment. As a result, the current account of its balance of payments deteriorated and peaked in December 2013. Keeping inflation as the government's main target perhaps surrenders monetary policy to the interests of global finances that are constantly looking for higher returns. Besides unfavourable exchange rates, its pattern of trade has shifted towards greater reliance on the export of primary commodities (Schmalz and Ebenau, 2012; Mishkin, 2004).

The country was dominated by the production of primary commodities and industrial products in the twentieth century. Prior to adopting its economic reforms, Brazil had followed import substitution policies, which advocated self-reliant development and replacing imports with domestic industrial production. During the 1980s, the government divided the major Brazilian companies into two categories: national capital and foreign capital. As a consequence, the government favoured those companies with domestic investment such as telecommunications, petrochemicals, postal services, oil and gas. These were dominated by domestic capital investment. In the past, the investment areas for foreign investors in Brazil were restricted. However, these policies were radically changed in the 1990s, when the government adopted neoliberal economic reforms and followed various policy measures recommended by the Foreign Investment Advisory Service (FIAS) which led to removal of earlier protectionist policies; in addition, the government took various measures to promote capital inflows. The rates of equity capital into Brazil from various countries in 2012 were as follows: Netherlands (30%), US (13%), Spain (13%), Japan (12%), UK (4.9%), France (3.6%) and Germany (1.2%). (BCB, 2014)

An interesting development took place since the early 1990s when Brazil's export earnings rose rapidly thanks to a surge in Chinese demands. For example, Brazil's primary commodity export value increased from US\$ 11 billion to US\$ 64 billion between 2005 and 2012. However, manufactured exports moved from a trade surplus of US\$ 20 billion to a trade deficit of US\$ 45 billion over the same period. (Schmalz and Ebenau, 2012)

Brazil has experienced an unprecedented increase in short-term foreign capital inflows as its financial sector has been targeted by specialised investors with the aim of earning higher profits from trading rather than investments. In recent years Brazil's structural changes have exposed its economy to further external vulnerability (Schmalz and Ebenau, 2012). The increasing importance of trading rather than investment has made the changes; profit now depends on rising asset prices (Minsky, 1986). In the Brazilian case with increased global integration, the exchange rate is determined by the international portfolio considerations, which not associated with the economic fundamentals. Under such situations an individual government can have little impact or policy manoeuvrings. (Dymski, 2010)

It seems that financial integration, especially in the case of Brazil, has increased its vulnerability. Brazil's *real* has been the most volatile currency in the recent years, apparently due to a complex set of very short-term domestic currency assets. Minskyian theory confirms

that this instability is due to the developing countries' subordinate role in the international financial system. In general the vulnerability of developing economies is due to volatile capital and exchange rate movements, which have been widely discussed among economists. According to them, neoliberals argue that such vulnerabilities could be as a result of 'misaligned' fundaments or are due to developing economies reliance on high levels of short-term external debts. (Dymski, 2010) For them, misguided economic policies could be caused by information asymmetries and may also be due to weak domestic institutions. According to them, correcting these domestic problems along with the development of credible domestic institutions and the retreat of the state will be able to reduce external vulnerability. (Obsetfeld, 1996; Amsden, 1989)

Arestis (2001) has analysed the neoliberals' proposition and concluded that financial vulnerability is not due to these misguided policies but the outcome of the capitalist system, as financial structures became increasingly fragile in the course of the internal workings of the economy. According to him, any small shock can turn the system from a fragile into an unstable one. In fact, the increased share of foreign investors' in domestic currency assets can lead to large exchange rate movements entirely independent of domestic policies, as international investors adjust their portfolio allocation in accordance with changing international financial funding and conditions. As a result, there is a danger that sudden portfolio adjustment could be exacerbated by the very short-term domestic currency assets held by foreign investors.

Moreover, this holding of domestic currency by foreign investors can have an immediate effect on a country's currency exchange rate. Investment decisions made by foreign investors can involve speculative exchange rate decisions. This could affect capital and exchange rate movements as expected exchange rate gains are made by capital flows, which may attract further capital, potentially generating bubbles. For instance, Brazil's stock index rose more than 500% between 2003 and 2008 whilst the *real* appreciated from 3.6 in 2003 to 1.5 to a US\$ in August 2008 (Kaltenbrunner and Painceira, 2015).

According to Kaltenbrunner and Painceira (2015:1287):

"Rising uncertainty in international financial markets prompted international investors to seek liquid and high-yielding assets, which could be easily resold to fulfil funding commitments. Brazil's relatively sophisticated financial market, concentrated in very short maturities made it one of the prime targets of these operations [...] Falling risk aversion and yields in developed financial markets, spurred by the massive provision of liquidity by the world's major central banks, channelled billions of the US\$ into Brazil to take advantage of high interest rates, rising asset prices and a strongly appreciating exchange rate".

