



NYJC

TUTORIAL QUESTIONS

How the Macroeconomy Works Economic Problems – Economic Growth

Economic Problems – Economic Growth

Essential Question:

Should the pursuit of economic growth be the main macroeconomic objective of a government?

Key Questions:

1. **What is economic growth and how do we measure it?**
2. **What is aggregate demand (AD) and aggregate supply (AS) and what are their key determinants?**
3. **What are the sources of economic growth?**
4. **What are the benefits and costs of economic growth to an economy?**
5. **How can a government pursue economic growth?**

Review on: Economic Problems – Economic Growth

Below are general issues you need to know before attempting the tutorial questions. Please put a tick in the column, to indicate that you are aware of the issue and understand it clearly. Do revise the issues before attempting the essay and case study questions.

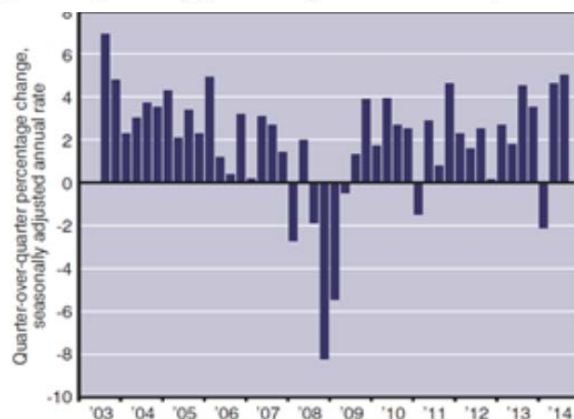
Economic Problems - Economic Growth	Tick
1. What is aggregate demand and aggregate supply? What are their key determinants?	
2. What is economic growth and how is it measured?	
3. Distinguish between sustained growth, sustainable growth and inclusive growth	
4. What is a recession?	
5. How can AS/AD be used to illustrate economic growth in an economy?	
6. What is the significance (effects) of a falling or rising economic growth?	
7. How can the economic growth rate be used to assess the economic performance of a country?	
8. What are the limitations of using the economic growth rate to assess the economic performance of a country?	
9. How can demand side policies be used to achieve economic growth?	
10. How can supply side policies be used to achieve economic growth?	
11. How will the size of multiplier affect the effectiveness of government policies?	
12. How can labour productivity impact economic growth?	

SECTION 1 – Economics ALIVE!

Article #1: The US and the Recession

The economic strength of the US economy has been an issue of much debate in recent years. One of the main indicators of national economic strength is the performance of Gross Domestic Product (GDP) (Figure 1).

Figure 1: Quarterly growth figures of US GDP, 2003 to 2014



Source: <http://business.financialpost.com/investing/dow-jones-storms-past-18000-for-first-time-as-u-s-economy-grows-at-fastest-pace-in-11-years>

In December 2008, against the background of severe economic difficulties and the prospect of financial collapse, the Federal Reserve (the Central Bank in the US) launched the unorthodox policy of quantitative easing (QE). This involved the electronic creation of money. The Federal Reserve then used it to buy financial assets, directly and indirectly from commercial banks, financial institutions and the private sector. Nearly six years later after \$4.5 trillion of asset buying the policy was brought to an end.

Source: Adapted from Economics Today, January 2016

Article #2: Singapore is first East Asian country to slip into recession

The first decade of the 21st century ended with a bleak world economic outlook following the 2008–2009 global financial crisis, which was headlined by the collapse of American investment bank Lehman Brothers in September 2008. Lack of oversight has shown up as a major weakness in the financial industry since the collapse of the United States' sub-prime mortgage market, as certain banks and investment firms have only recently discovered the extent of complicated, high-risk instruments on their balance sheets.

By the third quarter of 2008, the banking crisis in the United States (US) and its ripple effects had greatly stressed the Singapore economy, causing it to be the first country in East Asia to succumb to recession. It was hailed as Singapore's worst ever recession.

News of massive losses incurred by the country's sovereign wealth funds, Government Investment Corporation of Singapore and Temasek Holdings, through wide exposure to US "toxic assets" raised public furore. Ordinary citizens who had poured their life savings into financial products such as Lehman's Minibonds and DBS High Notes became angry when their investments soured, and they clamoured publicly for redress from banks and brokerages that had sold them the products. At the centre of the minibond fiasco was the Development Bank of Singapore (DBS), which took the drastic step of retrenching 900 staff in November 2008 to cut costs. The move was criticised as being sudden and pre-emptive by then Labour chief Lim Swee Say. Other local companies and businesses

resorted to wage cuts, wage freeze, hiring freeze, shorter working hours and even compulsory leave to ride out the crisis.

To help Singapore businesses and workers cope with the economic downturn, the government pledged S\$2.9 billion in November 2008 and a further S\$20.5 billion Resilience Package in January 2009. The Singapore economy weathered the financial storm better than feared with Prime Minister Lee Hsien Loong announcing in August 2009 that “the worst is over for the Singapore economy” and that “the eye of the storm has passed”. In November, the Ministry of Trade and Industry declared that the recession was effectively over and projected a growth forecast of between three and five percent in 2010. The economic figures achieved in 2010 defied gloomy predictions made the year before when the recession was in full steam.

Source: Adapted from Today, April 2008 and National Library Board online resource guide, October 2008

Discussion:

(a) Identify and explain the period of recession in Figure 1.

Recession involves two consecutive quarters of negative growth. This happens over the period of the third quarter of 2008 to the end of the second quarter of 2009. The other three quarters of negative growth occur singularly, so do not constitute a technical recession. The periods with consecutive years of falling positive growth also do not qualify.

(b) Compare the source(s) of recession in US and Singapore in 2008.

- “financial collapse” (article 1) and “lack of oversight has shown up as a major weakness in the financial industry” (article 2) → sources of recession in US are from $\downarrow C$ and $\downarrow I$.
- “banking crisis in the United States and its **ripple effects** had greatly stressed the Singapore economy” (article 2) → sources of recession in Singapore are from $\downarrow (X-M)$ and $\downarrow I$ (FDI)

(c) With reference to Article 1, explain how “quantitative easing” can be used as a tool to counter recession in the US.

At this juncture, it is sufficient for students to explain the workings of QE like an expansionary monetary policy to counter the recession. Tutors may choose to go further to examine the rationale of QE (interest rates were already near zero).

- (d) With reference to Article 2, explain the policy undertaken by the Singapore government to help the economy cope with the recession.

Resilience Package – intended to be a short-run supply side policy to help firms cope with costs problems during a recession. (illustrate with AD/AS diagram for students to visualise how this helps to “weather the financial storm better”)

- (e) Why do you think the US and Singapore governments have chosen different policy tools in light of the recession? Do you agree with the policy choices?

*Learning point for students: even though 2 countries may be facing the same problem of recession, it is important to identify the **root causes** in order to provide the appropriate remedies according to the contexts of the countries. Cannot have a one-size-fits-all policy.*



1. Should economic growth be the main priority of all governments?
2. Are demand-side or supply-side policies more effective in promoting economic growth?
3. How may strategies adopted to promote economic growth be in conflict with other macroeconomic objectives of the government?

SECTION 2 – Case Study
[Suggested Answer on Page 6-18T]

Economic Growth on a Rapid Scale

Table 1: Selected Economic Statistics, 2010

	China	Singapore
Annual real percentage growth in GDP	10.4	14.8
Rate of inflation (%) (Consumer prices)	3.3	2.8
GDP per capita (US\$)	4, 433	41, 987
Life expectancy at birth (years)	73	83
*Carbon emissions per capita (tons)	6.2	8.5

Source: World Bank Development Indicators and Singapore Statistics

* Estimated figures

Extract 1: Cautious outlook even as Singapore records double-digit growth

Singapore's growth accelerated to a record 18.1 percent pace in the first half of 2010, spurring the currency and putting the island on course to overtake China as Asia's fastest-growing economy this year.

A year after Singapore exited its worst recession, tourists are arriving in record numbers and companies are boosting hiring. The expansion is part of a rebound across Asia that has prompted South Korea, Taiwan and India to raise interest rates to temper inflationary pressures, even amid concerns that Europe's debt crisis may impair global growth.

In Singapore, economic expansion this year has fueled prices. "Rising food, transport and housing costs, compounded by escalating wage pressures, will likely keep inflation above 4 percent in early 2011," said Chua Hak Bin, a Singapore-based economist at Bank of America Merrill Lynch. The rising inflation rate has prompted the Monetary Authority of Singapore to seek a "modest and gradual appreciation" of the Singapore dollar. Since 1981, Singapore has been using the exchange rate instead of the interest rate to conduct its monetary policy as it is the most effective tool for a small and open economy.

Can the rebound in the economy last? Singapore's dependence on global trade may mean it's unlikely to escape the impact of any renewed slowdown. In the European Union, domestic demand remains depressed as concerns over the sovereign-debt crisis persist. The implementation of fiscal austerity measures to cut government budget deficits may further weaken this. The weakening of the euro against key trading partners will also dampen import demand in the European Union, clouding the outlook for rebound. Signs of a slowdown in the labour market in the U.S. have affected consumer confidence, and sluggish final demand has led to a moderation in manufacturing in Asia. This is because Asia remains deeply connected with US and EU as export destinations for final goods assembled in low-cost countries.

However, this does not mean that export-dependent Singapore will be left with no options. Whether it can ride out the global downturn and emerge relatively unscathed will now critically depend on its ability to boost its competitiveness by re-engineering its growth strategies.

Source: Adapted from Bloomberg News, 14 July and 23 Dec 2010

Extract 2: A brave new growth path

Between 2004 and 2007, Singapore's economy expanded at fiery rate of 8.2 per cent a year. But this was driven by a deluge of foreign workers and foreign capital, while productivity grew a mere 1 per cent per year in the last decade. Growth through cheap labour has been an 'easy route', while restructuring the economy and retraining local workers to increase productivity will be a more difficult journey. In spite of this, switching to productivity-driven growth is critical to sustain our economic growth in the long run. A highly-productive economy means that we are able to produce more goods and services with the same amount of resources, thereby creating new wealth for the economy. If our industries are productive, Singapore will also remain competitive regionally in attracting foreign companies. Businesses can also achieve higher revenue, leading to higher profits and higher wages.

Whatever the costs of switching to productivity-driven growth, the risks of not doing so are higher as the current growth path is unsustainable. Restructuring Singapore's economy will be an uncertain exercise – not all businesses will survive, and workers in industries that see a shake-out may lose jobs. But when the ultimate aim is higher incomes for all, the challenge should be worth undertaking.

Source: Adapted from *The Straits Times*, 4 February 2010 and www.enterprisene.gov.sg

Extract 3: The importance of economic growth

Several economists have suggested that Singapore aim for slower growth to ease the tight labour market and to make it easier to narrow the wage gap and cut the inflow of foreigners. However, in defence of his government's economic strategy, Prime Minister Lee Hsien Loong said that economic growth must remain a central plank if Singaporeans want to improve their lives. He rebutted the idea of slower growth as a way to ease social strains. If Singapore's growth slowed, investments would fall, jobs would become scarcer and unemployment would rise. Every society has to balance economic imperatives and social needs. Singaporeans have to understand what is achievable, what the options are, and what trade-offs we have to make.

Source: *The Straits Times*, 9 June 2012

Extract 4: Growth and the environment

'In China, the conflict between humanity and nature has never been as serious as it is today,' said the environment minister Zhou Shengxian. The depletion and deterioration of resources and the environment have become serious bottlenecks constraining economic and social development. In an online discussion, the premier, Wen Jiabo said, 'We absolutely cannot again sacrifice the environment for high-speed growth. Blind development creates over-capacity and put greater pressure on the environment and resources. That economic development is unsustainable.'

A report by Tsinghua University noted that from 2000 to 2010 China's energy demand has surged by 220% compared to a world average of 20%. Since 2006, it has accounted for 75% of the global increase in coal consumption and 60% of the increase in oil use.

He Jiankun, director of the low carbon energy lab at Tsinghua University said that China needs to consider quality and efficiency of economic growth in the 12th five-year plan. He argued that to achieve this, China must expand family consumption and the service sector, and rely less on energy-intensive infrastructure investment and manufacturing for export. He estimated that for every one percentage point fall in the investment share of the economy and one percentage point rise in consumption share, the energy intensity of the economy would be cut by 0.45%.

Source: *Guardian.co.uk*, 28 February 2011

Questions

- (a) Identify the country with the higher nominal GDP growth. [1]
- (b) (i) Explain why Singapore's monetary policy is centred on the exchange rate instead of the interest rate. [3]
- (ii) With reference to extract 1, explain how an appreciation of the Singapore dollar would help to 'temper inflationary pressures'. [4]
- (c) Analyse the macroeconomic impact of 'a deluge of foreign workers and foreign capital' on the Singapore economy. [6]
- (d) With reference to the extracts, discuss the view that 'switching to productivity-driven growth is critical to sustain our economic growth in the long run'. [8]
- (e) In the light of the issues raised, assess the desirability of rapid economic growth. [8]

[Total: 30]

CSQ2: Eurozone Crisis – Within and Beyond
[Suggested Answer on Page 6-21T]

Table 1: Budget Position as a percentage of GDP

	2010	2011	2012
India	-7.3	-7.8	-8.4
Spain	-9.7	-9.4	-10.6
Germany	-4.2	-0.8	0.2
Greece	-10.8	-9.6	-6.9
UK	-10.0	-7.9	-6.5
Singapore	7.7	9.5	2.0
China	-0.7	0.1	-2.0

Adapted from OECD Economic Outlook No. 92 as of December 2012

Table 2: GDP figures (US\$ billions)

	2010	2011	2012
India	1,710	1,842	1,872
Spain	1,380	1,476	1,349
Germany	3,284	3,600	3,400
Greece	292	289	245
UK	2,256	2,444	2,435
Singapore	217	245	254
China	5,930	7,321	8,227

Source: Data.worldbank.org, 2012

Table 3: Human Development Index

	2010	2011	2012
India	0.547	0.551	0.554
Spain	0.884	0.885	0.885
Germany	0.916	0.919	0.920
Greece	0.866	0.862	0.860
UK	0.874	0.875	0.875
Singapore	0.892	0.894	0.895
China	0.689	0.695	0.699

Source: United Nations Human Development Reports, 2012

Extract 5: Eurozone's Second Crisis: Inflation at Six Month High

As if the recession is not bad enough, the Eurozone is hit with another crisis.

