# Question 2: The tale of BRICS

**Table 4: Rates of growth of GDP, annual percentages, by year**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Countries/ Year** | **2012** | **2013** | **2014** | **2015** | **2016** |
| **Brazil** | 1.9 | 3.0 | 0.5 | -3.5 | -3.4 |
| **Russia** | 3.7 | 1.8 | 0.7 | -2.8 | -0.2 |
| **India** | 5.5 | 6.4 | 7.4 | 8.1 | 7.1 |
| **China** | 7.9 | 7.8 | 7.2 | 6.9 | 6.7 |
| **South Africa** | 2.2 | 2.5 | 1.8 | 1.2 | 0.5 |

[Source: World Bank]

# Table 5: Human Development Index, by year

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Countries/ Year** | **2012** | **2013** | **2014** | **2015** |
| **Brazil** | 0.734 | 0.747 | 0.754 | 0.754 |
| **Russia** | 0.799 | 0.803 | 0.805 | 0.804 |
| **India** | 0.599 | 0.607 | 0.615 | 0.624 |
| **China** | 0.713 | 0.723 | 0.734 | 0.738 |
| **South Africa** | 0.652 | 0.660 | 0.665 | 0.666 |

[Source: United Nations]

# Extract 7: The Mixed Fortunes of BRICS

The story of the BRICS begins with Goldman Sachs chief economist Jim O’Neill, who wrote a paper in 2001 arguing that these were the emerging superstars most likely to dominate the 21st century globalized economy. Taken together, these five countries cover 40 percent of the world’s population and more than 25 percent of the world’s land.

Roughly speaking, the BRICS can be broken into two groups—those that took advantage of globalization’s march to integrate themselves into global supply chains (primarily China and India) and those that took advantage of globalization to sell their abundant natural resources (primarily Brazil, Russia and South Africa).

For India, instead of focusing on manufacturing, it went the services route instead. Today, services account for roughly 61 percent of its GDP, with a particular emphasis on IT—at $108 billion, India is one of the world’s leading IT services exporters. And the rise of India’s middle class resembles that of China’s; Indians went from 1 percent of the global middle class in 1990 to 8 percent in 2015, with another 380 million Indians expected to join by 2030.

The picture is decidedly mixed, meanwhile, with the other BRICS countries, who rose mainly on the back of their vast natural wealth. Brazil sells commodities like soybeans, iron ore, and crude oil on global markets. South Africa also used its natural wealth—in this case rare gems and metals like gold, diamonds and platinum—to help get its economy on track following apartheid. In 1990, the country exported $27 billion worth of goods; by 2011, that number had increased nearly five- fold. And then there’s Russia, which spent the 1990s rebuilding itself from the rubble of the Soviet Union. Thankfully, the country is blessed with abundant energy sources—crude oil, natural gas, metals and minerals—that helped it find its footing. But the fall in commodity prices in 2015 to 2016 has done significant damage in all three countries.

It would be easy to label India and China as the clear winners among the BRICS, but it’s not that simple. Yes, India and China have the fastest growth rates of any major economies in the world, and citizens of these countries remain optimistic about the future. But nearly 50 percent of Indians remain vulnerable to a slide back into poverty, and China’s economy has slowed as higher wages make manufacturing more expensive. Both countries are especially vulnerable to technological changes that bring automation into the workplace on a larger scale.

[Source: [http://time.com,](http://time.com/) 1 Sept 2017]

# Extract 8: Automation threatens jobs

Research has predicted that the proportion of jobs threatened by automation in India is 69%, while it is 77% in China, World Bank President Jim Yong Kim has said, citing data from the multilateral agency.

While the Narendra Modi government has promised to create millions of jobs to absorb thousands of youth coming to the workforce, critics say not enough jobs are being created in the economy. Quick expansion of automation could contribute to a rise in structural unemployment in the labour market and rising inequality, according to the World Development report.

From a technological standpoint, two-thirds of all jobs are susceptible to automation in the developing world but effects are moderated by lower wages and slower technology adoption. Kim called on creating resources for infrastructure to get developing countries to invest in people. “Countries need to increase their investments in people necessary to build a workforce that can be competitive in the economy of the future,” said the World Bank president.