Kaltenbrunner and Painceira (2015) emphasise that a number of reasons have contributed to Brazil's external vulnerability such as assets of foreign investors that are tied to exchange rate movements in international markets and funding conditions, exchange rate, and expected returns. Such factors have increased the importance of trade rather than investment operations, making profits increasingly associated with rising estate and urban property prices, which in turn has increased the economy's vulnerability to short-term market forces.

Net foreign direct investment (FDI) increased in Brazil from US\$ 2 billion to US\$ 64 billion over the decade from 1994 to 2014. This sharp increase in FDI was also due to a privatisation drive. As a result, in 2013, Brazil became the fifth largest destination for FDI in the world, receiving 4.8% of the capital. In sectoral terms, most of this foreign capital went into services (51.9%), followed by industries (36.7%), with much less in mining, agriculture and livestock sectors (10.8%). *The Economist* (2015:15) argues, "Brazil's corporate bond market has grown 12-fold since 2007. Its current account deficit means that it relies on foreign capital; its political paralysis and fiscal inflexibility offer nothing to reassure investors".

It is useful to cite Brazilian economic policy experiences here: "Despite sound macroeconomic fundamentals, increasingly developed domestic financial markets and being a net external creditor, Brazil has been subject to very large and sudden capital and exchange rate movements over recent years. Moreover, these movements have been largely independent of domestic economic conditions [...] the result of new forms of external vulnerability (NFEVs) created by structural changes in Brazil's financial integration". (Kaltenbrunner and Painceira, 2015:1282) In recent years the Brazilian economy has experienced a slowdown in growth rates.

It is very interesting to note the recent development in which the bribery scandal helped to topple the PT from power in August this year, Dilma Rousseff was impeached by Congress on related charges of breaking budget rules and she was removed from office. Former President Lula da Silva has also separately been indicted by the court for obstruction of justice in a case related to Petrobras. There is no doubt that the fourth consecutive election of a president from the centre-left PT did not go down well among the opposition. Moreover, it was also speculated that PT founder Lula de Silva could fight the election in 2018. This news became more threatening as his approval ratings hit 90%. This meant there is a real possibility that the opposition could be out of government for a generation. (Anderson, 2016)

Why this coup? The media has attacked the government vigorously and neoliberals are asking the government 'to restore market confidence'. In 2015, private investment collapsed because of political uncertainty. The PT while in opposition was known as the only honest political party in Brazil but once in power it compromised and soon realised the contradiction that in order to win expensive election, the party had to get its hands dirty. Petrobras is Brazil's largest corporation and during the last decade it had discovered deep sea oilfields off the Brazilian coast. Dilma was minister when the contract was signed and as mines and energy minister she was responsible for signing contracts and privileges to Petrobras, which was persistently opposed by the opposition party PSBD, the media and international oil companies. (The Economist. 2016) These developments could have an impact on the future of the BRICs, which aims to challenge G7, the rich nations' club. Brazil, one of the movers behind the organisation witnessed regime change this year. The country's new President, Michel Temer, who replaced the popularly elected Dilma Rousseff recently, lacks political legitimacy. (The Time, 2016) Brazil's foreign policy has taken a rightward turn. It has moved

closer to the United States on major foreign policy issues, especially those relating to Latin America.

### Russia

In 1991, after the collapse of the Soviet Union, Russia and 14 other independent republics were created. Russia, with a population of 140 million emerged as a leading country within the former Soviet Union. Since the global financial crisis of 2008, Russia's economy has continued to grow at the rate of 6.4%. After the disaster of the Yeltsin period and the deep crisis in the Russian economy in 2006, the economy began to slowly move upwards and to experience a significant rise in FDI inflows. A large proportion of the foreign capital inflows into Russia has taken place in the oil, gas and manufacturing sectors. Cyprus, Netherlands, and the UK are major investors in Russia although recent restrictions on FDI have negatively affected a number of sectors (IMF, 2015; Katz, 2015).

In Russia with the adoption of pro-market reforms, a capitalist class was forged from the old bureaucracy by means of pillaging state property. When Putin took over as President, he restored order so that capitalism could function. He reconstructed the state, often using authoritarian and populism means to restore order to the previously chaotic period.

Russia's export-oriented sector is largely composed of oil and gas and metallurgy. The manufacturing products are produced largely for the domestic market. The price disparity favours exporters of products with a low degree of processing, while it proves to be detrimental to the manufacturing sector. As a result of inflating the costs of manufacturing goods, exporters appropriate part of their financial flows, withdrawing these funds overseas. Thanks to its oil and gas the country enjoys a trade surplus, but at the same time the appreciated rubble has undermined the competitiveness of its products in international markets (Hawksworth and Cookson, 2006).