According to Eurostat, prices in the Eurozone were 2.7 per cent higher in September 2012 compared with the year before, and up from the previous month's 2.6 per cent rate. Eurostat did not provide any reasons for the increase as the figure was only a preliminary estimate, although higher energy costs are likely to blame. Economists believe that a sales tax in Spain could have also contributed to the increase.

The increase will likely prove to be another headache for European Central Bank (ECB) rate setters in the run up to their next policy meeting. The ECB has had to contend with a faltering eurozone economy and turbulent financial markets in trying to stick to its mandate of keeping inflation just below two per cent.

Six Eurozone economies¹ are in recession and more are expected to follow in coming months. The Eurozone economy has struggled recently as the region's debt crisis has knocked investor and consumer confidence and caused governments to introduce tough austerity measures.

Many believe that quantitative easing measures would help the Eurozone economy pick up. Usually, central banks try to raise the amount of lending and activity in the economy indirectly, by cutting interest rates. But when interest rates can go no lower, a central bank's only option is to pump money into the economy directly. The central bank does this by buying assets - usually government bonds. The institutions selling those bonds will then have "new" money in their accounts, which then boosts the money supply.

A number of economists forecast another interest rate cut this year from the current record low of 0.75 per cent. "We continue to see the ECB leaving policy rates unchanged at next week's meeting – a view that is (at the margin) reinforced by this latest increase in inflation," said James Ashley, an economist at RBC Capital Markets.

Adapted from European Business News Portal, 2012

Extract 6: Living beyond our means

The UK and US's governments face a conundrum. To achieve economic recovery, aggregate demand needs to expand. But the government is introducing tough austerity measures to reduce the size of the public-sector deficit and debt; exports are being held back by the slow recovery, or even return to recession, in the Eurozone and the USA; and investment is being dampened by business pessimism. For recovery, High Street spending needs to rise.

But herein lies the dilemma. For consumer spending to rise, people need to save less and/or borrow more. But UK and US saving rates are already much lower than in many other countries. Also, household debt is much higher in the UK and USA. This has been largely the result of the ready availability of credit through credit cards and other means. The government is keen to encourage people to save more and to reduce their reliance on debt – in other words, to start paying off their credit-card and other debt. But this will hardly help recovery.

Adapted from John Sloman, Economics

Extract 7: Going beyond the Eurozone

The outcome has been as expected: Two years into the crisis, at the mid-year mark in 2012, Europe is indeed in deep denial and recession, and uncertainty looms large in both its policy spheres and decision-making ability.

In Asia, especially China has been impacted only modestly by the slowdown, and is now positioned to begin a consolidated phase of growth leadership in Asia. Singapore, Hong Kong and Taiwan – the region's most open or export-dependent economies – are likely to take the biggest economic hit and India's foreign trade account is hovering around a negative \$10 billion per month. Foreign indirect investment flows do appear to have come down near term, due to the widely predicted monetary tightening performance during this period has been mixed.

Adapted from The Wall Street Journal, 2012

¹ France, Italy, Spain, Finland, Portugal, Cyprus

Extract 8: How can the world move forward?

The European Central Bank is banking on the lowering of interest rates and introduces a programme of quantitative easing.

This plan may help some states but will, of course, be terrible for Germany. Unlike the rest, Germany's economy has resurged thanks to its incredible competitiveness – Germany now runs a bigger external surplus than China. The loose monetary policy would save Italy, but the bulk of the inflation would be in Germany, where there is no spare capacity. German exports would decline and the businesses that produce them would lose out and have to sack workers.

But for Europe overall, that is ideal. Indebted countries like Greece, Italy and Spain and even the UK, need to export their way back to prosperity. For this to happen, Germany needs to start importing. The easiest way to achieve that is to make German goods more expensive – exactly what a big dose of inflation would do.

The Asian countries have their own battle at home to fight with in light of the rampant food and energy shortages. Central banks of these market countries need to determine how fast they will tighten monetary policy. In Asia, authorities have lifted interest rates to slow double-digit inflation, reduce credit growth and narrow the trade deficit. On top of that, this crisis has amplified the need for Asia countries to look beyond reliance on the Western markets for trade.

Adapted from Telegraph.co.uk, 2012

Questions

- (a) (i) Compare the budget position as a percentage of GDP of India with that of Greece from 2010 to 2012. [2]
- (ii) With reference to Table 2, how might the observation in **(a) (i)** explain the changes in national income in India and Greece? [3]
- (b) Using AD-AS analysis, explain how the Eurozone can suffer from a recession and yet still face inflation as seen in Extract 5. [3]
- (c) With reference to Extract 6, explain the possible factors that may hinder economic recovery in UK and US. [4]
- (d) Discuss how the living standards in Asian economies could be affected by the Eurozone Crisis. [8]
- (e) Assess the appropriateness of the policy options adopted by the European Central Bank and the Asian economies in solving the macroeconomic problems they are facing. [10]

[Total: 30]

SECTION 3 – Essays

SECTION 3A – Lower-Order Skills

1. Explain why economic growth is regarded as a major macroeconomic objective by most governments. [10]
[Suggested Answer on Page 6-27T]
2. Explain the factors that will affect sustained economic growth in Singapore. [10]
[Suggested Answer on Page 6-28T]
3. Explain the process whereby an increase in government expenditure can lead to a bigger change in national income. [10]
[Suggested Answer on Page 6-29T]

SECTION 3B – Higher-Order Skills

1. “The government has not pursued a ‘grow-at-all-costs’ policy. It ‘went for growth’ by making Singapore more competitive.”
Source: Mr Tharman Shanmugaratnam, The Straits Times 28.2.2008
 - (a) Explain why the government has not pursued a ‘grow-at-all-costs’ policy. [10]
 - (b) Assess the supply-side policies that Singapore government has adopted to promote long-term economic growth. [15]
[Suggested Answer on Page 6-31T]
2. The Japanese economy shrank at its fastest rate since the 2011 earthquake and tsunami in the second quarter of this year, contracting at an annual rate of 6.8%. In addition to falling exports and high government debt, spending was hit by a sales tax rise in April.
The Guardian, 13 August 2014
 - (a) Explain the likely causes of recession in Japan. [10]
 - (b) Discuss whether demand management policies are most appropriate in pursuing economic growth for Japan. [15]
[Suggested Answer on Page 6-36T]
3. Inclusive growth is economic growth that creates opportunity for all segments of the population and distributes the dividends of increased prosperity, both in monetary and non-monetary terms, fairly across society.
Source: <http://www.oecd.org>, accessed on 10 July 2016
 - (a) Explain why a government might aim to achieve inclusive growth. [10]
 - (b) Evaluate the measures adopted by the Singapore government to achieve inclusive growth. [15]
[Suggested Answer on Page 6-41T]

SECTION 3C – Challenging Essays

1. Assess the relative importance of the various components of the circular flow of income in driving economic growth in different economies. [25]
[Suggested Answer on Page 6-46T]

2. Singapore's Ministry of Trade and Industry (MTI) announced on 14 July 2010 that it expected the economy to expand by 13.0 to 15.0 per cent in 2010. The economy's real economic growth rate in 2009 was -1.3%.

Discuss whether small and open economies such as Singapore should adopt different economic policies from those of large economies in order to sustain healthy economic growth. [25]

[Suggested Answer on Page 6-49T]

3. "Our first priority is to keep the economy competitive and growing through continually upgrading and diversifying the economy to make ourselves more resilient to external shocks, strengthening ties with the vibrant Asian economies, and tapping new areas of growth."

Adapted from May Day Message 2008 by PM Lee Hsien Loong

Discuss whether economic growth should be the main objective of Singapore's macroeconomic policy. [25]

[Suggested Answer on Page 6-53T]

2017 Other JCs' Prelims – ECONOMIC GROWTH (H2)		
1	ACJC	<p>The subcommittee on Energy Resilience and Sustainable Growth proposed that Singapore should price energy to reflect its total cost. This involves exploring various options, including a carbon tax and emissions trading regimes.</p> <p>Discuss the appropriate policies that the Singapore government can adopt in order to achieve sustainable economic growth. [25]</p>
2	AJC	<p>In implementing policies to achieve its macroeconomic objectives, a government may face certain conflicts.</p> <p>Assess the effectiveness of alternative policies implemented by the Singapore government to achieve all its macroeconomic objectives. [25]</p>
3	DHS	<p>With the economy much closer to full employment now and a strong likelihood of a fiscal stimulus next year... we expect the US Federal Reserve to accelerate the pace of interest rate hikes next year.</p> <p style="text-align: right;">Paul Ashworth, Chief U.S. Economist, Capital Economics, Source: http://money.cnn.com, 15 Dec 2016</p> <p>(a) Explain the need for the US Federal Reserve to accelerate the pace of interest rates hikes. [10] (b) Discuss the view that price stability should always take priority over other macroeconomic objectives. [15]</p>
4	HCI	<p>In 2010, the Economic Strategies Committee recommended that Singapore focus on productivity-driven growth. While productivity rose initially, productivity growth was negative in 2014 and 2015. In response, the Singapore budget 2015 has extended the existing policies to drive productivity growth such as the Productivity and Innovation Credit (PIC) scheme.</p> <p>Discuss the extent to which Singapore should depend on its productivity drive to achieve its macroeconomic aims. [25]</p>
5	IJC	<p>In 2016, Singapore's GDP at 2010 prices grew by 2 per cent, the unemployment rate rose slightly to 2.1 per cent while the inflation rate stood at negative 0.5 per cent. The external demand, supported by both merchandise exports and services exports, grew at a slower pace of 1.6 per cent.</p> <p>(a) Explain how the above economic indicators can be used to assess Singapore's economic performance. [10] (b) Assess the usefulness of the above economic indicators as measures of changes in standard of living in Singapore. [15]</p>
6	JJC	<p>Discuss the view that potential trade-offs are the main reason why governments need to implement a mix of policies in order to achieve their macroeconomic aims in their economies. [25]</p>
7	MI	<p>Discuss how far the conflicts in government macroeconomic objectives depend on the openness of the economy. [25]</p>

8	NYJC	<p>It is the economy-wide productivity consequences of technological improvement, not technological improvement per se, that lifts standard of living.</p> <p>Assess the extent to which higher labour productivity are likely to improve standard of living in Singapore. [25]</p>
9	PJC	<p>In the US, Japan, UK and much of Europe, there has been no increase in real incomes over the last decade for the median household. This reflects both the intense global competition and the forces of technology that are challenging a growing range of jobs. Singapore faces the same global realities and challenges. Source: Singapore Budget 2015</p> <p>(a) Explain the impact of global competition and technology advancement on a country's aim in achieving inclusive growth. [10] (b) Assess the use of fiscal policy by the Singapore government to achieve inclusive and sustainable growth. [15]</p>
10	RI	<p>(a) Explain how an economist would assess changes in economic performance of an economy. [10] (b) Discuss whether trade-offs between macroeconomic objectives is the main consideration in the choice of policies to achieve economic growth in Singapore. [15]</p>
11	TJC	<p>China's economic rise, in which GDP grew on average 10 per cent each year for more than a decade, has come at the expense of its environment and public health. Environmental degradation also poses a serious threat to China's economic growth, costing the country roughly 3 to 10 per cent of its gross national income, according to various estimates.</p> <p>(a) Explain the likely consequences of rapid economic growth. [10] (b) Assess the possible options available to a government in attaining sustainable economic growth. [15]</p>
12	TPJC	<p>Japan has repeatedly pursued government intervention in the hope of revitalising its economy weakened by deflation, debt and ageing demographics. Japanese Prime Minister Shinzo Abe's three-pronged approach combines fiscal expansion, quantitative easing, and structural reform to boost economic growth while raising inflation to 2 percent. Source: Council on Foreign Relations, 10 February 2017</p> <p>(a) Explain the reasons why governments aim to achieve sustained economic growth, a healthy balance of payments and a low rate of inflation. [10] (b) Discuss whether conflict in macroeconomic objectives is the most important reason that underlies Japan's three-pronged approach to achieve her macroeconomic objectives. [15]</p>
13	VJC	<p>"Despite substantive efforts to re-ignite recovery, global economic growth remains low and unemployment persistently high." Source: World Economic Forum, The Global Competitiveness Report 2015-2016</p> <p>Discuss how governments ought to decide on the choice of macroeconomic policies to bring about sustained economic growth in their countries. [25]</p>

A Level Examination Questions – ECONOMIC GROWTH (H1&H2)		
1	2007 H1	(a) Explain how fiscal and monetary policy can be used to influence the circular flow of income. [12] (b) Discuss whether effective supply-side policies are the best way for the Singapore government to achieve long-term economic growth and stability. [13]
2	2007 H2	(a) 'To be considered successful, an economy needs to achieve low unemployment, low inflation and stable economic growth.' Explain this statement. [12] (b) Discuss whether fiscal policy is the most effective way for Singapore to sustain a successful economy. [13]
3	2008 H1	(a) Explain the factors that result in long-run economic growth. [10] (b) Assess the view that the Singapore government should focus on achieving economic growth as its main macroeconomic goal. [15]
4	2008 H2	Discuss the most appropriate policies that a government could adopt to encourage both actual and potential economic growth. [25]
5	2009 H2	Economic measures of the Singapore economy for 2007 indicate that GDP was \$243 billion. The current account on the balance of payments was \$59 billion in surplus. (a) Explain how you might use GDP and balance of payments data to measure the performance of an economy. [12] (b) Assess whether these economic indicators are the best measures of economic performance and standard of living in Singapore. [13]
6	2010 H1	(a) Explain one possible supply-side policy that could be used by a government as a part of its efforts to achieve the macroeconomic policy objective of non-inflationary economic growth. [10] (b) A government decides that its economy is currently operating with an unacceptably high level of unemployment. Discuss the view that its best option as a method of reducing unemployment is to use discretionary fiscal policy. [15]
7	2010 H2	The recent worldwide recession caused many governments to re-assess their use of fiscal policy in order to stimulate their stagnating economies. (a) Explain what would reduce the effectiveness of fiscal policy as a stimulus to the Singapore economy. [10] (b) Assess alternative policies that might be more appropriate in managing the Singapore economy when faced with a worldwide recession. [15]
8	2012 H1	(a) Explain two possible causes of an increase in the average standard of living in a country. [10] (b) Discuss the view that high rates of economic growth are often, but not always, desirable. [15]
9	2012 H2	Governments generally face trade-offs between different macroeconomic policy objectives. Discuss how far a government's macroeconomic policy decisions when faced with these trade-offs are affected by the extent to which the economy is open. [25]