[Source: https://timesofindia.indiatimes.com, 6 Oct 2016]

# Extract 9: Brazil's recession worst on record

The economy contracted by 3.6% in 2016, meaning it is now 8% smaller than it was in December 2014. The country has been hard hit by the fall in commodity prices and an internal political crisis that has undermined investor confidence. The situation has been made worse by the high debt levels. The two-year slump has seen the number of unemployed rise by 76% to 12.9 million, a rate of 12.6%.

Brazil was once one of the fastest-growing economies in the world, the 'B' in the BRICS group of nations regarded by many investors as having the world's best growth potential. Its key exports - including oil, soy and metals, were in hot demand. But as growth in the biggest element of that grouping, China, began to slow, so did demand for commodities and their prices.

But there are some signs that this recession may be soon over. Brazil's monthly inflation rates suggest prices in the economy are stabilizing, and interest rates are falling at a faster pace than expected. This could fuel consumption and investment and speed up the country's recovery. Also there could be tailwinds from the global economy, with prices of commodities on the rise again and possible growth coming from the US. But much of Brazil's recovery still depend on whether government reforms in public spending are successful.

[Source: BBC.com, 7 March 2017]

# Extract 10: The strive for sustainable development in India

With a population rapidly approaching that of China crammed into just one third of the area, India suffers from resource scarcity on a level unlike any other nation. So while it nominally faces many of the same challenges as other BRIC nations – water scarcity, dirty energy supplies, human rights issues – India’s population density makes its situation exponentially more difficult.

A World Bank study in 2014 found that environmental degradation like air pollution, water pollution, deforestation and natural disasters cost India $80bn per year, or nearly 6% of its economic activity. Of that total, 52% is attributable to air pollution. If you thought China’s smog was bad, Delhi’s air pollution levels can be twice as high, with even less government action to show for it. India’s air pollution is not only far worse than any of the other BRICs, it is so intense that it is reducing plants’ ability to photosynthesize sunlight, cutting crop yields in half.

While pollution is a broad problem across India, poverty and general lack of access to basic human needs is more of a first order problem, and one that draws the lion’s share of attention from government, businesses and people. In 2012, just 36% of India’s population had access to improved sanitation, leading the nation’s minister of rural development to call India “the world’s capital for open defecations”.

As a result, much of the sustainable development discussion in India has focused on inclusion and bringing the population into the 21st century. In 2014, Prime Minister Narendra Modi launched the Clean India Mission, a five-year effort to eliminate open defecation, provide access to improved sanitation, and clean up the River Ganges, among other targets. Corporations have joined up with the Clean India Mission, committing to invest in education for girls and adopting communities for cleanup, among others. During the UN climate talks in Lima, Peru, last fall, Modi announced a massive solar commitment: 100 gigawatts of solar capacity by 2022, creating as many as 1m jobs and giving rural Indians access to cheap, clean energy and greater economic opportunity as a result.

[Source: The Guardian, 4 May 2015]

# Questions

1. Using Table 4, compare the growth performance of China and India with that of Brazil and Russia. [2]
2. With reference to Extract 7,
   1. Extract 7 states that “the fall in commodity prices of recent years has done significant damage in all three countries.”

Explain how this has impacted the macroeconomic objectives of Brazil, Russia and South Africa. [4]

* 1. To what extent does the data in Table 4 support the suggestion that the fall in commodity prices in 2015 to 2016 has done significant damage in Brazil, Russia and South Africa? Justify your answer. [3]
  2. Using a diagram, explain how ‘China’s economy has slowed as higher wages make manufacturing more expensive.’ [4]

1. (i) Using Extract 8 explain how automation could contribute to a rise in structural unemployment in the labour market and rising inequality. [5]

(ii) In light of the negative effects brought about by automation, World Bank President Jim Yong Kim expresses the importance to increase investments in people necessary to build a workforce that can be competitive in the economy of the future.