Russia's most striking economic imbalance comes from its excessive reliance on the oil sector, which accounts for half of its total revenue and 60% of its total exports. Russia's investment as a share of GDP is low relative to that of other BRIC countries i.e. 21%; Chinese investment is 45% of GDP and exports make up 30% of the GDP. In sharp contrast to China, Russia is less diversified and highly dependent on international oil prices. (IMF, 2015) Although India's investment rates are relatively higher at 35% of the GDP, growth in its private corporate sector has declined since 2013 (Siddiqui, 2015b).

# India

Although the large absentee landowners were removed in India after independence in 1947, and tenants became landowners, but socio-economic and living conditions for agricultural labourers hardly saw any improvement. The legislation on land reform was not fully implemented so there were no radical changes on the rural scene. The government decided not to tax agricultural income, which would have been necessary to raise government revenue and to achieve higher rates of industrial and economic growth. Thus, increased agricultural output was largely the result of bringing more land under cultivation. However, the

availability of land was limited and with a rising population, this obviously could not provide a lasting solution and in the late 1960s, food shortages became critical. The agrarian crisis provided a new opportunity for the rich farmers when the government decided to adopt a 'green revolution' policy to resolve the crisis (Siddiqui, 1999). The government offered subsidies on new inputs and credits to farmers who were willing to invest in new technology. As a result, the agricultural output increased in some crops as hoped. However, it accelerated the differentiation of the peasantry in the rural India.

In the industrial sector the 'Import Substitution Industrialisation' model ran into difficulties in the 1960s as fiscal constraints became more apparent. Industrial development was reliant on public investment and industrial growth slowed down in the early 1970s. In addition the deficit had grown and became too inflationary. In the 1980s, the government began to liberalise the economy and public spending fuelled industrial growth not by public investment but by higher current account spending. This became possible mainly through increased public borrowing from both domestic and foreign sources. External borrowing was largely from international development agencies. This situation led to both domestic and external pressures to approach the IMF for a loan and in return the neoliberal economic reforms were adopted, which included liberalization of trade and investments, de-regulation, privatisation, and reduction in taxes, subsidies etc. (Mishkin, 2004). Due to growing the economic and financial crisis, the Indian government decided in 1991 to adopt neoliberal economic reforms by reducing the direct tax rates for individuals and corporations, trade barriers and red tape also known as the "license raj". (Siddiqui, 2009a) The government also enacted laws to make it easier for foreign capital investment in India. Exports were promoted. As a result, trade to GDP ratios in India rose from 11% in 1995 to 24% in 2011. In addition, FDI in India rose from US\$ 5 billion in 1996 to US\$ 29.2 billion in 2006 and then further rose to US\$ 62 billion in 2008 (Siddiqui, 2014b; Bhavan et al 2011).

In 1991, the dirigisme was abandoned; with this change, the Indian big bourgeoisie further integrated with international financial capital, seeking cooperation with the developed countries rather than opposing their policies. (Ghosh and Chandrasekhar, 2009) Since India's adoption of neoliberal reforms, US investment has risen sharply, from less than US\$ 4 billion to US\$ 76 billion in the last twenty five years. As Katz (2015:81-82) observes:

"Over the last decade, India's economy has recorded higher growth rates and gave birth to several multinational corporations with global status. It has also achieved a certain expansion in technology sector, especially in software services. But its subcontracting activities are carried out very far away from the epicentres of the digital revolution. Any comparison with patents or profit rates in the United States only confirms this gap [...] Industry continues to operate on a non-integrated, intermediate scale, highly dependent on external inputs and royalty payments [...] India has created the largest number of new millionaires and it has a large middle class. But 77% of the population remains in poverty and 40% are underweight. The fight against hunger has failed and 100,000 farmers committed suicide between 1996 and 2003 because of fear of debt or crop failure." During the early 2000s when the world economy was booming with the US housing bubble, India also achieved high GDP growth rates, but also generated bubbles. The impact of the 2008 global economic crisis was that India's exports in October 2014 were US\$29 billion, which was 50% lower in comparison to October 2013. Imports increased from US\$ 38.08 billion in October 2013 to US\$39.45 billion in October 2014. As a result, the trade deficit widened between 2013 and 2014 from US\$ 10.59 billion to US\$ 13.36 billion. This happened despite the rapid fall in oil prices in the international markets, which meant India had to pay less for oil imports. (Siddiqui, 2014a) However unlike Brazil, India still regulates its financial sector. Nevertheless, overall the role of the state was curtailed in the mobilisation of resources (Schmalz and Ebenau, 2012).

India's export success in recent years is largely in services and limited to only a few other sectors such as chemicals, pharmaceuticals, engineering and garments. However, India emerged as the largest exporter of IT services in 2011 and its share in the world's exports of IT services was more than 18% in 2011. Services have become the dominant sector of the Indian economy. Whilst its service exports represented a very important source of growth and a major source of foreign exchange earnings, India's agricultural sector has witnessed stagnation since the early 2000s. Significantly, agriculture provides a livelihood for the two-third of its population and despite modest growth in the manufacturing sector, employment generation was negligible, producing "jobless growth".