10	2012 H2	(a) How do economists compare the economic performance of different countries? [10] (b) Assess the extent to which Singapore's economic performance is the main determinant of its population's standard of living. [15]														
11	2013 H2	Governments have aims in relation to unemployment, economic growth and the balance of payments. (a) Explain the consequences of failing to achieve these aims. [10] (b) Discuss whether failure to achieve these macroeconomic aims is more likely to be caused by domestic or international factors. [15]														
12	2014 H1	All governments have a range of different macroeconomic objectives. However, given that there are conflicts between the objectives, they need to establish priorities in order to decide which policies to pursue. (a) Describe the major macroeconomic objectives and explain the conflicts that exist between them. [10] (b) With reference to Singapore, discuss the extent to which monetary policy alone can be effective in achieving macroeconomic objectives. [15]														
13	2014 H2	<p>The following data relate to the Singapore economy in 2011.</p> <table><tr><td></td><td>\$billion</td></tr><tr><td>Private Consumption Expenditure</td><td>129</td></tr><tr><td>Gross Fixed Capital Formation</td><td>77</td></tr><tr><td>Government Consumption Expenditure</td><td>34</td></tr><tr><td>Exports of goods and services</td><td>531</td></tr><tr><td>Imports of goods and services</td><td>444</td></tr><tr><td>GDP</td><td>327</td></tr></table> <p>Source: http://www.singstat.gov.sg/stats/latestdata.html, accessed 30 January 2013</p> <p>(a) Economies consist of several key sectors such as households, firms, government and the rest of the world. Explain the relative importance of these key sectors of the circular flow of income in determining the national income in Singapore. [10] (b) Discuss the likely effects on Singapore's national income and its components when its exchange rate appreciates. [15]</p>		\$billion	Private Consumption Expenditure	129	Gross Fixed Capital Formation	77	Government Consumption Expenditure	34	Exports of goods and services	531	Imports of goods and services	444	GDP	327
	\$billion															
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GDP	327															
14	2014 H2	<p>In 2011 Singapore's GDP at 2005 prices grew by 4.9%, the total population grew by 2.5%, inflation (as measured by the consumer price index) was 5.2% and overall unemployment stood at 1.9%.</p> <p>Source: http://www.singstat.gov.sg/stats/latestdata.html, accessed 30 January 2013</p> <p>Discuss the limitations of these statistics in both assessing the change in the standard of living in the Singapore economy in 2011 and comparing it with that of other economies. [25]</p>														

15	2014 H2	<p>Since the economic crisis of 2008, rates of economic growth across the world have differed considerably.</p> <p>(a) Explain the key determinants of actual and potential economic growth. [10] (b) (b) Assess the alternative economic policies that the Singapore government could adopt to maintain a sustained rate of economic growth into the future. [15]</p>
16	2015 H2	<p>During the recent world-wide recession many European countries chose low interest rate as a monetary policy approach rather than adopting demand-led fiscal policy stimulation. At the same time, with most of these countries' governments introducing large cuts in government expenditure in order to reduce their budget deficits, a fiscal contraction actually resulted.</p> <p>Discuss which policy approach is appropriate for a country during a world-wide recession. [25]</p>
17	2016 H1	<p>(a) Explain the main advantages and disadvantages for an economy when it has a persistently high rate of economic growth. [10] (b) Discuss the extent to which a government is able to adopt an exchange rate policy that promotes economic growth. [15]</p>
18	2016 H2	<p>(a) Explain why macroeconomic policy decision-making is made more difficult by possible conflicts between government objectives. [10] (b) Assess the relative effectiveness of the alternative macroeconomic policies that the Singapore government could adopt to maintain a low rate of unemployment. [15]</p>
19	2017 H2	<p>The Singapore economy grew by 1.8% on a year-on-year basis in the second quarter of 2015, sharply lower than the 2.9% growth in the preceding quarter, the Ministry of Trade and Industry (MTI) announced on Tuesday 11 August 2015.</p> <p>(a) Explain the internal and external factors that are likely to have contributed to this slowdown in the economic growth rate. [10] (b) Discuss whether the policies aimed to increase the economic growth rate might cause difficulties for Singapore's economy. [15]</p>
20	2018 H2	<p>In April 2016, Singapore's Finance Minister Mr. Heng Swee Keat, announced that in the fiscal year 2016, total government expenditure is expected to be S\$5.0 billion (7.3%) higher than the previous year. Source: Singapore Budget 2016, accessed 3 August 2016</p> <p>Assess whether an increase in government expenditure, such as that announced in the 2016 budget, is likely to have a significant impact on Singapore's economic performance. [25]</p>

Chapter 6: Economic Growth Suggested Answers

SECTION 2 – Case Study

Suggested answers to Question 1

a) Identify the country with a higher nominal GDP growth. [1]

Singapore

b) i) Explain why Singapore's monetary policy is centred on the exchange rate instead of the interest rate? [3]

- *High import content of domestic demand which means that changes in world prices has a powerful influence on domestic prices and hence the need to use exchange rate to monitor domestic prices.*
- *As an international financial centre, Singapore allows free movement of capital into and out of the country, and as such, we are unable to control our interest rate.*

ii) With reference to extract 1, explain how the appreciation of the Singapore dollar would help to 'temper inflationary pressures'. [4]

- *Explain the direct effect of appreciation of SGD on reducing imported inflation [2]*
- *Explain the indirect effect of appreciation of SGD on reducing demand-pull inflation by reducing AD. [2]*

c) Analyse the macroeconomic impact of 'a deluge of foreign workers and foreign capital on the Singapore economy. [6]

- *Analyse the macroeconomic impact on income & employment in the short run – in terms of falling wages, increase in investment, favourable capital account balance etc*
- *Analyse impact on potential growth in the long run*

Knowledge, Understanding, Application and Analysis		
L2	Answers that provide sound analysis of the macroeconomic impact with clear explanation and evaluation	4 - 6
L1	Answers that explain the macroeconomic impact but with limited explanation and evaluation	1 - 3

d) With reference to the extracts, discuss the view that 'switching to productivity-driven growth is critical to sustain our economic growth in the long run'. [8]

Switching to a productivity-driven growth is critical to sustain growth in the long run

- *As global competition becomes more intense, foreign investment may fall. The global downturn would also lead to a fall in export demand and revenue. This means that growth cannot be sustained if Singapore relies purely on foreign residents; unless Singapore 're-engineers its growth strategies' and switch to productivity driven-growth.*
- *Explain that increasing productivity is critical to sustaining growth in the long run as it attracts investment and makes Singapore's exports more competitive*

However, switching to a productivity-driven growth involves restructuring which will result in

- structural unemployment
- Workers may also not be willing to undergo retraining

Conclusion

- It is necessary to increase productivity to achieve sustained growth in the long run but Singapore must ensure that the costs of restructuring must be carefully managed.

Knowledge, Understanding, Application and Analysis		
L2	Well-developed analysis of the reasons, and some discussion of the costs of switching to productivity-driven growth	4 – 6
L1	Undeveloped analysis of the reasons for switching to productivity-driven growth	1 – 3
E	Makes a judgement about the importance of productivity-driven growth	1 – 2

e) In the light of the issues raised, assess the desirability of rapid economic growth. [8]

Rapid economic growth brings about many benefits

- Reduces unemployment as AD increases
- Increases standard of living and reduces poverty
 - Rapid growth translates into higher household incomes → higher material SOL and reduce poverty
 - With higher incomes, households can also attain higher quality healthcare, housing, sanitation facilities, which translate into higher life expectancy as shown in table 1.
- Higher tax revenue for the government which means greater capacity to redistribute income and finance social spending

But the pursuit of rapid economic growth could also lead to undesirable impact in other economic, social and environmental aspects

- Risks of overheating
 - Rapid economic growth is mainly achieved by increasing AD at a faster pace which is not matched by an increase in the economy's productive capacity
 - Inflationary pressures set in as economy approaches full employment
 - Adverse effects of higher inflation rates (inferred from extract 1):
 - E.g. Higher cost of living → lowers SOL
- Environmental degradation and depletion of natural resources (extract 4)
 - Negative impact on SOL due to worsening of pollution levels from carbon emissions from energy-intensive manufacturing activities; dumping of industrial waste etc.
 - Rapid depletion of natural resources will become a supply-side bottleneck constraining economic growth in future
 - ➔ Even with increasing AD, the economy is unable to increase output further as there are fewer resources available
 - ➔ Firms can only raise prices with rising demand, leading to inflationary pressures in the economy
- Effects on production methods and skills (structural unemployment)
 - Growth involves changes in production. The more rapid the rate of growth, the more rapid the rate of change, leading to structural unemployment
- Rising income inequality (extract 3)
 - The benefits of economic growth may not be distributed equally amongst all income groups in society
 - In Singapore's case, rapid economic growth was due to expansion of more capital-intensive manufacturing sectors. Capital owners and highly-skilled labour thus benefitted

more from higher returns and higher wages respectively; while low-skilled labour benefitted less → worsened income inequality

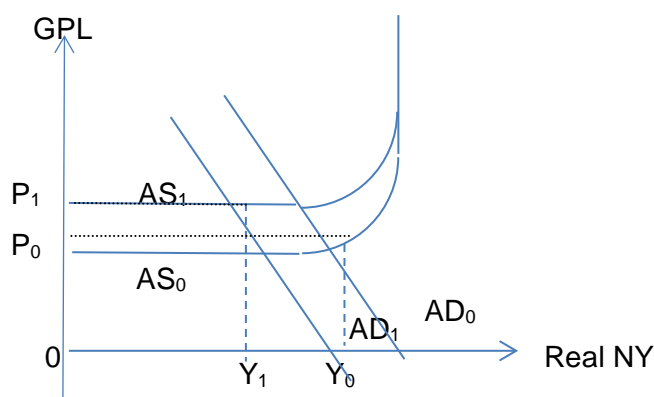
Conclusion

Weigh and give a judgement call

Knowledge, Understanding, Application and Analysis		
L2	Well-developed analysis of the costs and benefits of rapid economic growth on Singapore's economy (any 2 to 3 points, well-substantiated with data)	4 – 6
L1	Undeveloped analysis of the costs and benefits of rapid economic growth Max 2m for a well-developed analysis of only the costs or benefits of rapid economic growth	1 – 3
E	Makes a judgement about the desirability of rapid economic growth	1 – 2

Suggested answers to Question 2

(a)	(i)	<p>Compare the budget position as a percentage of GDP of India with that of Greece from 2010 to 2012.</p> <table border="1" data-bbox="316 360 1264 465"> <thead> <tr> <th></th><th>2010</th><th>2011</th><th>2012</th></tr> </thead> <tbody> <tr> <td>India</td><td>-7.3</td><td>-7.8</td><td>-8.4</td></tr> <tr> <td>Greece</td><td>-10.8</td><td>-9.6</td><td>-6.9</td></tr> </tbody> </table> <p><u>Similarity:</u> from 2010 – 2012, both India and Greece suffered from a budget deficit. [1]</p> <p><u>Difference:</u> Greece had a falling budget deficit as a percentage of GDP while India suffered from a rising budget deficit. [1]</p>		2010	2011	2012	India	-7.3	-7.8	-8.4	Greece	-10.8	-9.6	-6.9	[2]
	2010	2011	2012												
India	-7.3	-7.8	-8.4												
Greece	-10.8	-9.6	-6.9												
	(ii)	<p>With reference to Table 2, how might the observation in (a) (i) explain the changes in national income in India and Greece?</p> <p><u>Pointing out the changes in NY in both India & Greece [1]</u> India enjoyed a rise in NY while Greece suffered from a fall in NY.</p> <p><u>Linking the observation in (a) (i) to the change in NY for both India and Greece:</u> Greece's falling budget deficit could possibly imply that the government may have been adopting a contractionary fiscal policy or austerity measures. The fall in government expenditure and/or a rise in tax revenue would thus result in a fall in NY, hence accounting for the falling NY. [1]</p> <p>On the other hand, India's rising budget deficit could possibly imply that Indian government may have been adopting an expansionary fiscal policy, to raise government expenditure or reduce taxes, hence accounting for the rising NY. [1]</p>	[3]												
(b)		<p>Using AD-AS analysis, explain how the Eurozone can suffer from a recession and yet still face inflation as seen in Extract 5.</p> <p>Inflation – GPL is still rising.</p> <p>↓C and ↓I in Eurozone due to pessimism → ↓AD It is also coupled with ↑ in higher energy costs → ↑COP → ↓ in SRAS</p> <p>OR</p> <p>Sales tax (e.g. on intermediate goods and services) will also ↑ COP → cause a further ↓ in SRAS.</p> <p>Students need to point out both changes in AD & AS to show resultant rise in price level, hence Eurozone can suffer from a recession and still face the problem of inflation.</p> <p>DD reason, SS reason & reflecting rise in price level and fall in output on diagram. If no diagram is drawn, clear explanation on why there is a rise in price and fall in output is expected.</p>	[3]												



[Note: AD/AS diagram is not required.]

(c)	<p>With reference to Extract 6, explain the possible factors that may hinder economic recovery in UK and US.</p> <p>Any 2 factors. 2m to be awarded for clear explanation for each factor.</p> <p>In order to achieve economic recovery, AD needs to \uparrow (as stated in Extract 6)</p> <ul style="list-style-type: none"> • However tough austerity measures to reduce budget deficit by $\downarrow G$ and/or $\uparrow T$ \rightarrow would instead result in a fall in AD instead, hence hindering economic recovery. • High existing household debts – C cannot increase significantly especially when the UK and the US rely on domestic markets to stimulate growth. Income earned could have been used to repay debts, hence hindering economic recovery. • Business pessimism \rightarrow expectation of rate of return is low \rightarrow MEI shifts to the left \rightarrow at every interest rate, firms choose to $\downarrow I$, minimal rise in AD, assuming ceteris paribus, hence hinder economic recovery. 	[4]
(d)	<p>Discuss how the living standards in Asian economies could be affected by the Eurozone Crisis.</p> <p>SOL – students need to explain impact on material and non-material SOL & positive and negative impact on ASIAN countries and making reference to CS evidence/data.</p> <p>Impact may be negative: Explain why the impact may be negative: Eurozone Crisis could have caused a fall in material SOL in Asian countries.</p> <p><u>Students should make reference to data in Extract 7:</u> Eurozone Crisis: \rightarrow countries like Spain, Greece, UK all suffered negative growth rates. Fall in GDP would reduce countries' ability to purchase from Asian countries.</p> <p>\rightarrow Countries like India, Hong Kong, Taiwan and Singapore will suffer a fall in X revenue, fall in AD, assuming ceteris paribus, fall in countries' NY.</p>	[8]

→ fall in ability of residents in Asian countries to purchase more goods and services → fall in material SOL.

