**Question 2: The Economies of India and Singapore**

**Figure 2: Gross Fixed Capital Formation1 of India and Singapore (annual percentage growth)**

14

12

10

8

6

4

2

0

-2

2011

2012

2013

2014

2015

2016

Year

India

Singapore

Percentage

***1****Gross fixed capital formation (GFCF) includes plant, machinery, and equipment purchases; and the construction of roads, railways.*

[Source: data.worldbank.org, accessed 27.08.18]

# Extract 8: Economic outlook for India and Singapore

The Indian economy has recorded strong growth in recent years, helped by trade gains, private consumption spending, positive policy actions including implementation of key structural reforms, and reduced external vulnerabilities. Inflation has remained low after the collapse in global commodity prices, a range of supply-side measures, and a relatively tight monetary stance.

Singapore has embraced a new growth model for a world of rapidly advancing digital technologies and automation. The strategy is to turn Singapore into a labour-lean economy with less reliance on foreign workers and growth based on innovation, digitalisation, and continuous investment in skills. Economic and social policies in the form of higher fiscal spending to make growth more inclusive and tackle population ageing have advanced appreciably in recent years and are still evolving, complementing the economic transformation drive.

[Sources: IMF Country Report, India, 22.02.17 and IMF Country Report, Singapore 22.06.17,

accessed 27.08.18]

# Table 2: Selected Statistics for India and Singapore, 2013 – 2016 Real GDP per capita growth, annual percentage, 2013-2016

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 2013 | 2014 | 2015 | 2016 |
| India | 5.1 | 6.1 | 6.9 | 5.9 |
| Singapore | 3.4 | 2.5 | 1.0 | 1.1 |

**Inflation, consumer prices, annual percentage, 2013-2016**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 2013 | 2014 | 2015 | 2016 |
| India | 11 | 6.7 | 4.9 | 4.9 |
| Singapore | 2.4 | 1.0 | -0.5 | -0.5 |

**Nominal wage growth, annual percentage, 2013-2016**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 2013 | 2014 | 2015 | 2016 |
| India | - | 13.4 | 10.4 | 10.3 |
| Singapore | 5.3 | 4.9 | 4.0 | 3.1 |

[Sources: data.worldbank.org, labour.gov.in and stats.mom.gov.sg, accessed 27.08.18]

# Extract 9: Chronic under-investment in Indian infrastructure

The traditional post-World War II East Asian2 growth model resembles a virtuous cycle based on: attracting foreign investments, building infrastructure and hiring cheap labour, and exporting manufacturing goods to the U.S. and other parts of the developed world. Chronic under-investments into India’s infrastructure, combined with foreign investment restrictions, however, have precluded India from adopting this traditional manufacturing export-led growth model so far. According to a June 2016 McKinsey report, India currently has an infrastructure investment gap equivalent to 0.5% of GDP; in addition, 25% of the country’s households lack access to electricity, 6% to clean water, and 82% to internet access.

*2East Asian economies consist of countries such as Japan, South Korea, China and Taiwan.*

[Sources: Forbes 22.03.17, accessed 27.08.18]

# Extract 10: India stumbles on business-friendly reforms

That India is pro-business but not necessarily pro-market is a frequent refrain. “The government wants to create jobs, not the environment in which job-creation flourishes,” says one investor. Special economic zones are set up sometimes to entice single companies. Even big foreign investors are essentially told what to do: Walmart can only open cash-and-carry stores closed to the general public, Amazon must sell mostly other merchants’ goods rather than its own, and so on.

Evidence of the mistrust of markets is abundant. Indian farmers need more fertiliser, but imports are taboo and price controls discourage investment in new factories. No matter: the government has leaned on Coal India and a power utility, of all companies, to try their hand at it. If venture capitalists are wary of funding Indian startups, the state will do it in their stead, badly. A government fund launched five months ago for this purpose has so far made just one investment.

[Source: The Economist 25.06.16, accessed 27.08.18]

# Extract 11: Disruptive change weighs on the Singapore economy

The slowdown in Singapore’s growth is the result of a confluence of short-term cyclical headwinds, as well as longer-term structural issues.