At present, the Indian economy is quite diverse and encompasses the near stagnation of agricultural growth. The industrial sector continues to grow although at lower rates than services. Foreign capital investments have risen in recent years with the US accounting for around 10% of the total FDI in 2007. Services have become the key sector for pulling growth rates in recent years, accounting for 50% of the country's output in 2015. However, service sector employees account for less than one-fourth of the labour force (Bhavan et al 2011).

India's share of the total world GDP (in PPP terms) was about 5.5% in 2014. Since 2000, the average annual rate of growth of GDP was about 6%, higher than the 3.9% of the previous decade. Agriculture continues to be a prominent sector in India, especially in terms of employment. India's export of services exceeded its exports of manufactured goods. This sector besides being very capital-intensive, was successful in being able to earn a huge export income, but hardly any job creation. The challenges before India are to reduce poverty, inequalities, while expanding employment opportunities and improving social cohesion. (IMF, 2015) The drawbacks to these growth rates are the existence of huge poverty and social friction caused by unequal sectoral growth, with the urban migration leading towards dramatic increase in urban population. (Siddiqui, 2016b)

# China

China began progressively opening-up its state-controlled industries and domestic markets to private investors in the 1980s and 1990s, while at the same time, public investment in infrastructure was increased. With the adoption of pro-market reforms in China, foreign investment rose sharply and due to its global production, resources and marketing networks,

it was able to sell these goods in world markets (Siddiqui, 2009b). As a result, its economy experienced a dramatic increase in exports, which in turn enabled very robust GDP growth over three decades. These exports were mainly directed towards the markets in rich countries. As the Chinese manufacturing sector expanded, this led to an ever-rising external demand for raw materials, and suppliers in developing countries benefitted from this process both in terms of increasing their exports and in receiving better terms of trade.

As the export sector expanded, there were also further opportunities for growth and this increase in economic activities also attracted more capital investment. This export-led growth could not continue indefinitely and has its limitations. At the same time, many developing countries were increasing their exports which led to intense competition among exporters. When the crisis hit the western countries in 2008, these countries were very vulnerable and low wages which were presumed to act as a catalyst in attracting investors were unhelpful. Ho-Fung Hung (2015:257) explains: "The rise of China's export sector was unleashed by a series of policy change in the mid-1990s that precipitated an expanding stream of low-wage rural migrant labourers. Such an export-oriented path of growth was also facilitated by China's currency peg with the US that keeps Chinese exports competitively cheap in the world market".

China's manufacturing sector has expanded in the last three decades as the country has become the world's workshop, unlike those other countries that largely export primary commodities. Katz (2015:70-71) notes,

"China's new position in the world hierarchy is crowned by the strengthening of its industrial sector. This mutation is the result of a dizzying growth which increased per capita GDP 22 times between 1980 and 2011 (from US\$ 220 to US\$ 4930), while purchasing has grown by 33 times. The country's commercial volume has doubled every four years over that same period. In 2001, Chinese commercial transactions were valued at a mere 20% when compared to those in the United States; by 2005, that figure jumped to 40%, and today, they are on a par with their rival. In 1978, only 9.8% of the economy was derived from international trade, while that figure currently stands at 65%. These transformations have completely disrupted the country's internal economy. The weight of the agriculture sector has fallen precipitously, services have expanded, and industry has become the motor force driving all economic activity".

However, super-exploitation is also being witnessed in the way that Chinese households are being driven from their rural areas during the on-going urbanisation processes, and are required to have special work permits to live in the cities, where they work long hours and are paid much lower wages. (Bond and Garcia, 2015) The size of the population of China's cities rose at the rate of 10% per annum. The rate of urbanisation rose from just 17.4% in 1978 to 42.5% in 2013, on a scale unprecedented in human history. At present, nearly 70% of the economy is in the hands of the private sector. (Siddiqui, 2015c)

There also seems to be three big differences between the migrant workers in China and those in India. For example, firstly, the Chinese migrants had some land holdings back in the village, whereas in India, they are mostly landless. Second, the Chinese migrants have been to school, but the Indian ones are illiterate. Thirdly, child labour is not seen, while in India, it is. This makes a big difference. China has been focussing on the domestic market by increasing the purchasing power of the working classes. But the Indian government is not interested in increasing the purchasing power of the poor and it is interested to maintain low wages, in the hope that Indian manufacturing can compete better with the Chinese in export markets. However, such policy has resulted in the stagnation of wages among the working people in India, which is not the case in China (Siddiqui, 2009b).