Impact may not be negative:

Not all countries are negatively hit by the fall in national income (for material SOL).

Some countries like China, as Extract 7 points out, may only have been modestly affected by the Eurozone Crisis. This could be due to China's ability to rely on her domestic sources of growth instead of exports to EU. Hence the fall in NY may only be very small and temporal. Overall material SOL may not have fallen.

Non-material SOL

Based on HDI statistics (which measure life expectancy, education and income indices) → the Asian countries reflect rising figures.

	2010	2011	2012
India	0.547	0.551	0.554
Singapore	0.892	0.894	0.895
China	0.689	0.695	0.699

Explain how life expectancy and education indicates the non-material SOL of Asian countries.

Evaluation:

Make a stand about overall impact on SOL. Overall SOL is still rising for both material & non-material. Evidence from case: Table 2 shows that Asian countries may not be as negatively affected as explained, as NY figures are still rising & HDI statistics also reflect a rise.

Hence how negative the impact of the Eurozone on Asia's countries' SOL depends on how reliant the country may be on exports to Eurozone and if the country has alternative sources of growth it can turn to (diversification of other trading partners) **OR** point out what other pieces of data would be needed in order to more holistically deduce about SOL in Asian countries.

Level (Marks)	Knowledge, Application, Understanding and Analysis
L2 (4 – 6)	For a well-elaborated answer using information from the case study. Answer elaborates on how Eurozone Crisis may have a positive and negative impact on both material and non-material SOL for Asian countries.
L1 (1 – 3)	For one-sided answer (positive or negative, material or non-material SOL) on how the Eurozone Crisis could have an impact on material and non-material SOL. Undeveloped answer with gaps in economic analysis.
E (1 – 2)	Making a judgement – the severity of the impact depends on how close the trading relationship is between Eurozone countries and specific Asian countries.

(e)	<p>Assess the appropriateness of the policy options adopted by the European Central Bank and the Asian economies in solving the macroeconomic problems they are facing.</p> <p>Macroeconomic Problems identified:</p> <ol style="list-style-type: none"> (1) Persistent budget deficit though it is decreasing. (2) Recession (3) Inflation (Eurozone – cost-push inflation; Asia – demand-pull inflation & cost-push inflation) (4) Current Account deficit (in Greece, Italy and Spain) <p>Students can bring in any 2 PROBLEMS & 2 policies (for ECB & Asia) to address. Students can combine similar problems between the countries e.g.: Inflation & recession</p> <p>European Central Bank</p> <p>Policies adopted: ↓ i/r + quantitative easing</p> <p>→ ↓ i/r → COB↓ → ↑C & ↑I → ↑AD → ↑NY → achieving actual economic growth</p> <p>→ Quantitative easing [Extract 5] → ↑Ms → ↑C & ↑I → ↑AD → ↑NY</p> <p>Policy has been appropriate given the current situation:</p> <p>→ Explain how the policy can work to solve the problem, hence the policy is appropriate given the current situation.</p> <p>→ Evidence from case: ‘The loose monetary policy would save Italy’ [Extract 8], hence justifying that the policy has been appropriate since it is anticipated to effectively solve the problem in Europe.</p> <p>→ Moreover, when Germany started importing as given in Extract 8 → assuming Germany imported more goods and services from other states in Eurozone → X revenue rose in Greece, Spain, Italy, assuming ceteris paribus → ↑AD → ↑NY</p> <p>→ Alternatively, fall in interest rates → capital flight of hot money → depreciation of currency → exports become more competitive in foreign markets and imports become less competitive domestically → ↑AD → ↑NY</p> <p>Policy may not be appropriate:</p> <p>→ If more money in circulation but no ↑ in output → might result in worsening of inflation and Europe is suffering from cost-push inflation.</p> <p>→ Conflict of policies – Quantitative easing supposedly to ↑ NY but due to business pessimism, I will not rise sufficiently to solve the problem (I is interest inelastic). Policy is inappropriate to solve the problem.</p> <p>→ Eurozone faced different economic problems as evidence from Extract 8 when Germany experienced BOP surplus while other states of Europe needed to “export its way back to success” → however ECB adopted the same policy, which may not have been appropriate to all states.</p>	[10]
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Asian Economies

Problems Identified: Cost-push inflation due to food and energy shortages (Extract 8) + trade deficit due to their trading partners in the West suffering (Extract 7).

Policies adopted:

- 1) Tighten monetary policy ($\downarrow M_s$ or $\downarrow \text{credit}$)
- 2) Trade policies

- ➔ $\downarrow M_s \rightarrow \uparrow i/r \rightarrow \uparrow \text{COB} \rightarrow \downarrow C \ \& \ \downarrow I \rightarrow \downarrow \text{AD} \rightarrow \downarrow \text{DD-pull inflation}$
- ➔ $\downarrow \text{credit growth} \rightarrow \downarrow M / \downarrow C \rightarrow \downarrow \text{trade deficit} / \downarrow C \rightarrow \downarrow \text{DD-pull inflation}$
- ➔ Signing of more FTAs beyond Western markets \rightarrow tap on the growth of other countries & reduce reliant on Western markets for growth & diversify risk.

Policy has been appropriate given the current situation:

- ➔ *In Asia, the economy has been impacted only modestly by the slowdown, and is now positioned to begin a consolidated phase of growth leadership in Asia [Extract 7].* Reiterates that policy has been appropriate and effective to address the problems, as the economy has only been impacted modestly.

Policy may not be appropriate:

- ➔ 'Singapore, Hong Kong and Taiwan – the region's most open or export-dependent economies – are likely to take the biggest economic hit and India's foreign trade account is hovering around a negative \$10 billion per month' [Extract 7]. Despite the use of policies, given the severity of the impact and how reliant these countries are on exports, the policy may not solve the problem.
- ➔ 'Foreign indirect investment flows do appear to have come down near term, due to the widely predicted monetary tightening performance during this period has been mixed' [Extract 7]. Due to pessimism/poor investor confidence, policy will not be appropriate to revive the situation in Asia.

Evaluation:

Whether the policies adopted by ECB and Asian government are appropriate depend on the root cause of the problems as well as the country implementing it. Due to the limitations of the Eurozone needing to adopt a common policy, they are unable to tackle different economic problems faced by the respective countries. Blanket measures might not be suitable or could possibly even worsen the problem of another country.

In Asia, if rampant food and energy prices are mainly due to imported cost-push inflation, the policies of tightening money supply would serve to reduce demand-pull inflation but limited in its appropriateness in tackling the root cause of the problem. In that case, an appreciation of her exchange rate might be more appropriate in reducing the inflation instead.

Level	Knowledge, Application, Understanding and Analysis
L2 (5 – 7)	<p>Thorough analysis using appropriate economic analysis (AD/AS framework) is evident throughout the answer. Clear scoping of answer to identify the problems in the countries before moving on to examine the policies. Clear link between problems and policies.</p> <p>Well-elaborated answer on how the policies suggested by ECB and the Asian economies could be adopted or are relevant in solving the identified problems. (1 problem & 1 measure to be discussed and analysed – for ECB & Asian govt)</p>
L1 (1 – 4)	Attempt to respond to the question is evident though not consistently done. Undeveloped answer and lack economic analysis (AD/AS framework) on how the policies suggested by ECB and the Asian economies could be adopted or are relevant in solving the identified problems.
E2 (2 – 3)	<p>Evaluation is thorough and based on economic analysis.</p> <p>Ability to recognise that there is a need to consider the cause of the problem and country's unique characteristics before deducing its appropriateness.</p>
E1 (1)	For unexplained evaluative comments. Mere listing of stand / weak evaluative comments.

SECTION 3A – Lower-Order Skills

1. Explain why economic growth is regarded as a major macroeconomic objective by most governments. [10]

Suggested Answer

- Explain economic growth in terms of actual growth and potential growth. Use diagrams to illustrate how actual and potential growth can be attained.
- Actual growth involves increases in utilization of existing capacity caused by increase in aggregate demand. Shown by a movement from within PPC to boundary of PPC and potential growth involves increase in the productive capacity of the country caused by increase in aggregate supply. It is shown by a shift of the entire PPC.
- Explain reasons for government wanting to achieve economic growth
 - Growth is an important avenue through which better living standards and lower rates of poverty can be achieved.
 - To create more jobs and hence reduce unemployment
 - To create the necessary wealth to provide relevant public good and improve the quality of merit good.
 - To expand productive capacity which will help to moderate increase in GPL.
- A higher economic growth will help to reduce unemployment and improve living standard. If the growth is sustained, it will also help maintain price stability and reduce poverty in the country and hence is regarded as a major objective.

Knowledge, Application, Understanding and Analysis		
L3	For a well-developed answer that explains why achieving economic growth is a major objective when compared to other macroeconomic goals.	8-10
L2	For an undeveloped explanation that explained the reasons why governments want to achieve economic growth.	5-7
L1	Mere knowledge about economic growth without explanation. List some relevant points.	1-4

2. Explain the factors that will affect sustained economic growth in Singapore. [10]

Suggested Answer

- Define sustained economic growth
- Explain actual and potential economic growth

Explain factors that promote actual growth

- If the economic outlook is promising with positive business sentiments, households and firms will be enticed to spend more thus contributing to actual growth (increase in Consumption and Investment).
- When the global economy picks up, trading partners would also import more goods and services thus giving a boost to Singapore net export earnings (increase in net exports).
- In times of a slow down in the economy or recession, the Singapore government would intervene to inject into the economy so as to stimulate actual growth (increase in G).

Explain factors that promote potential growth

- To increase the domestic supply of labour, incentives like income tax rebate were given to married female professionals with the aim to encourage them to join the labour force.
- Low personal income tax rates attracted foreign professionals and skilled workers to join our labour force and these aim to increase the growth rate of the labour input that is needed as Singapore moves towards the knowledge-based economy.
- The Singapore government also devotes relatively large amount of funds on education, and health care to build up a highly productive and robust labour force.
- The increase in foreign direct investments (FDI), especially those from the advanced countries also brought in their expertise in the various fields and assisted in the transfer of technology, management and marketing skills into Singapore.
- This helped us to improve on efficiency and the quality of products as well as the quality of her labour force, all of which are important factors towards expanding her productive capacity.
- The productive capacity of an economy will also be enhanced by improved infrastructure such as better transportation linkages and telecommunications. In addition, investment in research and development would lead to technological advancement which can increase potential growth.
- Entrepreneurs organize and co-ordinate factors of production, explore new markets, innovate and take risks in anticipation of demand. To enhance entrepreneurship in Singapore, the government has set up the Enterprise Promotion Centre, infuse promotion of entrepreneurship in our schools, change laws governing bankruptcy and provide many tax incentives and financial help to encourage budding entrepreneurs.
- Support explanation with the use of AD/AS diagram

Knowledge, Application, Understanding and Analysis		
L3	Answers show well-developed analysis of how various factors enhance actual and potential growth in Singapore.	8 - 10
L2	Answers show understanding and explanation of how various factors enhance economic growth with little or no contextualisation.	5 - 7
L1	Answers show descriptive and sketchy knowledge on various factors that enhance economic growth.	1 - 4

3. Explain the process whereby an increase in government expenditure can lead to a bigger change in national income. [10]

Suggested Answer

The process that is required here is the **multiplier process** by which the increase in government expenditure leads to a bigger change in national income. The multiplier process will cause the initial increase in government expenditure to result in a bigger change in national income. The **k** value will then determine the extent of the change in national income caused by the change in government expenditure. As such, students are expected to provide a detailed **explanation** of the multiplier process by which the increase in government expenditure can lead to a bigger change in national income using **appropriate examples** and **illustrations**.

- Define government expenditure
- Define national income
- Explain the multiplier process using appropriate examples
 - Increased in government expenditure on expanding MRT services by building more lines across Singapore.
 - Assume Singapore has $MPC = 0.50$, $MPW = 0.50$
 - Assume $MPS = 0.20$, $MPT = 0.10$ and $MPM = 0.20$
 - Assume the initial amount paid to the main contractor for the big project is 100 million SGD.
 - The effect on National Income is shown in the table below

Round	ΔY	ΔC	ΔS	ΔT	ΔM
1	100	50	20	10	20
2	50	25	10	5	10
3	25	12.5	5	2.5	5
4	12.5	6.25	2.5	1.25	2.5
⋮	⋮	⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮	⋮	⋮
Total	200	100	40	20	40

- When the government builds the new MRT railways, it immediately raises the national income of the economy by \$100m.
- The immediate effect is income of the main contractor is increased by \$100m.
- The main contractor will consume 0.50 (MPC) of his change in income i.e. \$50m saves 0.20 (MPS) of the change in income i.e. \$20m, pays 0.10 (MPT) of the change in income in tax i.e. \$10m and spend 0.20 (MPM) of the change in income on imports i.e. \$20m
- To meet the rise in the \$50m of domestic consumption, producers will increase output and employment.
- The recipients of this \$50m of income i.e. producers of these goods and services in the second round will spend \$25m on domestic goods, saves \$10m, pays \$5m in taxes and spend \$10m on imports.
- The process will continue, with each round of domestic consumption on goods being next round of income for the producers of these goods.
- Thus a long chain of extra income, extra consumption, extra savings, extra taxes and extra expenditure is set up.

- The process will come to an end when the change in withdrawal is \$100m as the initial injection of \$100m has been exhausted.
- The final change in Y is obtained by:

$$Y = \Delta AE * K$$

$$\Delta Y = \$100 * 2 \quad \text{where} \quad \Delta AE = \$100\text{m and } k = 1 / (1 - 0.50) = 2$$

$$= \$200$$
- An extra government expenditure of \$100m has created \$200m of income which is higher than the initial amount of \$100m that is spend on expanding MRT lines.
- Assume that the initial Y is \$1000m and with the change of Y of \$200m, then the new equilibrium national income is at \$1200m now.