The world economy has yet to completely shake off the vestiges of the global financial crisis and continues to lack a strong growth driver. This is the result of an "absence of a meaningful rebound in consumer confidence globally, which is weighing on investment and hiring decisions", says CIMB Private Bank economist Song Seng Wun.

"Singapore is caught in that crossfire," he adds, noting that the Republic's key trading partners have all been grappling with their own sets of challenges. World oil prices had been fairly stable from 2010 until mid-2014, at around US$110 a barrel. But they have almost halved since, plunging the oil and gas industry into a crippling slump. Companies in Singapore have not been spared the effects of this protracted downturn

But some economists say the slowdown is not merely cyclical. Prime Minister Lee Hsien Loong said in his National Day Rally speech in August that disruptive change is the "defining challenge" facing Singapore's economy. Technology has transformed almost every industry - from food delivery to manufacturing. These developments have left both challenges and opportunities in their wake, most obviously in the labour market. There are thousands of jobs waiting to be filled in growing sectors like IT, precision engineering, education and healthcare. But many workers who have been laid off lack the necessary specialised skills required in these roles.

[Source: The Straits Times 30.10.16, accessed 27.08.18]

# Questions

1. With reference to Figure 2 and Table 2:
	1. Compare the gross fixed capital formation over the period 2013-2016 between India and Singapore. [2]
	2. Explain a possible reason for the trend of India’s gross fixed capital formation growth over the period 2013-2016. [2]
	3. Using a PPC diagram, explain an opportunity cost arising from a country’s decision to allocate more resources to investment spending. [4]
2. Explain the meaning of real GDP per capita. [2]
3. How far does the data in Table 2 allow one to conclude whether the average Indian or the average Singaporean is likely to experience a larger improvement in living standards over the period 2013-2016? [7]
4. Using AD/AS analysis, explain how a collapse in commodity prices (Extract 8) and a relatively tight monetary stance (Extract 8) have kept inflation low in India. [7]
5. Extract 11 suggests that slowing growth in Singapore is due to a ‘confluence of short- term cyclical headwinds, as well as longer-term structural issues’. Discuss the relative importance of cyclical and structural factors in causing growth to slow down. [9]
6. India has progressed towards a free-market economy that saw the government introduce policies that included a reduction of taxes and subsidies, removal of price controls and opening up domestic markets for foreign investment. The International Monetary Fund says India also needs active government intervention to increase infrastructure spending.

Assess the case for a greater reliance on the free market, rather than government intervention, to achieve economic growth and low unemployment. [12]

## [Total: 45]

## Question 2 – Marking Guide

2(a), **With reference to Figure 2:,**

2(a)(i), **Compare the gross fixed capital formation over the period 2013- 2016 between India and Singapore.**

It should be observed from Figure 2 that both countries recorded an overall increase in the level of gross fixed capital formation over the period 2013-2016, given by the positive growth rate (albeit a negative growth rate for Singapore in 2016) **(1)**.

The next statement may be to compare the rate of increase in GFCF for both countries. GFCF in India expanded at an increasing rate while GFCF in Singapore grew at a decreasing rate (1)

2(a)(ii), **Explain a possible reason for the trend of India’s gross fixed capital formation growth over the period 2013-2016.**

Following consecutive years of a decline in GFCF growth, India experienced a revival in investment spending over the period 2013- 2016 characterised by higher rates of year-on-year increase. There are many different possible reasons to account for such a trend. Any reason with valid economic reasoning should be accepted. One possible reason may have to do with a fall in interest rates, though the ‘relatively tight monetary stance’ in Extract 8 might not support such a view. Other possible reasons include government policies toward state-led investment spending, improved market prospects or business environment that lifted the profits expectations of firms, or favourable domestic or external factors that have encouraged private sector investment. For e.g. an increase in external demand (trade gains) may contribute to a pick-up in manufacturing activity reliant on capital- intensive production in India, the effect of which is to spur firms to spend more on capital goods to support the output expansion.

2(b), **Explain the meaning of real GDP per capita.**

2(c), **How far does the data in Table 2 allow one to conclude whether the average Indian or the average Singaporean is likely to experience a larger improvement in living standards over the period 2013-2016?**

, Definition of standard of living in terms of the material and non-material aspects of well-being.