## **External Vulnerability**

Since 1990s the BRIC economies have been increasingly integrated into the international financial markets as soon as their economies are open for international financial capital. They also have to follow credit expansion policies. This is likely to mean that the domestic currency will appreciate sharply in real terms to create a positive environment for further inflows of foreign capital. The current account grows to a point where further inflows of foreign capital become necessary to finance it (Soederberg, 2015).

Today the BRIC economies are more dependent upon greater global integration in various ways, such as their increased dependence on foreign capital and their greater reliance on foreign markets. India witnessed a substantial rise in its share of capital relative to labour share in the economy. Its financial sector proliferated, especially in the real estate sector which accounted for 15% of the GDP in 2012. The urban property asset value has risen sharply, fuelled by credit-financed consumption among the middle and upper sections of Indian society. This growth is largely dependent upon debt-fuelled consumption, especially among middle-class consumers. (Siddiqui, 2009a)

Moreover, changes in perception can adversely affect capital inflows such as economic reforms, macroeconomic policies, lower interest rates or lower returns. Minsky (1986) emphasises that a huge increase in capital inflows may be due to credit loosening in the developed economies. As a result, host countries may witness a surge in domestic demands, especially in areas such as real estate, urban land and stock markets. The local elites may also be willing to give up their possession of foreign currencies in favour of domestic currency. It may also further boost demand for domestic currency and consequently lead to greater currency appreciation (Wolfson, 2002).

Following the Eurozone crisis in 2010, when foreign investors were looking for higher returns and safe countries to invest in, the BRICs countries were seen as being safer and the best place to invest. During that period the short-term foreign capital investment in the Brazilian economy reached very high levels. For instance, soon after the collapse of Lehman Brothers in June 2008, the country's short-term external liabilities rose to US\$ 679 billion i.e. 46.1% of the GDP. Prior to Brazil's economic crisis in 1999, the total stocks of its short-term external liabilities were only 28% of the GDP. This stock stood at US\$ 883 billion or 39.7% of GDP in 2011. Foreign investors' participation in Brazil's stock markets rose sharply from

less than 25% in 2005 to 37% in 2007. Brazil's stock of foreign exchange reserves rose from US\$ 52 billion in 2005 to US\$ 350 billion in 2012 (BCB, 2014).

Open capital accounts generate tendencies whereby capital movements occur because of unpredictable changes in investor confidence and this can affect both inflows and outflows of capital. It seems that the degree of openness of a country has an important bearing on the extent of integration of its financial market with the international market.

On the issue of foreign investment, Rosa Luxemburg (1968) had argued that the extra economic coercion associated with exploitation between capitalist and non-capitalist spheres becomes important during crisis periods. She pointed out that capitalism's extra economic coercive activities draw surpluses not just from formal capital-labour production relations but also from households (i.e. particularly women's role in social production), the land and all forms of nature also known as 'commons'. She emphasised that: "The relations between capitalism and non-capitalist modes of production start making their appearance on the international stage. Its predominant methods are colonial policy, an international loan system -a policy of sphere of interest-and war". (Luxemburg, 1968:396) Harvey called it accumulation by dispossession and he argued that over-accumulation of capital is a constant problem in a deepening crisis. This is because some sections of the corporations seek external markets to raise their profits and they also see an opportunity to build strategic alliances with the dominant capital: "The opening up of global markets in both commodities and capital created an opening for other states to insert themselves into the global economy, first as absorbers but then as producers of surplus capitals" (Harvey cited in Bond and Garcia, 2015:20).

Harvey (2003) presents a slightly different scenario. According to him BRICs offer some interesting developments in the contemporary period and in the international political economy, as they have shifted from their earlier 'state developmental' policies in favour of neoliberal economic policies. Moreover, this also means intensification of uneven development combined with the super-exploitative system of accumulation supported by globalization, especially the policies of trade, investment and financial liberalization. The expansion of the credit system is also an attempt to resolve the overproduction crisis as debt allows these to be packaged with the promise to extract future surpluses to pay for them in the future.

# **Neoliberalism in BRIC Countries**

The BRIC countries have adopted neoliberal economic policies and increased their reliance on market forces, de-regulation, and foreign capital and investment. However, we find that despite increased reliance on market forces, each of them has opted for a different degree of openness in their economies. China and India particularly have been moving slowly towards adoption of economic liberalisation. In both countries state investment has played an important role in stimulating aggregate demand. China gradually began to assign a greater role to market forces in 1978 and Russia in the early 1990s after the break-up of the Soviet Union. Neoliberal policy was adopted in Brazil in 1990 and in India in 1991, which led to a significant increase in foreign investment, and the availability of global financial resources with their associated risks of volatility and crisis. However, the result of this engagement in both these countries has been somewhat different: Brazil has been able to attract more foreign investment than India. It has engaged aggressively in the privatisation of public enterprises and was also able to secure higher growth in its exports, while India was able to achieve higher overall GDP growth rates than Brazil, together with larger foreign exchange reserves and better financial stability. (Pedersen, 2008) Other major differences exist between these two countries. Brazil's financial sectors have been almost absorbed by the foreign banks and its most well-known bank, BNDES, has been shrinking its activities. The Indian financial sector, on the other hand, has been under stricter regulation by the government and capital account convertibility is still far from being a policy priority (Evans, 1995).