Comment on whether such a policy would be effective in reducing the negative effects brought about by automation. [6]

1. Extract 9 highlights the factors contributing to Brazil’s recession.

Evaluate the policy options available to the Brazilian government to revive its economy. [9]

1. “Data on GDP growth rates are no longer relevant in measuring the well-being of its citizens.” Discuss this view. [12]

[Total: 45]

**Suggested Answer**

**(a), , Using Table 4, compare the growth performance of China and India with that of Brazil and Russia., [2]**

, , Suggested Answer:

China and India have a positive growth in GDP throughout the entire period, while Brazil and Russia experienced negative growth from 2015- 2016.China and India also have higher growth rates throughout the entire

period.,

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**(b), , With reference to Extract 7,,**

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**, (i), Extract 7 states that “the fall in commodity prices of recent years has done significant damage in all three countries.”**

Explain how this has impacted the macroeconomic objectives of Brazil, Russia and South Africa., **[4]**

, , Suggested Answer:

Brazil, Russia and South Africa are commodity exporters. As such, when the prices of commodities fell, the total export revenue will be affected. Since the demand for commodities is likely to be price inelastic due to the lack of close substitutes, the fall in price leads to a less than proportionate increase in quantity demanded. Hence, total export revenue falls. This leads to a fall in net exports and aggregate demand, ceteris paribus. Real GDP falls and economic growth suffers.

Furthermore, the fall in output also means that firms’ demand for labour falls, leading to higher unemployment.,

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, **(ii), To what extent does the data in Table 4 support the suggestion that the fall in commodity prices in 2015 to 2016 has done significant damage in Brazil, Russia and South Africa? Justify your answer., [3]**

**, , Suggested Answer:**

The data in Table 4 supports the suggestion that a fall in commodity prices would have a significant damage on the 3 countries’ economic growth. This is seen in the data for Brazil and Russia that they are suffering from negative growth rates in 2015 and 2016 when commodity prices fell. South Africa also suffered a fall in GDP growth rates from 2015 to 2016 when commodity prices fell in the same period.

However, the data might not fully support the suggestion as South Africa was still able to maintain a positive growth rate throughout the entire period despite the fall in commodity prices, indicating that it might not have experienced significant damage unlike that of Brazil and Russia.,

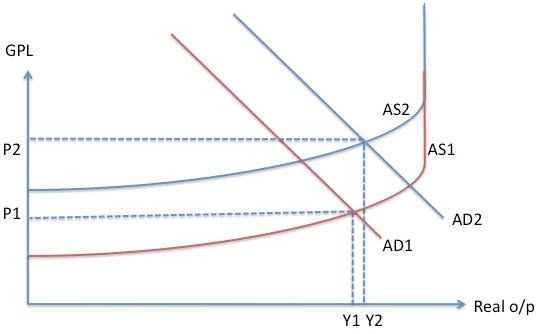
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, **(iii), Using a diagram, explain how ‘China’s economy has slowed as higher wages make manufacturing more expensive.’, [4]**

**, , Suggested Answer:**

Higher wages will lead to a rise in cost of production (COP). This leads to an upwards shift in Aggregate Supply (AS) from AS1 to AS2, leading to a rise in General Price Level (GPL) from P1 to P2.,

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However, Table 4 shows that China’s economy is still growing, as such, this indicates that the Aggregate Demand (AD) must be rising at a faster rate. Thus, real GDP still increases, but the fall in AS slows down the rate of growth.,

**(c), (i), Using Extract 8 explain how automation could contribute to a rise in structural unemployment in the labour market and rising inequality., [5]**

**, , Suggested Answer:**

Automation would indicate the greater use of machines in the workplace and a lower demand for labour, especially low skilled labour. Since automation is likely to affect labour-intensive industries which tend to replace the low-skilled labour in the firm, these workers might not have the ability to find new jobs easily as the economy progresses towards knowledge based industries where high skilled workers are needed in the economy. This thus cause a mismatch of skill and thus a rise in structural unemployment.