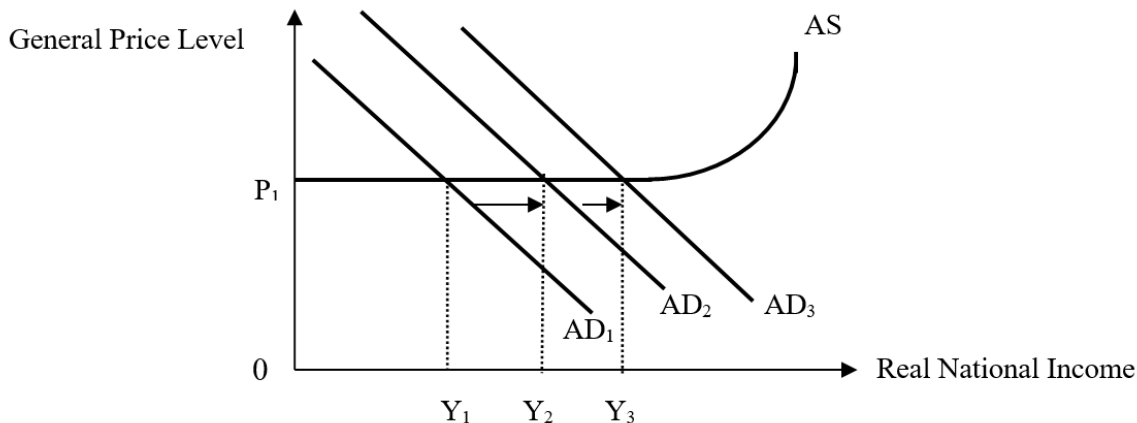


Figure 1: Multiplier process using the AD-AS model

- Conclusion
 - The initial increase in government expenditure would result in a larger change in national income due to the multiplier process which is in place to cause the change to happen.
 - The extent of the increase change in national income is dependable on the k value.
 - With a larger value of k, the initial increase in government expenditure will then result in a much larger change in national income as a result of the initial increase.
 - For example, if the k value is not 2 but 4, the initial increase of \$100m would result in a much larger change in national income to \$400m
 - ($\Delta Y = \Delta AE * K = \$100 * 4 = \$400$)
 - Thus, the k value would determine the extent of the change in national income with the multiplier process in place.
 - The value of k would then be dependable on the MPS, MPT and MPM.

Level	Descriptors	Marks
L3	Excellent explanation the multiplier process with good examples and clear illustrations to show the process that result in a larger change in national income. Extent of the increased in the national income is well explained using different k values.	8-10
L2	Clear explanation of the multiplier process with relevant examples and illustrations used to show the process that result in a larger change in national income as a result of an increase in government expenditure.	5-7
L1	Superficial explanation of the multiplier process with little or no example to illustrate the working of the process that caused an initial increase in government expenditure to result in a larger change in national income.	1-4

SECTION 3B – Higher-Order Skills

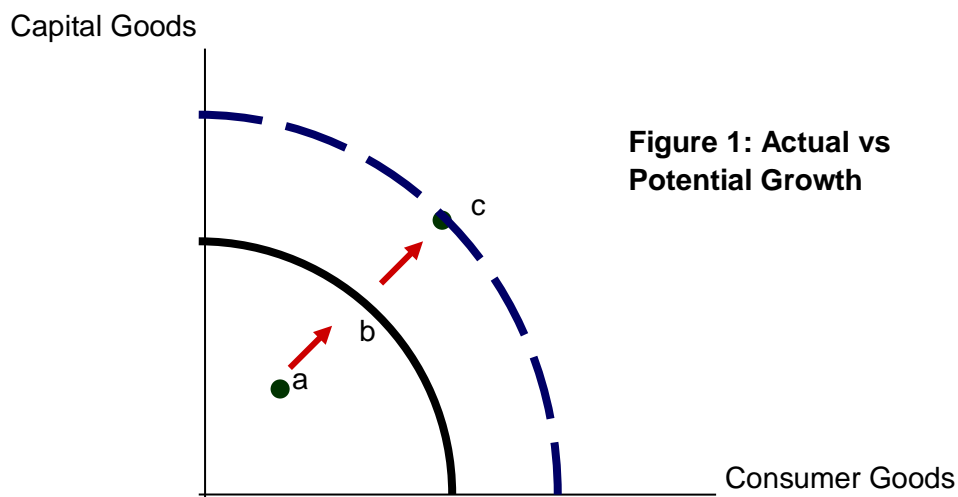
- 1 “The government has not pursued a ‘grow-at-all-costs’ policy. It ‘went for growth’ by making Singapore more competitive.”

Source: Mr Tharman Shanmugaratnam, The Straits Times 28.2.2008

- (a) Explain why the government has not pursued a ‘grow-at-all-costs’ policy. [10]
(b) Assess the supply-side policies that Singapore government has adopted to promote long-term economic growth. [15]

Suggested Answer for Part (a):

Economic growth refers to both actual and potential growth. Actual growth is a short-term concept which refers to the percentage annual increase in national income. It involves increases in the utilization of existing capacity caused by increases in aggregate demand (AD). Potential growth, on the other hand, is a long-term concept which explains the rate at which the economy could grow if all its resources were fully utilized. Hence, a government wanting to achieve higher growth will first need to ensure that the productive capacity of the economy is increased (ie. potential growth) and then ensure that this increase in capacity is utilized (ie. actual growth).



Diagrammatically, the concept of actual and potential growth can be illustrated using a Production Possibility Curve (PPC). From Figure 1, actual growth is represented by a movement of the economy from a point within the PPC (point a) to a point on the PPC (point b), while potential growth is represented by an outward shift of the PPC.

Economic growth is regarded as one of the major macroeconomic goals of the government as it could lead to improved living standards and lower rates of poverty. As real income rises, purchasing power increases, leading to higher levels of consumption of goods and services. This means a higher quantity and better quality of goods and services such as better housing is made available to the general population, thereby increasing their material standard of living.

As incomes rise, the government can also redistribute income from the rich to the poor without the rich “losing”. For example, given the progressive nature of the Singapore income tax system, people automatically pay more taxes as their incomes rise. This extra revenue for the government can be spent on programmes to alleviate poverty such as education grants and skills training for the poor. This would equip them with the necessary knowledge and skills

needed to find a job, providing them a way out of the poverty cycle and potentially narrowing the income gap between the rich and the poor.

However rapid economic growth may also incur costs. If government implements expansionary MP (cut interest rates) & FP (cut taxes and increase in government expenditure) to increase AD without any corresponding increase in output, this would result in shortages thereby driving prices up and causing inflation to rise.

This could eventually lead to an overheating economy which could adversely affect growth. (illustrate with a AD-AS diagram)

Next, to achieve growth, firms would need to invest more. To increase the level of investment, there is a need for more financing which can come from higher savings or higher taxes. Either way, present consumption will be foregone. Hence, an opportunity cost is incurred.

Growth will also require structural changes in the Singapore economy given new challenges from emerging economies like India, China and Vietnam with lower cost labour affecting our low-end manufacturing. To remain competitive, the Singapore economy is now moving towards the higher-end manufacturing, service-oriented and knowledge-based industries. Structural unemployment may arise as some Singaporeans find that their skills are no longer relevant in the new industries. As this tends to affect the lower-skilled workers who are less well off, this could potentially widen the income gap between the rich and the poor. In 2010, the Singapore economy grew by a record 14.7% but also ranked second highest in terms of the world GINI coefficient score. Rising income inequality could potentially result in social problems such as increasing crime rates as the lower income group tries to boost their income through illegal means.

Finally, growth leads to higher levels of production activities which often translate to higher levels of negative externalities especially when producers ignore the external cost of production. For example, increased production may lead to more pollution and waste, resulting in increased health-related problems causing non-material standard of living to fall. Hence, growth could lead to deterioration in living standards if the material benefits of growth are offset by the qualitative aspects.

The government has not pursued a “grow-at-all-costs” policy as it needs to weigh up the overall benefits of pursuing growth against the overall costs involved. They would pursue growth only if the overall benefits outweigh the overall costs. In deciding to pursue economic growth, the government should at the same time implement policies to address the adverse effects of growth.

Knowledge, Application, Understanding and Analysis		
L3	Uses analysis to underpin the discussion on the negative consequences (when costs outweigh the benefits) from growth at all costs. Did acknowledge the benefits from growth initially and at least referred to Singapore in passing.	8 -10
L2	Explanation on the negative outcome of growth at all costs with 2-3 specific examples of such but without an attempt to explain benefits. Explanation on the negative outcome of growth at all costs with 2-3 specific examples of such and at least state the benefits of economic growth.	5 - 7
L1	Mere knowledge without explanation. List some relevant points.	1 - 4

Suggested Answer for Part (b):

Supply-side policies are policies that aim to reduce cost of production and improve productivity and efficiency so as to affect income, employment and prices. They alter the aggregate supply in the economy.

To promote long-term economic growth, long-run supply side policies which aim to increase the productive capacity of the economy, can be used. These policies work to increase the quantity and quality of factors of production such as land, labour, capital and entrepreneurship and to drive technological progress.

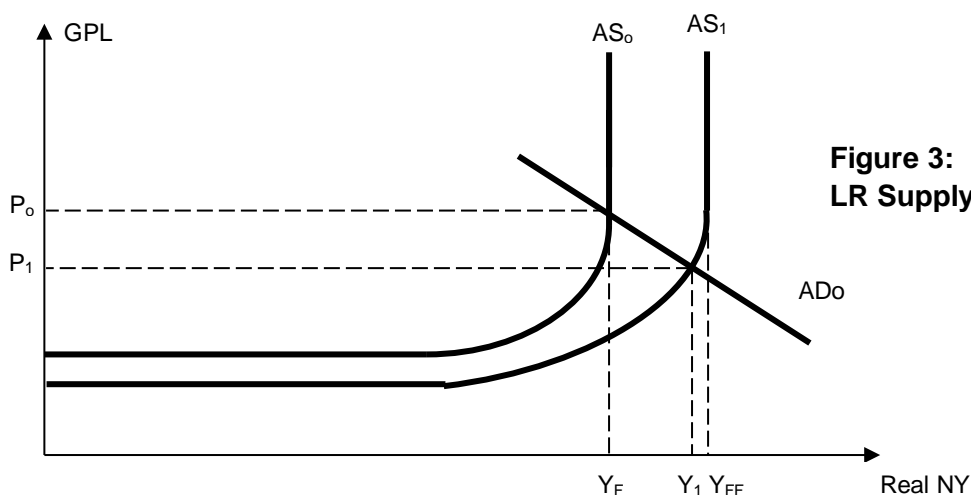


Figure 3:
LR Supply-Side Policy

Diagrammatically, an increase in productive capacity would raise the aggregate supply (AS), causing a rightward shift of the AS curve from AS_0 to AS_1 . Full employment level increases from Y_f to Y_{ff} , resulting in a fall in general price levels from P_0 to P_1 while national income rises from Y_f to Y_1 .

As Singapore is a small country with limited natural resources, the supply-side policies adopted by our government to raise potential output are focused on raising the quantity and quality of labour and capital and in promoting technological progress, often using fiscal tools such as government spending and tax incentives.

To increase labour force participation rates, the Singapore government has implemented workfare schemes such as the Workfare Income Supplement (WIS) scheme which supplements the wages of workers with lower skills and education. This encourages them to remain in employment while incentivising those currently not working to re-join the workforce thereby increasing the pool of labour.

In the 2012 budget, the government announced measures to reward work for the elderly including higher CPF contribution rates and the doubling of earned income tax relief for the older workers. This allows those employed to build up their retirement savings and encourage those in retirement to be drawn back into the labour market.

Pro-family work policies and procreation incentives announced under the enhanced baby bonus scheme also aim at increasing the local birth rates to boost future labour supply through cash grants, tax incentives and priority housing.

But while these measures may have expanded our local labour force, the overall effect is limited by our small domestic population. In addition, there may be a long time lag before the effects of incentives such as the pro-creation policies are felt.

Given these limitations, the Singapore government has in recent years relied on foreign talent as an additional source of labour. To increase the inflow of high-skilled foreign workers, the government has lowered direct tax at the top end of personal income tax to compete with other economies for such talent. Foreign workers from the service sectors have also been drawn to work in new growth areas like the Integrated Resorts and the health sector. Foreign manpower policies have been eased to allow hiring of a greater number of such workers for these industries.

However, the mobility of skilled foreign talent can be disruptive and more of such inflow and outflow can be expected with foreigners forming a larger proportion of the workforce. Service workers also tend to job-hop more regularly from minor pay differences and raises cost of training them.

To increase the quality of our labour force, the Singapore government invests up to 5% of GDP on education, which is heavily subsidized and made compulsory to increase the literacy rate and skill level of the workforce. Higher education also raises the mobility of workers and eases their ability to acquire new skills to meet new structural changes that come with growth. Hence, educational institutions like the ITE, polytechnics and universities have expanded their intakes and introduced new courses to meet the manpower requirement projections in new and existing sectors to sustain actual growth.

To promote a more productive and efficient workforce, heavy emphasis is also placed on training our existing labour to equip them with skills relevant to our economy. For this purpose, the government implements programmes such as the Skills Programme for Upgrading and Resilience (SPUR) which subsidizes training and covers absentee payroll to facilitate skills upgrading.

But while such policies are sound and beneficial, the high expenditure incurred will have an opportunity cost on spending in other areas. The government has also acknowledged that by equipping our population with world class education and training, Singaporeans will become more mobile and may venture overseas to work rather than contributing to the local economy. There is also a long gestation period to train a student to gain the benefit.

Another means of expanding our productive capacity to promote long-term growth is by increasing the quantity of capital, defined as the stock of plant and machinery used for the production of goods and services. In Singapore, the government attracts foreign direct investments (FDI) by providing tax incentives like higher depreciation allowances and tax holidays for pioneer status investors. It is such incentives that attracted the largest solar panel maker in the world from Norway to relocate to Singapore. The advantage FDI over local investment is the inclusion of technology transfer by the foreign company.