, A sustained increase in real per capita GDP over the years, given by the robust growth rates, means that Indian residents on average enjoyed a higher level of real income which made it possible to purchase a larger quantity of goods and services, thus allowing for improvements in their livelihoods. Compounded over time, that growth rates remained consistently above 5% indicates that there was a significant improvement in living standards. In comparison, the rate of real GDP per capita growth for Singapore was much lower over the same period.

, Despite the elevated rates of inflation, real wage growth (nominal wage growth adjusted for the effects of inflation) for India exceeded that of Singapore, considering the impressive nominal wage growth for the former. Since real wage is a direct measure of purchasing power, on this note, the average Indian seems to have experienced a larger improvement in living standards over the period.,

, As a measure of the true value of output or income, national income statistics (real GDP per capita) have limitations to do with:

* non-marketed or non-transacted output that may be significant in less developed countries as well as output sold in underground markets may not be included
* improvements in the quality of goods and services are not taken into account

value of negative externalities, such as pollution and other undesirable by-products of production or consumption is not accounted for,

, In addition, income statistics or wages may be inadequate as measures of standards of living. The inadequacies include:

* use of real GDP per capita and real wage growth as an indicator of average output/income or average wage growth per person

relevance of other economic information such as income distribution, levels of education & health, life expectancy, leisure time, as well as quality of life factors such as the crime rate, a sense of security and peace arising from relations with other countries, well-functioning institutions (free of corruption), stress levels from working conditions, the degree of political freedom etc. to account for SOL adequately.,

2(d), **Using AD/AS analysis, explain how a collapse in commodity prices (Extract 8) and a relatively tight monetary stance (Extract 8) have kept inflation low in India.**

A collapse in commodity prices means that prices of agricultural commodities and non-agricultural commodities such as metals (copper, iron ore), crude oil etc. have taken a tumble. Given that India imports a significant quantity of these items and since these raw materials are widely used as factor inputs across different sectors and industries, the decline in commodity prices will lower firms’ production costs and cause AS to increase **(2)**. Candidates may also explain that there may be other more significant cost-push factors giving rise to a fall in AS, in which case, the effect of the decline in commodity prices may be to moderate the fall in AS to bring about a smaller leftward shift. Where explained appropriately, such an approach should be rewarded.

The effect of a collapse in commodity prices may also be to cause a fall in the prices of agricultural commodity exports from India. Given that demand is likely to be price-inelastic, a fall in price will result in a less than proportionate increase in quantity ceteris paribus, giving rise to a fall in export revenue. This will have the effect of lowering (X-M) and hence reducing AD, holding everything else unchanged. A relatively tight monetary stance has to do with the Reserve Bank of India (RBI) opting to raise interest rates or to keep interest rates at elevated levels, likely due to heightened inflationary expectations. This

will have the effect of dampening private consumption and investment, **7**, spending **(2)**. Given that domestic demand is likely to be buoyed by robust growth in industrial and manufacturing activity, including higher household spending spurred by wage growth, the resultant effect may be a smaller magnitude of increase in AD, in which case, the increase in GPL via the multiplier effect will be reduced.

**1 further mark** for *explaining* the combined effect of the factors on inflation.

The combined effects of both AD and AS shifts on the GPL should be clearly explained in relation to how inflation is kept low **(1)**. Depending on the approach taken by candidates, this may be to explain that the increase in GPL has been moderated by either a fall in AS in combination with an increase in AD OR a lower resultant increase in AD and fall in AS, the magnitude of both shifts would otherwise have been more pronounced if not for the two factors.

(e), **Extract 11 suggests that slowing growth in Singapore is due to a ‘confluence of short-term cyclical headwinds, as well as longer- term structural issues’. Discuss the relative importance of cyclical and structural factors in causing growth to slow down.**