As automation replace low skilled workers in the low end manufacturing industries, supply of low skilled workers would increase thus reducing the market wage rates for these workers. At the same time, there will be an increase in demand for high skilled workers to maintain machinery due to the rise in automation. Thus this would increase the wages for high skilled workers. As such, automation could lead to a widening of the income gap

between the low skilled and high skilled workers.,

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**, (ii), In light of the negative effects brought about by automation, World Bank President Jim Yong Kim expresses the importance to increase investments in people necessary to build a workforce that can be competitive in the economy of the future.**

**Comment on whether such a policy would be effective in reducing the negative effects brought about by automation., [6]**

**, , Suggested Answer:**

As stated in Extract 8, a rise in automation could bring about negative effects such as structural unemployment and rising income inequality. As such, investment in people could be in the form of supply-side policies such as education and training would help to reduce the effects of structural unemployment and income inequality.,

, , Investment in people through education and retraining could allow low- skilled workers to acquire new skills which would enable them to take up jobs in the sunrise industries, thereby reducing structural unemployment. As these workers would gain higher skills through education and retraining, they are also able to bargain for higher wages at their new workplaces. This reduces the income inequality between the high skilled workers and low skilled workers in the economy.

However, this policy might not be effective as it takes time to educate and train workers. Moreover, the success of the policy also depends on the receptiveness of workers. Less educated or older workers might be less receptive to education and re-training, which would render such a policy ineffective in reducing structural unemployment or income inequality.

Conclusion: Overall, whether such a policy is effective would depend on the receptiveness of the people as well as the government’s ability to implement it for the low-income and structurally unemployed.,

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**(d), , Extract 9 highlights the factors contributing to Brazil’s recession.**

**Evaluate the policy options available to the Brazilian government to revive its economy., [9]**

, , Suggested Answer:

Brazil is suffering from recession due to falling export revenue and fall in Investments. The large government debt is also causing firms to lose confidence in the government which thereby causes firms to withdraw their investments in Brazil. In order to revive the economy, the Brazilian government can adopt expansionary monetary policy together with austerity measures. This is so that while austerity measures may induce contractionary effects on the economy to cure the problem of public debt, the expansionary monetary policy can stimulate growth and revive the Brazil economy. However, there are several factors that might limit the effectiveness of these policies.

The Brazilian government can implement austerity measures such as a rise of taxes and/or a cut in government expenditure to reduce the government debt. When taxes such as income tax or corporate taxes increase, government would be able to collect greater tax revenue. With a cut of government expenditure at the same time, the government debt would reduce. As stated in extract 9 that the high debt levels worsen investor’s confidence, such an austerity measure would restore the confidence that firms would have on Brazil government. Thus, firms are likely to increase investments in Brazil thus stimulating AD to rise  real GDP increases  revives the Brazilian economy.

However, there are limitations to the use of austerity measures to reduce government debt in to restore confidence in the economy. As stated in extract 9 that as much of Brazil’s recovery depends on the whether the government’s reforms in public spending are successful, it would infer that it is difficult for Brazil government to cut its budget as government spending

would have been planned in advance and are often essential spending such as healthcare and education. To cut government spending, it would,

, , often have to go through parliamentary debates and discussion which may take a long time to come to a decision. Thus by the time decisions were made, firms may have lost their confidence with the economy and any austerity measures would have been useless in restoring confidence back to the economy.

Furthermore, any cuts to government spending or rise in taxes would have a contractionary effect on the economy. Given that the economy is already in recession, the contractionary effect of an austerity measure may further sink the economy into deeper recession. Thus, there is a need for the Brazil government to complement the use of austerity measures with the expansionary MP to prevent such situation from happening.

The Brazilian government can also implement expansionary MP to stimulate growth in the country. By reducing i/r  COB falls  consumers are more willing to borrow and less willing to save  increase C on big ticket items. Firms are more willing to borrow as investments are more deemed more profitable with the same expected returns  increase in I. With C and I increasing  AD increases  real GDP increases  revives the economy.

However, there are limitations to the use of expansionary MP. Pessimism in firms may cause firms not to respond to lower i/r as they are not confident in the recovery of the economy. Thus, firms may deem new investments to be unprofitable and thus I may not increase  expansionary MP may not be effective in reviving the economy.