A UNDP report (2013) has highlighted the striking transformation of the BRIC economies and envisaged that as a result they will have growing political impact. To sustain high growth, the UNDP report recommends a number of neoliberal policies such as further integration with the global markets, adherence to rules of global governance, and financial liberalisation. However, the report ignores the fact that increased dependence on foreign markets would mean increased levels of vulnerability to the volatile nature of global finance, which has been marked in the recent past by speculation, capital flights, and economic crises. (Ocampo and Stiglitz, 2008) Such policies would run counter to the aim of economic sovereignty, and also to the pro-poor, and poverty alleviation goals of the economic inclusion agenda. Contrary to the UNDP report, Soederberg (2015:253) finds:

"[Financial liberalisation] has done little to deliver on the neoliberal promise of growth and progress through investments in production and thus the creation of stable and sustainable wages and, by extension, poverty reduction. Indeed, the increased frequency and intensity of financial debacles has made the South, and especially the poor therein, more susceptible to the aftershocks of speculative-led accumulation".

The BRIC countries need to diversify their range of trading partners and need to increase their trade with other developing countries. There is some positive sign, as economic ties and bilateral trade between China and India have been steadily growing since 2002. China has become India's first trading partner, while India is one of China's top ten trading partners. In 2014, India's exports of goods to China were about 8% of its total exports of goods, while they made up to 1.5% of China's total imports. China's exports to India accounted for only 2.5% of its total exports, but constituted 11.8% of India's total imports. (Siddiqui, 2015c; UNDP, 2013) The balance of trade has always been negative for India, its trade deficit reaching a very high level of US\$ 21.3 billion, despite its exports to China amounting to US\$ 19 billion in 2011, a growth of almost 80% from 2009 (World Bank, 2012).

#### **Concluding Remarks**

There is no doubt that the global economy is changing and the BRIC economies will be able to increase their share in world output. It seems that higher growth rates in their economies will lead to them having a greater say in international economic policy matters. However, as these economies have adopted neoliberal policies, thus seems less likely to produce antagonistic or major conflict as happened early last century in the case of the Bolshevik Revolution.

This study finds that despite the fact that within the BRIC countries, China and, to a lesser extent, India remains more closed to internal financial markets. However, countries continue to move towards increased capital openness, encouraging foreign investors to buy domestic assets. Minsky's view was that to understand creditor-debtor relations and the inherent fragilities under such relations in international political economy, the important question was: what assets are to be held and how are they to be financed (Minsky, 1986). In recent years Brazil has imposed restrictions on short-term portfolio flows, external bank borrowing, US dollar spot positions and foreign investors' derivatives positions. The BRIC economies may need specific policies to deal with the rapid increase in foreign capital inflows (Soederberg, 2015).

China and India have emerged as the two most powerful economies in the BRICs in terms of economic capabilities. They are also among the fastest growing economies in the world. Moreover, the two countries have adopted different economic strategies as a consequence of their varying degrees of openness and the manufacturing and service sectors have had different levels of performance in both countries, especially since 1990. At present, India's manufacturing sector accounts for only small amount of its GDP and a small fraction of its exports, whilst China has experienced a dramatic growth in its manufacturing sector since 1980s, both its share in GDP and exports having increased remarkably. These developments not only expanded job opportunities but raised income levels as well. India's comparative advantage is still concentrated in the traditional commodities, whilst China has increasingly diversified its economy and exports. The latter specialised in exports of cheap manufactured goods and is now also becoming progressively more competitive in exports of electronic goods.

This study concludes that abandoning the state's role in favour of market forces and increasing reliance on foreign capital and exports, as neoliberal policies requires, will not lead to sustainable growth. Such policies may help the local elites and produce few more billionaires, but they will not address sectoral imbalances. Moreover, the BRICS countries, especially India and Brazil, will not be able to reduce poverty, which will prove to be a greater challenge in the near future, by relying largely on market forces. Therefore, they need to change their economic strategy from dependence of foreign markets and the threat of global financial instability but rely instead on domestic demand, improving living conditions and reducing poverty.

# References

- Anderson, P. 2016. "Crisis in Brazil", London Review of Books, Vol. 38(8), 21 April, pp.15-22. <u>http://www.lrb.co.uk/v38/n08/perry-anderson/crisis-in-brazil</u>
- Amsden, A. 1989. *Asia's Next Giant: South Korea and Late Industrialisation*, New York: Oxford University Press.