*Question Analysis:*

*The severity of the recession triggered by the 2008 financial crisis and the sluggishness of the subsequent recovery (including the slowdown in growth of economies relatively unaffected by the events) have raised questions about the relative weight of structural and cyclical factors that may impact the growth and employment in an economy. A small and open economy like Singapore is spared from neither. Cyclical factors have to do with the upturns and downturns of the economic cycle of expansion and contraction. While cyclical factors tend to be relatively short-lived and may be easily offset by an appropriate fiscal or monetary stance (e.g. fiscal and monetary stimulus during periods of recession), structural factors are more deep-seated and long-lived and are not easily overcome by such policies. The latter is commonly associated with the ‘supply-side’ of the economy, which determines a country’s productive capacity (recall PPC and the vertical segment of the AS curve). These factors include infrastructure, quality institutions, workforce, level of education and training, labour and goods market efficiency, financial market development, extent of technological readiness, market size etc. Given Singapore’s dependence on external demand for its exports, cyclical factors to do with an economic downturn in the economies of her major trading partners may cause export demand growth to slow and weigh on Singapore’s economic growth. However if Singapore’s market size (including foreign markets) is affected by a fall in trade volume due to China’s rebalancing of its economy (transition towards domestic consumption away from investment as a source of growth will cause the overall level of imports to fall) or if Singapore embraced a growth model characterised by shift towards innovation and techno*, *are structural in nature. The relative weight of the factors will then depend on the magnitude and duration of the cyclical and structural shocks, as well as, the ability of the government to provide an effective policy response to mitigate the effects (e.g. drag on growth and job creation).*

Slowing growth to do with a lower rate of increase in real national income.

Cyclical headwinds have to do with the ‘absence of a meaningful rebound in consumer confidence globally’ that may explain the lack of a significant pick-up in consumer and investment spending as well as the slump in oil prices, among other possible factors. Firms and households in the economies of Singapore’s major trading partners may hold back spending in the face of economic uncertainties and this translates to slower export growth for Singapore. Depressed prices of oil, largely a result of a slowdown in global growth, would also have caused a contraction of revenues for firms in oil and gas-related sectors in Singapore. This would make it difficult to sustain production and firms will be forced to cut back output and lay off workers. The net effect may be a smaller magnitude of increase in aggregate spending for Singapore, depending on how other components of AD may have changed.

Structural factors include government policies (e.g. foreign worker levy hikes, incentives to promote innovation and enterprise) to undertake economic restructuring to shift to a growth model underpinned by

innovation and technological utilisation, as well as issues to do with weak productivity growth, loss of competitiveness, rising inequality among businesses in adopting new technologies or exploiting technological developments, shrinking labour force etc. These may either add to short-term cost, result in the closure of less competitive firms or contribute to rising structural unemployment that will either cause AS to decrease or limit the expansion of productive capacity, including possible impacts on AD, the effect of which is to dampen growth.

2(f), **India has progressed towards a free-market economy that saw the government introduce policies that included a reduction of taxes and subsidies, removal of price controls and opening up domestic markets for foreign investment. The International Monetary Fund says India also needs active government intervention to increase infrastructure spending.**

**Assess the case for a greater reliance on the free market, rather than government intervention, to achieve economic growth and low unemployment.**

Explanation of the role of government intervention to do with infrastructure provision, investment in human capital, macroeconomic stabilisation, provision of a social safety net etc. Education and health have significant external benefits, thus calling for government intervention (such as direct provision) that increases the consumption of both.

Education and health are major factors behind increases in productivity that contribute to economic growth. Where the private sector may not be able to provide for, governments may need to invest in human capital to address emerging skill gaps and to equip workers with relevant industry skills that are in demand. Infrastructure as a type of physical capital, includes water supplies, sanitation and sewerage, power, communication, transportation, roads, irrigation, and many others. All of these play a very important role in promoting economic growth, apart from a direct contribution to improved standards of living. Therefore, there is a strong role for governments in order to ensure the provision of the appropriate kinds of infrastructure, with the appropriate access by the population. The dire need for such access is clearly evident in the case of India, where the severe shortfall in infrastructure expenditure has prevented the country from reaping the benefits of a transition to a free-market economy.

Macroeconomic stabilisation is also critical to the creation of a conducive and stable environment for consumption and investment spending. This may take the form of appropriate fiscal or monetary stances as well as exchange rate intervention. The Singapore government adopts an exchange-rate- centred monetary policy that allows for a gradual and modest appreciation of the domestic currency, which effectively allows the government to mitigate the onset of inflation pressures via AD and AS channels. This has helped to keep inflation rates relatively low and achieving price stability is fundamental to Singapore’s reliance on exports and foreign investment as sources of growth. To counter the effects of rising income disparities and the resulting impact on growth, governments also have to intervene with the provision of a social safety net as well as the implementation of