The deregulation of the local financial market to allow greater participation by foreign financial institutions in the local financial sector also serves to enhance the status of Singapore as a financial centre. This in turn leads to more jobs creation and potential sources of funding for investment, thereby raising the quantity of capital.

However, Singapore should not be over-reliant on foreign investments. A large financial outflow from Singapore could cause the Singapore dollar to depreciate. With our reliance on trade, this could result in imported inflation, raising our cost of living and production.

Finally, the strategy to promote technological progress will improve the quality of capital by enhancing productivity to promote long-run growth. In Singapore, the government offers large fiscal incentives for firms with high research and development expenditure to spearhead new growth areas. The biotechnology, nanotechnology, gaming and digital animation and green

technology are some sectors targeted to drive higher potential growth. The positive spills over effect of growth in related industries are reasons for huge overall research and development grants given locally.

Singapore is likely to do well in this area due to our strong laws and enforcement on intellectual property rights. However, the only setback is the occasional poaching of leaders in such industries by other countries or the en bloc departure of a whole team of researchers due to better monetary and non-monetary incentives offered elsewhere.

Overall, Singapore's supply-side policies have succeeded in the past, as evidenced by our sustained economic progress over the years. But with new regional and global challenges, the government will have to review its policies to keep pace with the ever changing economic landscape. Adopting the right policies to ensure sustained growth is all the more important given Singapore's small and open economy which lacks natural resources to tide over any external shocks.

Knowledge, Application, Understanding and Analysis		
L3	Clear explanation & analysis of the supply side policies in promoting long-term economic growth. Appropriate examples pertaining to SG economy are given to support answer.	8-10
L2	Explanation of supply side policies impact on quality and quantity of factors, one policy on each or both policies on quality or both on quantity. No contextualization of policies.	5-7
L1	Brief and weak explanation of supply side policies and no attempt to refer to context of Singapore.	1-4
E3	Statements on effectiveness of policies with a reasoned judgment and substantiation	4-5
E2	Statements on effectiveness of the policies with weak substantiation	2-3
E1	Mere statements and weak assertion of the policies	1

2. The Japanese economy shrank at its fastest rate since the 2011 earthquake and tsunami in the second quarter of this year, contracting at an annual rate of 6.8%. In addition to falling exports and high government debt, spending was hit by a sales tax rise in April.

The Guardian, 13 August 2014

- (a) Explain the likely causes of recession in Japan. [10]
 (b) Discuss whether demand management policies are most appropriate in pursuing economic growth for Japan. [15]

Suggested Answer for Part (a)

3 Cs Cues	Explicit cues	Implications on behavioral outcomes
Command	<ul style="list-style-type: none"> “Explain” 	<ul style="list-style-type: none"> Describe (using economic terminologies) with examples & diagrams
Content	<ul style="list-style-type: none"> “likely causes of recession” 	<ul style="list-style-type: none"> Define “recession” Apply knowledge to context giving priorities to explicit cues given in the preamble Inclusion of the AD-AS framework
Context	<ul style="list-style-type: none"> “in Japan” Between 2011 & 2014 	<ul style="list-style-type: none"> Description should show awareness to the Japanese circumstances & constraints that led to the recession

Introduction

- Define key concept (“recession”) – contraction of the (Japanese) economy (“6.8%” annual contraction rate) or 2 consecutive quarters or more of negative growth
- Briefly describe the nature of the Japanese economy (context)
 - world's 3rd largest by nominal GDP & 3rd largest automobile manufacturing country
 - world's largest electronics goods industry
 - ranked among the world's most innovative countries leading several measures of global patent filings
 - currently facing increasing competition from China and South Korea
- Provide an overview of the essay
 - Categorically, caused by a persistent fall in AD &/or a fall in AS as well as deflationary macroeconomic policies.
 - Extent of economic contraction can be made worse if the recession occurred in a context of a certain unique features of the economy & its market components.

Body

- Major negative demand-side causes for recession (Illustrated using AD-AS framework)
 - Slump in exports demand – in consumer electronics & automobile sales (which contributed 16% of Japanese economy's revival in 2002-2008)
 - Reduced/Limited govt spending due to high govt debt (240% of GDP in 2014)
 - Fall in Cn spending due to a contractionary/deflationary macroeconomic policies [See (c)(i)]

→ reduction in G, C & I (due to sales tax increase) aimed at reducing the high budget deficit → AD shifts leftwards
- Major inflationary supply-side causes for recession (Illustrated using AD-AS framework)
 - Fall in productive capacity due to natural disasters (2011 earthquake) or a shrinking labour pool (aging population & minimal immigration) [& possibly fall in replacement investments overtime]

- b. Rising global commodity prices (food & oil products) during the period – SRAS shifts upwards (no change in Y_f).
- LRAS &/or SRAS shifts leftwards & upwards
- Deflationary macroeconomic policies (Illustrated using AD-AS framework)
 - a. Such measures are like an increased interest rates or increased direct & indirect T
 - b. Sales taxes increase (since April 2014) to counter a budget deficit – squeezing real Y_d & C_n dd or perhaps damaging business investment - fall in C & I
- Magnitude of recession depends on (**Optional)
 - a. Negative multiplier effects arising from less consumption on goods and services
 - b. Extent of drop in consumer and business confidence / worsening expectations can lead to more saving and cost-cutting by firms → rising unemployment

Conclusion

- The major factor causing the recession would be the main influencing factor in determining the policies & measures that would be appropriate to pursue Japan's macroeconomic goals.

Knowledge, Application, Understanding and Analysis		
L3	<ul style="list-style-type: none"> • Good balanced (theoretical) explanation of the likely dd & ss causes of recession in Japan • Good balanced (applied) explanation of the given dd & ss causes of recession in Japan 	8 9 – 10
L2	<ul style="list-style-type: none"> • One-sided explanation of the dd or ss causes of recession • Undeveloped two-sided explanation of the dd & ss causes of recession 	Max 5m 5 – 7
L1	<ul style="list-style-type: none"> • Able to identify the (categorical) causes of recession • Listing/Weak explanation of the causes of recession • No economic framework used in analysis. 	1 – 4

Suggested Answer for Part (b)

3 Cs Cues	Explicit cues	Implications on behavioral outcomes
Command	<ul style="list-style-type: none"> • “Discuss whether” 	<ul style="list-style-type: none"> • 2-sided perspective of the assertion • Commonly structured as “Thesis-Anti-thesis-Synthesis”
Content	<ul style="list-style-type: none"> • “economic growth” • “demand management policies” • “most appropriate” 	<ul style="list-style-type: none"> • Define “EG” & its conceptual components • Define “dd mgt policies” & illustrate the process differences compared to ss-side policies • Inclusion of the AD-AS framework used to illustrate • Involves an evaluation which policies are better
Context	<ul style="list-style-type: none"> • “for Japan” 	<ul style="list-style-type: none"> • Description should show how Japan could stem the contracting growth rate & achieve a positive rate giving attention to the Japanese circumstances & constraints that limits the viability of certain policies – point to be made goes beyond mere description of which policies can work – issue of greater “appropriateness” not just “effectiveness”.

Introduction:

- Define “economic growth” & state its composition (consisting of actual EG & potential EG)
- Define “demand-management policies” & state the effect of the dd-mgt policies implied with respect to the given goal

Body:

- Thesis: (Expansionary) Demand-management policies are appropriate in pursuing EG for Japan
 - a. The policy tools:
 - i. Expansionary MP by increasing domestic money supply or lowering domestic interest rates – describe mechanism & its impact on C & I
 - ii. Expansionary FP by increasing G more than the contractionary impact of the sales tax (ie. fall in C & I) – describe mechanism & its net impact on AD
 - b. The impact: Rise in AD would promote the level of economic activity that leads to greater employment of resources (especially labour – derived dd) leading to a rise in NY (Include diagram)
- Anti-thesis: (Expansionary) Demand-management policies are not appropriate in pursuing EG for Japan
 - a. Expansionary dd-mgt policies though appropriate in the pursuit of actual EG may not solve the root causes of the Japanese recession – limits to the pursuit of actual & potential EG
- The “EG-inflation” conflict. Expansionary dd-mgt policies may promote a rise in AD but the fall in productive capacity (due to the earthquake) in Japan may result in the onset of inflation earlier than it would have been prior to the earthquake eroding any real growth significantly.
- Inherent systemic limitations of policy mechanism to achieve actual EG → need complementary policies to mitigate any significant unforeseen negative side-effects/potential limitations
 - a. Limitation of expansionary FP via increasing G – high govt debt limits ability to finance & raise G. This together with the sales tax rise may collectively erode market confidence (dampening C & I as well) – the “EG – govt debt” conflict.
 - b. Limitation of MP –
 - i. Bank of Japan (central bank) may not have the ability to control the Yen ss (money supply) due to the openness of the Japanese economy
 - ii. Lowering interest rates was not able to spur domestic expenditure/demand due to the liquidity trap faced by Japan – resulting in investors borrowing in Japan & investing the borrowed capital in other more profitable investment destinations (“Yen-carry-trade”)
- Barring any policy limitations, expansionary dd-mgt policies may be appropriate to solve dd-side causes of recession but inappropriate in solving the ss-side causes of the Japanese recession & in pursuing actual EG as well as potential EG concurrently.

- a. Only ss-side policies are appropriate of managing the ss-side origins of the Japanese recession & the pursuit of actual EG as well as potential EG.
 - i. SR ss-side policies (give eggs) may lower COP (& shift AS downwards with an unchanged Y_f). With a given AD, the lower COP would lead to a movement along AD – pursuit of actual EG.
 - ii. LR ss-side policies (give eggs) may lead to a rightward shift of AS (rise in productive capacity – potential EG) which facilitates a greater non-inflationary rise in NY & more sustainable pursuit of EG (actual & potential).

- Synthesis/Conclusion:

The choice of which macroeconomic policy is appropriate to pursue EG depends on:

- The main causes of the recession
- The current state of the economy
- The market reaction & the likelihood of achieving the goal for any policy being implemented

Depending on the causes of recession:

- Though, expansionary MP may seem to work but in reality the Japanese economy is facing a liquidity trap - interest rate is so low that it is currently in the negative region (The Guardian, Sept 2014). The resulting “Yen-carry-trade” has actually worked in Japan’s favour of causing the Yen to depreciate.
- Dd-mgt policy may be inappropriate if the main cause of the Japanese recession originate from the ss-side. Hence, lowering COP & increasing productive capacity may be essential SR & LR measures to address the ss-side causes.
- However, for an anaemic economy like Japan which is facing an aging population and a chronic govt debt, as well as falling external dd, the odds are against Japan in being able to get the funds to incentivize retraining to enhance the labour productivity level or to generate adequate domestic demand to pursue EG of both types.

Hence in Japan’s case the most appropriate policy measure is not simply a choice between dd-side or ss-side, but whether any macroeconomic policy measure undertaken by the Japanese government would actually achieve any degree of EG that would create a positive ripple-effect (multiplier effect) that would gain momentum to cure all the chronic components of the ailing economy albeit one at a time.

Knowledge, Application, Understanding and Analysis		
L3	<ul style="list-style-type: none"> • Good 2-sided discussion of the demand-management & supply-side policies to pursue economic growth for Japan (& how it might conflict with other macro objectives) <ul style="list-style-type: none"> ◦ Appropriateness of MP & ss-side policies to achieve EG 	8 - 10
L2	<ul style="list-style-type: none"> • Good one-sided discussion of <u>either</u> demand-management or supply-side policies to pursue economic growth. • Undeveloped 2-sided discussion of the demand-management <u>&</u> supply-side policies to pursue economic growth 	5 – 7
L1	<ul style="list-style-type: none"> • Vaguely identified the demand-management policies. • Lists the demand-management policies. • No economic framework used in analysis. 	1 – 4
E3	<ul style="list-style-type: none"> • Substantiation of stand using well explained economic analysis on whether demand-management policies are most appropriate in pursuing economic growth for Japan 	4 – 5
E2	<ul style="list-style-type: none"> • Adequate substantiation of stand on whether demand-management policies are most appropriate in pursuing economic growth for Japan 	2 – 3
E1	<ul style="list-style-type: none"> • Stand on whether demand-management policies are most appropriate in pursuing economic growth for Japan • Without or vague substantiation 	1

3. **Inclusive growth is economic growth that creates opportunity for all segments of the population and distributes the dividends of increased prosperity, both in monetary and non-monetary terms, fairly across society.**

Source: <http://www.oecd.org>, accessed on 10 July 2016

- (a) Explain why a government might aim to achieve inclusive growth. [10]
(b) Evaluate the measures adopted by the Singapore government to achieve inclusive growth. [15]

Suggested Answer for Part (a)

Introduction:

Governments are concerned about achieving sustainable economic growth, full unemployment, low inflation, a healthy balance of payment (BOP), efficiency and equity. By aiming to achieve inclusive growth, countries are likely to achieve these economic objectives.

Body:

Higher employment and productive efficiency

- Inclusive growth means sustainable growth by creating job opportunities for all. This means reducing both demand deficient unemployment and structural unemployment.
- An increase in actual growth due to inclusive growth indicates an increase in aggregate demand (AD). In order to meet the increase in AD, firms will have to employ more factors of production including labour. This leads to an increase in demand for labour and a fall in demand deficient unemployment.
- In the pursuit of inclusive growth, the government focuses on investing in human capital so as to create opportunities for all segments of the population, reducing structural unemployment.
- The government will also subsidise programmes to upgrade the skills of the workers so as to create a more productive workforce and retrain workers whose skills are redundant so that they can take up jobs in other sectors.
- By ensuring that there is productive employment for all, this means **that scarce resources are fully utilized**, allowing the economy to operate closer to the maximum output it can achieve, leading to productive efficiency.

Low inflation

- Inclusive growth leads to non-inflationary growth, which includes both actual and potential growth. Inflation refers to a sustained increase in general price level. As inclusive growth focuses on the pace of growth, the increase in AD is in tandem with the increase in aggregate supply (AS). As the increase in general price level is now matched with an increase in real national income, inflation rate remains low as there is spare capacity to produce more goods and services in the economy.
- To achieve inclusive growth, the government focuses on policies to increase labour productivity. This will mean a fall in the unit cost of labour, an increase in short-run AS (SRAS), bringing about a fall in wage push inflation in the country.