- Arestis, P. 2001. "Recent Banking and Financial Crisis: Minsky vs the financial liberalisations", pp.153-93, in Bellofiore, R. and Ferri, P. (eds.) *Financial Fragility and the Investment in the Capitalist Economy: The Legacy of Hyman Minsky*, vol. II, Cheltemham, Edward Elgar.
- Bhavan, T. Xu, C. and Zhong, C. 2011. "Determinants and Growth Effects of FDI in South Asian Economies: Evidence from a Panel Data Analysis", *International Business Research*, vol. 4 (1).
- Bond, P. and Garcia, A. (eds). 2015. *BRICS: An anti-capitalist critique*, London, Pluto Press
- BCB (Central Bank of Brazil). 2014. *Economic Indicators*, available at <u>http://www.bcb.gov.br/</u>?
- Cornia, G. A. ed. 2014. *Falling Inequality in Latin America. Policy Changes and Lessons*. Oxford: Oxford University Press.
- Desai, R. 2007. "Dreaming in Technicolor: India as a BRIC economy", *International Journal*, autumn, pp. 781-804.
- Dymski, G. 2010. "Why the Subprime Crisis is Different: a Minskyian approach", *Cambridge Journal of Economics*, vol.34 (2), pp.239-55.
- Evans, P.B. 1995. *Embedded Autonomy: State and Industrial Transformation*, Princeton: Princeton University Press.
- Ghosh, J. and Chandrasekhar, C.P. 2009. "The Costs of 'Coupling': the global crisis and the Indian economy", *Cambridge Journal of Economics*, vol.33 (4), pp.725-39
- Girdner, E. J. and Siddiqui, K. 2008. "Neoliberal Globalization, Poverty Creation and Environmental Degradation in Developing Countries", *International Journal of Environment and Development*, Vol.5 (1), Jan.-June, pp. 1-27 ISSN: 0973-3574.
- Harvey. D. 2003. The New Imperialism, Oxford: Oxford University Press.
- Hawksworth, J. and Cookson, G. 2006. The world in 2050: a broader look at emerging market growth prospects, Price Waterhouse Coopers, March. https://www.pwc.ch/user\_content/editor/files/publ\_tls/pwc\_the\_world\_in\_2050\_e.pdf
- Hung, Ho-Fung. 2015 "China and the Lingering Pax Americana", pp. 254-260, in (eds) Bond, P. and Garcia, A. 2015. *BRICS: An anti-capitalist critique*, London, Pluto Press
- International Monetary Fund. 2015. World Economic Outlook, Washington D.C.
- Jacques, M. 2012. *When China Rules the World: the end of the western world and the birth of a new global order*, second edition, London: Penguin Paperback
- Kaltenbrunner, A. and Painceira, J.P. 2015. "Developing Countries' Changing Nature of Financial Integration and New Forms of External Vulnerability: The Brazilian Experience", *Cambridge Journal of Economics*, vol. 39 (3), pp.1281-06. Doi:10.1093/cje/beu038
- Katz, C. 2015. "Capitalism Mutations in Emerging, Intermediate and Peripheral Neoliberalism", pp. 70-93, in (eds.) Bond, P. and Garcia, A. 2015. *BRICS: An anti-capitalist critique*, London, Pluto Press
- Leys, C. (edi). 1996. *The Rise and Fall of Development Theory*, Bloomington: Indiana University Press.