Overall, there is some evidence in Extract 9 which suggests that EMP might be effective in reviving the economy. As i/r are falling by large extent, C and I might rise as the effect of a large fall in COB outweighs the effect of pessimism by firms. Furthermore, if the reforms in government spending are done successfully, it might boost the confidence of firms in the Brazilian government managing its economy. Thus FDIs might remain in Brazil and firms might even increase their I due to the confidence of the government.

In conclusion, for recovery of Brazil’s economy to happen, recovery of global demand for commodities must take place as Brazil is still highly reliant on X for growth. As expansionary MP only boosts C and I, it might not be as effective in stimulating recovery as these components of AD might only hold a small percentage of Brazil’s GDP.

*Note:*

1. *Analysis on LT policies such as SS side policies or trade policies could also gain credit but are poor application to the context as the context hints the use of ST policies to achieve recovery.,*

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**(f) Data on GDP growth rates are no longer relevant in measuring the well- being of its citizens.” Discuss this view., [12]**

, , Suggested answers:

GDP growth rates measure the percentage change in value of final output produced within the geographical boundary of the country, regardless of

factor ownership before depreciation in a year and after excluding the effects of inflation. While it is a useful data in assessing the change in material aspect of standard of living, it is limited in assessing the changes in the non-material aspect. Thus, it is important for countries to complement the use of GDP growth rate data with other data such as HDI so as to have a holistic view in assessing the overall well-being of its citizens.

When GDP growth rates are positive, it implies that a country’s real GDP has increased. The increase in real GDP means higher production of goods and services, which means more goods and services are available for consumption in the country. Furthermore, if the population growth is slower than real GDP growth, it would mean that real GDP per capita has increased. With higher real income per person, purchasing power increases. Each person can purchase more goods and services. Hence, material SOL will increase, indicating an improvement in the well-being of citizens.

However, GDP growth rates are limited in measuring the non-material aspect of SOL. Since positive GDP growth rates imply higher levels of production, it could mean that air quality could have worsened due to the increase in emissions arising from production of goods and services. Thus, while the citizens could enjoy higher purchasing power and greater quantity of goods and services available, the worsening of air quality could lead to poorer health and higher healthcare costs. Hence, data on GDP growth rates are limited in measuring the non-material aspect of SOL for its citizens. Data on air quality or pollution (e.g. Pollution Standard Index) should be complemented with the use of data on GDP growth rates. This is evident in the case of India as even though it achieves outstanding GDP growth rates as shown in Table 1, it was at the expense of the environment and quality of life.

Furthermore, GDP growth rates are limited in measuring the material aspect of SOL of its citizens as the data fails to take into account of factor incomes earned by residents overseas and non-residents in the domestic economy. Factor income includes wages, interest, profits and rent earned in this country by foreign residents and remitted abroad as well as incomes earned by domestic residents coming from abroad. As FDIs residing in the economy will remit part of their incomes back to the parent company in their home country, it would mean that these incomes are not passed down to the residents of the economy through wages or bonuses. Furthermore, residents residing abroad would remit incomes back to the home country. This would mean higher incomes for domestic households, enabling them to enjoy higher material SOL. As data on factor income is important in measuring the well-being of the citizens in the country, data on GDP growth rates is limited in representing the well-being of the citizens.

Due to the limitations of data on GDP growth rates, countries might want to consider using Human Development Index (HDI) as a better indicator in measuring the well-being of its citizens. The HDI is a composite statistic of life expectancy, education and real GNI per capita, which are used to rank countries into four tiers of human development. Together, it accounts for both the material and non-material aspects of welfare as thus is a better representation of the well-being of the citizens in the country. However, there are limitations of HDI data as it only looks at one indicator for each aspect of economic, social and demographic aspects which does not provide a complete representation of well-being of the citizens in a country. Furthermore, as the calculation of HDI requires the use of multiple data sources to formulate, accuracy of data sources is often questionable and it often take a very long time for HDI data to be made available.

In conclusion, while data on GDP growth rates has its limitations in measuring the well-being of its citizens, it is an indicator that is accessible and easily available. Thus, data on GDP growth rates are only relevant in measuring the well-being of its citizens when complemented with other data such as PSI, factor income from abroad, literacy rates and life expectancy as it would give a more holistic picture on both the material and non-materials aspect of SOL of its citizens.,