High standard of living and more equitable distribution of income

- Inclusive growth is economic growth that creates opportunities for all segments of the population and distributes the dividends of increased prosperity, both in monetary and non-monetary terms, fairly across society.
- Economic growth is defined as an increase in Gross Domestic Product (GDP), which is the total monetary value of the final goods and services that is domestically produced within a year.
- An increase in real GDP means more goods and services are produced. At the same time, there is an increase in households' income leading to higher purchasing power and more consumption of goods and services leading to a higher **material** standard of living.
- With higher economic growth, the government is able to generate more tax revenue. By aiming to achieve inclusive growth, the government is likely to spend more on education subsidies as a means to create productive employment and more on healthcare programs so as to redistribute wealth by making these merit goods more affordable to lower-income households. This contributes to a higher literacy rate and life expectancy, leading to a higher **non-material** standard of living.
- At the same time, the distribution of increased prosperity means that the standard of living for every individual is likely to increase and the value of the Gini coefficient falls.

Healthier BOP

- BOP is a record of a country's economic transactions between its residents and the rest of world over a period of time, usually a year.
- Inclusive growth requires government to increase productivity, which helps to lower unit cost of input, making exports more price competitive. Assuming demand for exports to be price elastic, a fall in the price of exports will lead to a more than proportionate increase in the quantity demanded for exports, leading to an increase in total revenue from exports, which improves the current account.
- In addition, a more productive workforce is likely to attract FDI to the country. This increase in long-term capital inflow brings about an improvement in capital account, ceteris paribus.
- Overall, the BOP position is likely to improve when the government aims to achieve inclusive growth.

Conclusion

In recent years, governments aim to achieve inclusive growth because there is no inherent trade-off in economic policymaking between the promotion of social inclusion and that of economic growth and competitiveness; it is possible to be pro-equity and pro-growth at the same time.

Other acceptable answers:

-Students can explain how in the pursuit of inclusive growth, policies to reduce income gap can also help to reduce distributive failure and therefore, achieve allocative efficiency.

-Students can explain that rapid growth or "grow at all costs" may increase income inequality and explain the need to aim for inclusive growth to reduce the income gap so as to improve the living standards of the citizens (compare workers of higher and lower skilled – where growth could be concentrated in the higher skilled jobs or coastal region where trading activities are often concentrated there)

Knowledge, Application, Understanding and Analysis		
L3	Thorough explanation of why government aims to achieve inclusive growth, covering the macroeconomic and microeconomic goals.	8 - 10
L2	An under-developed explanation of why government aims to achieve inclusive growth, covering some macroeconomic and microeconomic goals.	5 - 7
L1	Descriptive explanation on why government aims to achieve inclusive growth, with minimal linkage to macroeconomic/microeconomic goals.	1 - 4

Suggested Answer for Part (b)

Introduction:

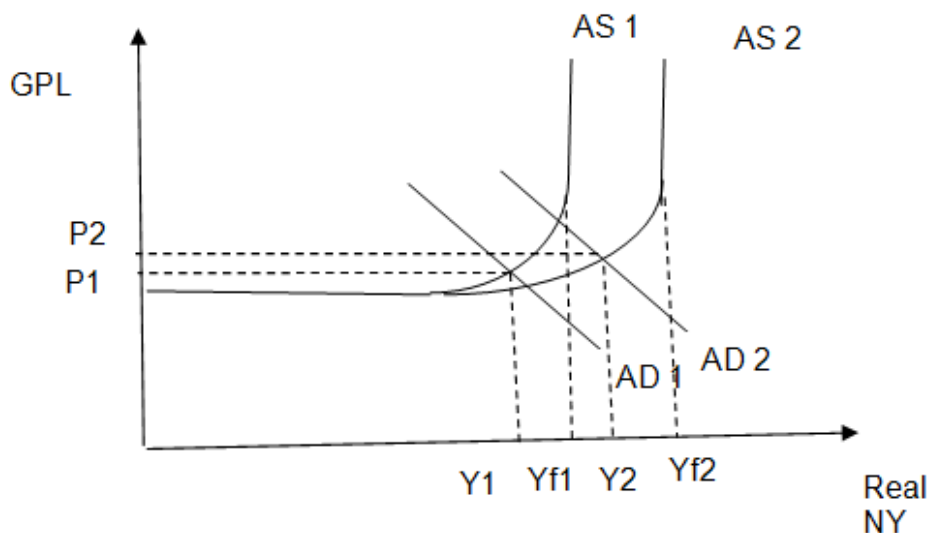
To achieve inclusive growth, the Singapore government emphasize on improving the productive capacity of individuals and creating conducive environment for employment and on income redistribution as a means of increasing incomes for excluded groups.

Measures to achieve inclusive growth include:

- Fiscal Policy
- SS-side policies
- Progressive Tax system

Fiscal Policy to achieve economic growth and reduce income gap

- \uparrow in $G \rightarrow \uparrow$ in AD assuming economy operating below full employment level, via multiplier \rightarrow **\uparrow actual growth**, reduces demand deficient unemployment.
- For example, \$8 billion Pioneer Generation Package. It helps citizens aged 65 and above in 2014 meet their healthcare costs for life, with further subsidies on healthcare services and medicines.
- $\rightarrow \uparrow$ affordability of healthcare services for senior citizens, **reduce the effects of income inequality**.
- Wage Credit Scheme launched in 2013, which has seen more than \$2.2 billion handed out to help local businesses subsidise wage increases for low-income workers. This helps to maintain employment and prevents the increase in income gap between low income workers and high income workers.
- \downarrow corporate tax rates from 20% to 17% $\rightarrow \uparrow$ in after tax profits $\rightarrow \uparrow$ investment local business and foreign firms $\rightarrow \uparrow AD$ shifting to the right from AD_1 to $AD_2 \rightarrow \uparrow$ actual growth from Y_1 to Y_2 .
- \uparrow in investment $\rightarrow \uparrow$ productivity $\rightarrow \uparrow LRAS$ shift to the right from AS_1 to $AS_2 \rightarrow \uparrow$ **potential growth** from Y_{f1} to Y_{f2} .



Appropriateness:

- In view of an ageing population in Singapore, direct income redistribution as a means of increasing incomes for this group is an immediate solution.
- As Singapore is a small and open economy that is vulnerable to external shocks, the wage scheme credit that mitigates the negative impact of business cycles is essential to prevent deskilling. Deskilling would reduce productivity level making it more challenging to achieve inclusive growth. As such, the wage credit scheme is much needed as it creates an incentive to stay in the workforce as compared to unemployment benefits.
- Corporate tax rate is one of the most important factor in attracting FDI in Singapore. FDI makes up a large proportion of GDP in Singapore given the nature of the economy. The move to reduce corporate tax rate is effective in attract foreign firms to invest in Singapore.

Limitations:

- Size of multiplier is small. As MPM is large (import reliant) in Singapore, MPS is large due to high CPF savings. Large leakages in the circular flow of income will result in a small increase in real national income.
- Strained government budget. In the long run, the Singapore government might have to adopt "growth at all cost" instead of inclusive growth to generate tax revenue in order to sustain her fiscal position.
- Singapore's corporate tax rates are competitive, therefore, further cuts would need to be compensated by an increase in GST which is regressive by nature. This will limit the scope for inclusive growth.

SS-side policies to reduce income gap

- Education subsidy making it affordable to low income family → ↑ labour productivity → ↑ demand for labour → ↑ wages → reduce income gap
- The Continuing Education and Training Masterplan, aims to ensure a competitive and career resilient workforce. It enables working adults, regardless of their starting qualifications, to continue to build and deepen their skills and competencies, throughout their careers.
- This reduces occupational immobility and helps workers to stay relevant in view of changing demands in the job markets.
- Allows workers in all sectors to remain relevant and generate stable incomes.
- Increases productivity growth which is essential for inclusive growth.

Appropriateness

- Singapore being a small economy, lack resources which results in a tight labour market. Hence, it is critical to increase productivity to match with the increase in wages.
- The openness of the Singapore economy allows free mobility of capital. This leads to increase in the pace and frequency of structural changes in the economy.
- Therefore, policies focusing on reducing occupational immobility is instrumental to achieve inclusive growth in Singapore as direct income distribution is not sustainable.

Limitations:

- Time lag between reforms and outcomes. For example, there is a time lag between the time when investments in education are made and the time when returns from improved labour skills are collected.

Progressive Tax System

Singapore's personal income tax rates for resident taxpayers are progressive. This means higher income earners pay a proportionately higher tax, with the current highest personal income tax rate at 20%. Tax revenue generated are redistributed as subsidies to make healthcare, education and housing affordable to all. **One limitation** for a more progressive tax system is that it creates a disincentive to work and deter foreign talent, this might lower the quality of labour, reducing potential growth.

Other possible answers:

Exchange rate policy

Wage policy

Conclusion:

Suggested evaluation:

Upon evaluation, government policies focusing on income redistribution to achieve inclusive growth is necessary in the short run but may not be sustainable, especially for a small and open economy like Singapore. As such, SS side policies that focus on productivity growth and productive employment will remain to be the most important approach to achieve inclusive growth in Singapore as it mitigates the negative impact of structural changes and her vulnerability to external shocks.

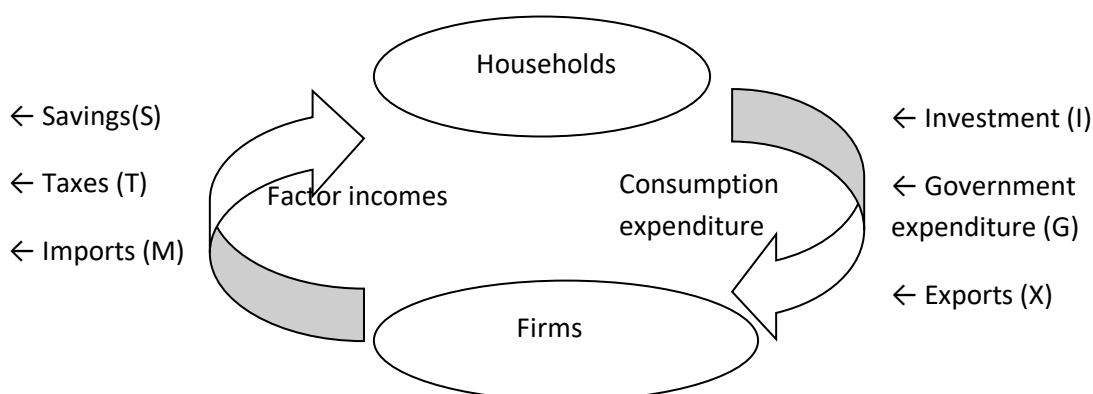
Knowledge, Application, Understanding and Analysis		
L3	For a thorough and well-balanced answer that evaluates the policies with good application to the Singapore economy.	8 – 10
L2	For a balanced but limited and undeveloped answer that has some application to the Singapore economy.	5 – 7
L1	For an answer that is largely descriptive and lacks a clear structure. Simple listing of policies to achieve inclusive growth.	1 – 4
Allow up to 4 additional marks for Evaluation		
E3	Judgment is based on economic analysis and adequately substantiated	4 – 5
E2	Judgment is based on economic analysis but is not adequately substantiated	2 – 3
E1	For an unexplained assessment, or one that is not supported by economic analysis.	1

SECTION 3C: Challenging Essays

1. Assess the relative importance of the various components of the circular flow of income in driving economic growth in different economies. [25]

Suggested Answer

- **INTRODUCTION**
- Define and set the context for the different economies for the discussion of the question:
 - Small and Open vs. Large and Less Open
 - Developed Economies (Advanced) vs. Developing Economies (Emerging)
 - Note that students can choose either one classification of the above two.
- Explain the different components of the circular flow of income.
- The circular flows of income in a 4-sector economy which comprises of households, firms, government and foreign sector shows the flow of goods, services, and their payments around the economy.
 - Define J & give examples. ($I+G+X$)
 - Define W & give examples. ($S+T+M$)
 - $I+G+X = S+T+M$



- Explain actual and potential economic growth.
- Explain the measure of “relative importance”: Must contribute significantly to the achievement of the actual and potential economic growth

BODY Part 1: Components that are more important in Large and Less Open Economies like USA

Characteristics of a Large and Less Open Economy:

- Large domestic sector as compared to the foreign sector
- High consumption (C) culture
- Big Taxable base (T)

Thesis statement 1: Domestic demand components like Consumption (C), investment (I) and government expenditure (G) play a relatively more important role in large and less open economies like USA as compared to small and open economies like Singapore

- Explain why C, I and G play a more significant role in driving economic growth in these economies linking to the characteristics of the large and less open economy.
- E.g. USA has high Consumption (C) due to relatively lesser Savings (S) → high multiplier → C can bring about a higher increase in AD → higher increase in NY.
- Domestic Investment is likely to play a more significant role in driving economic growth in economies like USA due to the higher amount of domestic capital accumulation.
- Investments can lead to potential Economic Growth.

Thesis statement 2: Withdrawal components such as Taxation (T) play a relatively more important role in large and less open economies like USA as compared to small and open economies like Singapore

- Explain why T play a more significant role in driving (or affecting) economic growth in these economies linking to the characteristics of the large and less open economy.
- Lower corporate and personal income taxes can drive investment and consumption respectively and these components of C and I can help to contribute actual economic growth in the SR and potential economic growth in the LR.

BODY Part 2: Components that are more important in Small and Open Economies like Singapore

Thesis statement 1: Injection components like investment (I) and exports (X) play a relatively more important role in small and open economies like Singapore as compared to large and less open economies like USA.

- Explain why I and X play a more significant role in driving economic growth in these economies linking to the characteristics of the small and open economy.
- E.g. Small and open economies rely more heavily on foreign direct investment due to the smaller pool of capital accumulation in the economy. Therefore, foreign injection of investments is more needed to drive growth.

Thesis statement 2: Withdrawal components such as Savings (S) and Taxes (T) play a relatively more important role in small and open economies like Singapore as compared to large and less open economies like USA.

- Explain why S and T play a more significant role in driving (or affecting) economic growth in these economies linking to the characteristics of the small and open economy.
- Higher S can lead to more capital accumulation for future investments → actual economic growth in the SR and potential economic growth in the LR.
- Lower corporate and personal income taxes can drive investment and consumption respectively and these components of C and I can help to contribute actual economic growth in the SR and potential economic growth in the LR.