- Luxemburg, R. 1968. *The Accumulation of Capital*, New York: Monthly Review Press.
- Minsky, H.P. 1986. *Stabilizing and Unstable Economy*, New Haven, Yale University Press.
- Morais, L. and Saad-Filho, A. 2012. "Neo-developmentalism and the Challenges of Economic Policy-Making under Dilma Rousseff", *Critical Sociology*, pp.1-10.
- Mishkin, F.S. 2004. Can inflation targeting work in emerging market countries?, NBER Working Paper No.10646, July. http://www.nber.org/papers/w10646
- Obsetfeld, M. 1996. "Models of Currency Crises with Self-fulfilling Features", *European Economic Review*, vo.40, pp.1037-47
- Ocampo, J.A. and Stiglitz, E.E. (eds). 2008. *Capital Markets Liberalization and Development*, New York: Oxford University Press
- Pedersen, J.D. 2008. *Globalization, Development and the State: The Performance of India and Brazil since 1990*, Hampshire: Palgrave Macmillan.
- Prasad, E.S., Rajan, R.G. and Subramanian, A. 2007. Foreign Capital and Economic Growth, NBER Working Paper 13619, Cambridge, MA. http://www.nber.org/papers/w13619
- Rodrik, D. and Subramanian, A. 2009. Why Did Financial Globalization Disappoint?, IMF Staff Papers, vol. 56 (1), Washington DC: http://scholar.harvard.edu/files/dani-rodrik/files/why-did-financial-globalization-disappoint.pdf
- Samake, I. and Yang, Y. 2011. Low-Income countries Linkages: Are There Growth Spillovers?, IMF WP/11/267, Washington DC: IMF http://www.imf.org/external/pubs/ft/wp/2011/wp11267.pdf
- Schmalz, S. and Ebenau, M. 2012 "After Neoliberalism? Brazil, India and China in Global Economic Crisis", *Globalizations*, vol.9 (4), August, pp.487-501
- Siddiqui, K. 2016a. "A Study of Singapore as a Developmental State" in Young-Chan Kim (edi) *Chinese Global Production Networks in ASEAN*, London: Springer, pp.157-188
- Siddiqui, K. 2016b. A critical study of Hindu nationalism in India, *Journal of Business and Economic Policy*, vol.3 (2), pp.9-28. ISSN 2375-0766 (Print), 2375-0774 (Online) USA. http://jbepnet.com/journals/Vol\_3\_No\_2\_June\_2016/2.pdf
- Siddiqui, K. 2015a. "Trade Liberalisation and Economic Development: A Critical Review", *International Journal of Political Economy*, Vol.44 (3), pp.228-247. ISSN: 0891-1916 print/1558-0970. DOI: 10.1080/08911916.2015.1095050
- Siddiqui, K. 2015b. "Challenges for Industrialisation in India: State versus Market Policies", *Research in World Economy*, Vol.6 (2), pp.85-98. ISSN 1923-3981. DOI.org/10.5430/rwe.v6n2p85
- Siddiqui, K. 2015c. "Perils and Challenges of Chinese Economic Development", *International Journal of Social and Economic Research*, Vol. 5 (1), pp.1-56, ISSN: 2249-6270. DOI : 10.5958/2249-6270.2015.00001.X
- Siddiqui, K. 2014a. "Growth and Crisis in India's Political Economy from 1991 to 2013" *International Journal of Social and Economic Research*, Vol. 4 (2), April-June, pp. 84-99. Online ISSN: 2249-6270. DOI:10.5958/2249-6270.2014.00487.5

- Siddiqui, K. 2014b. "Flows of Foreign Capital into Developing Countries: A Critical Review", *Journal of International Business and Economics*, Vol.2 (1), March, pp.29-46
- Siddiqui, K. 2014c. "Higher Education in the Era of Globalisation", *International Journal of Humanities and Social Science*, Vol.3 (2), pp.9-32. ISSN:2319-3948
- Siddiqui, K. 2009a. "The Current Financial Crisis and its Impact on the Emerging Economies – China and India", *Research in Applied Economics*, Vol.1 (2) pp.1-28, ISSN: 1948-5433. DOI: <u>http://dx.doi.org/10.5296/rae.v1i1.183</u>
- Siddiqui, K. 2009b. "The Political Economy of Growth in China and India", *Journal of Asian Public Policy*, Vol.1, (2), March, pp.17-35.Routledge. ISSN 1751-6234. DOI: 10.1080/17516230902734528
- Siddiqui, K. 1999. New Technology and Process of Differentiation: Two Sugarcane Cultivating Villages in UP, India, *Economic and Political Weekly*, Vol. 34 (52), 25th December, pp. A39-A53. ISSN (Online) 2349-8846
- Soederberg, S. 2015. "The BRICS' Dangerous Endorsement of Financial Inclusion", pp. 251-253, in (eds.) Bond, P. and Garcia, A. 2015. BRICS: An anti-capitalist critique, London, Pluto Press
- Soares, S. 2012. Bolsa Família, its design, its impacts and possibilities for the future. IPC-IG Working paper 89.
- *The Time*, 2016. Dilma Rousseff's Impeachment Is the Start of Brazil's Crisis—Not the End, Matt Sandy/Rio de Janeiro @mattsandy Updated: Sept.
- *The Economist*. 2016. "Brazil's Economy Nowhere to go but up", 4<sup>th</sup> June, London
- *The Economist*. 2015. "The Never Ending Story", November 14, pp.15, London.
- United Nations Development Programme (UNDP). 2013. *The Rise of the South: Human Progress in a Diverse World*, New York: UNDP.
- Wolfson, M.H. 2002. "Minsky's Theory of Financial Crises in a Global Context", *Journal of Economic Issues*, vol. 36, No. 2, June, pp. 393-400
- World Bank. 2013. "Dealing with the Challenges of Macro Financial Linkages in Emerging Markets", World Bank. <u>http://www.worldbank.org/en/topic/poverty/publication/dealing-with-thechallenges-</u>of-macro-financial-linkages-in-emerging-markets
- World Bank. 2012. *India at a Glance*, Washington D.C.: World Bank. available at <a href="http://devdata.worldbank.org/AAG/ind\_aag.pdf">http://devdata.worldbank.org/AAG/ind\_aag.pdf</a>