CONCLUSION:

- Large and Less Open economies like USA → depend on injection of the domestic sector
- Small and Open economies like Singapore → depend on injection from the foreign sector.

- Compare which components of the circular flow of income are more likely to play a more significant role in driving economic growth in the different economies.
- Consider the current economic situation (or the different economic situation).
- Give a judgment or conclusion on which components of the circular flow of income are likely to remain as the most significant components in the different types of economies based on your earlier arguments and analysis.

knowledge, Understanding, Application, Analysis		
L3	<ul style="list-style-type: none"> - The answer has good, clear and balanced explanation of how the various components (3 per each type of economy) of the circular flow of income will drive economic growth in the different economies. - Adequate analysis is given in terms of how the different components will drive actual and potential economic growth in the different economies pertaining to the specific economies. - Circular flow of income diagram being used to explain the concept of the circular flow of income. - Good application of economic concepts to the 2 different types of economies discussed in the question. <p>For an answer on how only 2 components of the circular flow of income affecting the economic growth on the 2 different types of economies (max 15 marks).</p>	15-20
L2	<ul style="list-style-type: none"> - For an answer that explains how the different components will drive economic growth in the different economies pertaining to the specific economies. - The explanation however has undeveloped analysis on the circular flow of income - Some application of linking the circular flow of income to a type of economy <p>For an answer on the discussion of the circular flow of income on only 1 type of economy (max 10 marks).</p>	9-14
L1	<ul style="list-style-type: none"> - For an answer which show some knowledge of the circular flow of income and/or the different types of economies. - The answer is written in isolation without any linkages between the various concepts. - The components of the circular flow of income are simply stated rather than explained in terms of its relative significance. <p>For an answer that only discuss about economic growth (max 5)</p>	1-8
Evaluation		
E3	<p>For a well-reasoned judgment that is supported by economic analysis.</p> <ul style="list-style-type: none"> - The evaluation is done across the different components of the circular flow of income in terms of the most important component, the short run vs. long run importance of the different components of the circular flow of income that will drive economic growth in the countries. 	4-5
E2	<p>For an unexplained judgment or one that is not supported by economic analysis.</p>	2-3
E1	<p>Mere statement or summary.</p>	1

2. Singapore's Ministry of Trade and Industry (MTI) announced on 14 July 2010 that it expected the economy to expand by 13.0 to 15.0 per cent in 2010. The economy's real economic growth rate in 2009 was -1.3%.

Discuss whether small and open economies such as Singapore should adopt different economic policies from those of large economies in order to sustain healthy economic growth. [25]

Suggested Answer

Some generalizations about the characteristics of small and open economies

- High dependence on external demand
 - a. Conventional measure of external reliance of an economy is the ratio of exports to total demand. For Singapore in 2008 this was 73.4% (inclusive of import content). The import adjusted proportion was 53.5% Singapore's GDP proportion of net exports in 2008 & 2009 was about 21%.
 - b. Foreign direct investment is another source of demand for small and open economies.

Large and open economies also look to exports and FDI for source of demand but the degree of dependence is much lesser.

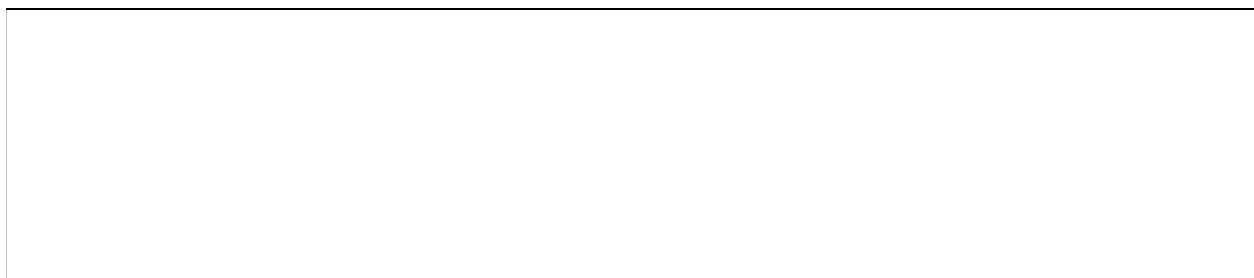
- High import content of domestic production
Singapore's import content of domestic demand was 43% and of exports was 60%, for Ireland (another example of small and open economy) it was 17% and 50%. (source of above statistics: Singapore Economic Survey 3rd quarter 2009)
- Reliance on foreign labour and talents supply
With small population, inflow of foreign workers is needed to boost domestic labour market. With more acute scarcity of resources compared to large economies, the growth strategies of small and open economies necessarily have to be anchored on talents and technology. This requires such countries to allow the inflow of foreign professionals and experts.
- Reliance on investment and technology
With limited labour supply and reliance on external demand, investment is highly essential to boost productivity and innovation is the key to acquire and sustain comparative advantage in trade.

Requirements for 'sustain healthy rates of economic growth'

Sustaining growth requires countries' capacity for production to cope with growth in aggregate demand hence avoiding overheating/inflationary pressures that can slow down or even reverse the expansion.

- Growth in aggregate demand/expenditure
- Growth in potential output

Students can use a diagram to make the requirements clearer.



Students can form different perspectives in their approach to this question.

Example 1: they can argue that

- Because of their unique economic characteristics, small and open economies should adopt policies which are distinct from those prevalent in large economies. They use exchange rate policy and much more of supply side policies in order to grow external demand and potential output. They also cannot afford to have continuous budget deficit, unlike the observed problem in large economies.
- But, when come to economic downturns, these small economies should still adopt deficit budget as pump-priming method. The effectiveness is limited in reversing contraction but it buffers the economy against larger contraction.

Example 2: they can also argue that

- Policies used by both groups of economies are essentially the same but because of the difference in the economic characteristics, there ought to be a difference in the emphasis placed on policy instruments.
- When economies slow down, expansionary demand policies apply to both types of economies but in small and open economies these policies on their own are not sufficient to activate a recovery. Fiscal policy being less effective does not mean that they should not adopt deficit budget during recession. However, the monetary policy instrument to adopt to stimulate demand should be exchange rate depreciation instead of interest rate policy.
- To sustain continuous growth in aggregate demand during normal economic conditions, both types of economies should not rely on expansionary demand measures because sustainability of economic growth requires attention on the effectiveness of supply side measures.

Role of expansionary demand policies during economic downturns (eg: recession)

For large economies, the large proportion of domestic demand over the overall aggregate demand makes these policies appropriate and effective to power up growth in aggregate demand. Governments may adopt these policies:

- expansionary monetary policy
- expansionary fiscal policy

Students to explain and illustrate

- how during slack economic condition, by keeping interest rates low the central banks in large economies can sustain or raise domestic consumption and investment
- how sticking to deficit budget allows government spending to support domestic demand.

In the 2008-2009 economic slowdown, large economies have gone the full throttle in fiscal stimulus via government spending and interest rates have been kept very low. Just in August this year, when US government identified that the economy was slowing down it had announced 'quantitative easing' (expansion in money supply and letting domestic interest rate stays at low level).

Should small and open economies adopt expansionary fiscal policy?

Expansionary demand management will not enable these economies to recover from a slowdown but expansionary fiscal policy is still necessary to avoid excessive negative economic growth. Example: Singapore adopted counter cyclical deficit policy in 2009 and 2010 budgets to fight the recession.

However, the extent of the impact of expansionary fiscal policy is limited by

- small proportion of domestic demand over total demand
- small multiplier effect due to high marginal propensity to import

Should small and open economies adopt expansionary monetary policy?

Yes they should but because of the large importance of external demand, exchange rate is a more appropriate policy instrument compared to interest rate and money supply intervention. Singapore adopts 'zero appreciation' policy, hence allowing Singapore Dollar to depreciate during economic downturns in order to lower export prices overseas and stimulate demand.

How do the economies create aggregate demand during normal economic conditions

Large economies can continue relying on domestic demand to power up economic growth but for small and open economies they need to look at ways of generating external demand. The key for the latter is through sharpening international competitiveness - by keeping prices stable and improving quality of production.

Keeping domestic inflation low is fundamental and in this respect again exchange rate policy is important because the high import content of production makes the strength of exchange rate a more potent factor to stabilize import prices and domestic cost levels.

Students can also argue that the openness of the domestic funds market to the entry and exit of foreign funds make it difficult for the central bank to influence domestic interest rate, for the purpose of influencing domestic demand.

Role of supply-side policies

The significance of supply-side policies to boost productive capacity and to improve international competitiveness applies to both economies. They both need to grow productive capacity to be able to continue producing more goods and services with price stability. Emphasis on R & D for example is a critical factor for economic growth in both economies. But, supply-side improvements to improve the country's potential output are more crucial to small and open economies because of the labour constraints they face and the need to continue creating external demand through competitiveness.

Answer to go into

- definition of supply-side policies (improving the efficiency, productivity and cost conditions – LRAS and SRAS)
- some examples of these which are implemented in Singapore, with a focus on how these measures improve potential output and the ability to attract external demand. Examples: training and wage policies, pro-competition policy.

Synthesizing:

- We cannot say that small & open economies should adopt different policies because creating potential economic growth lies fundamentally in supply side conditions and this applies to both types of economies. But small & open economies need to use supply-side policies more actively to deal with their resource constraints and to sharpen international competitiveness.
- The clear-cut distinctiveness is in the use of exchange rate policy as their monetary policy approach, unlike the case in large economies which tend to adopt interest rate /money supply intervention.
- Both economies adopt fiscal policy but the intensity as a fiscal stimulus differs. Small economies use fiscal policy too but the orientation is more towards improving supply side. The budget is typically counter-cyclical but it functions to reduce the magnitude of fluctuations in aggregate demand rather than reversing it.

Knowledge, Understanding, Application, Analysis		
L3	Well justified and well applied (examples used at many parts of answer as support of claims) Use the economic characteristics of small and open economies to justify why the relative importance attached on policies they use differs from large economies. Few examples of policy measures given.	15-20
L2	Appropriate economic policies for small and open economies are justified, basing them on the economic characteristics of these countries. Relevant answer but <ul style="list-style-type: none"> • Lacking in depth of explanation • Non-comparative, not elaborating on why relative importance between types of policies differs between the two groups of economies differs. 	9-14
L1	Narrates economic policies for economic growth without justifying how these are relevant to small and open economies.	1-8
E3	Uses the economic characteristics of countries as basis of arguments about how policies differ/ vary in orientation on how demand is created.	4 - 5
E2	Argues that small & open economies use different policies/ adopt different orientation in policies but these claims are mostly unsubstantiated with economic characteristics of countries and examples of policies.	2 - 3
E1	Mere statement, no judgement given.	1

3. “Our first priority is to keep the economy competitive and growing through continually upgrading and diversifying the economy to make ourselves more resilient to external shocks, strengthening ties with the vibrant Asian economies, and tapping new areas of growth.”

Adapted from May Day Message 2008 by PM Lee Hsien Loong

Discuss whether economic growth should be the main objective of Singapore’s macroeconomic policy. [25]

Suggested Answer

Define economic growth as a rise in real GDP.

Distinguish between short term (actual) & long term (potential) growth: Short term growth makes use of spare capacity whereas long term growth increases productive capacity. Long term economic growth: an expansion in the productive capacity of an economy, represented by the outward shifts of its production possibility curve or the rightward shifts of the aggregate supply curve. Short term growth: a movement from a point within the PPC to a point on the PPC, caused by an increase in AD in the short run in a less than fully employed economy. Brief discussion on how policies in place in Sg help attain growth.

Thesis

1. Economic growth can bring about a rise in the living standards, provided → a higher level of consumption of goods and services. This means greater quantity and better quality goods & services such as better housing; more efficient better quality public transport; for the general population.
2. Growth brings about business confidence and raises employment Through higher investments, jobs creation In addition, a growing economy signifies a stable economy → attracts greater inflow of FDI → generate greater long term growth
3. Growth can bring about more equitable income distribution Growth → income rises, the govt. can redistribute income from the upper income group to the lower income group without the need to raise tax rates In addition, economic growth → firms’ profit level rises → pays more corporate tax → a positive effect on government finances → boosting tax revenues and providing the government with extra funds to spent on programs to alleviate poverty and close the income gap between the rich and poor.

Anti-thesis

1. Widening income gap

Some Singaporeans may find that their skills are no longer relevant. Structural unemployment affects the low skilled workers who are less well off. Others may be forced to take up employment with lower pay. If the means to higher growth are greater incentives (such as cuts in income tax), then the rich might get richer with little benefits for the poor. Apply to Sg’s context: rising Gini Coefficient, payouts with more distributed to lower income households e.g. growth dividends.

2. Environmental Costs

Rising incomes make it possible for more people to own cars, but this could lead to problems of pollution and traffic congestion

3. Lower quality of life

Material SOL may have improved but quality of life can deteriorate overall due to non-monetary factors e.g. higher stress level

4. Possible Conflict between the pursuit of economic growth and stable prices

- Short term economic growth → higher price levels due to rising AD
- Explain how the intensity of the use of resources as a result of increasing AD → higher output → higher GPL (inflation rate rises) → overheating in the economy

Evaluation:

Sg has focused on long term growth through supply side policies e.g. education & training to raise productivity, R&D, conducive investment climate

5. Possible Conflict between the pursuit of growth and external equilibrium

- As AD keeps rising → short term economic growth → NY rises → level of import rises (rise in consumer goods and/or imported resources such as fuel, raw materials and capital goods for domestic production).
- If exports do not rise sufficiently → BOT deficit and a possible current account deficit → BOP deficit (if the surplus in the capital account is not huge enough to offset the deficit in the current account).

Evaluation: Is this of concern to Singapore?

Other possible discussion points: Current Situation in Sg: any other overriding problems other than growth? Other objectives may be more important currently: price stability?

Attainment of noninflationary growth may be a more accurate objective through monetary policy centered on a strong S\$ supported by fiscal prudence

- Helps prevent imported inflation – main source of inflation in Singapore and in turn maintain export competitiveness

Supply side policies (Continual upgrading)

- To improve productivity for sustained growth

Trade Policies

- Active establishment of bilateral free trade agreements to tap on growth opportunities through trade

Synthesis and conclude

Economic growth should be the main objective of the government as it will improve the well-being of people, however, government should not pursue growth at all costs. It should achieve long term sustainable growth and ensure that everyone benefited from the growth through the re-distributed policies of transfer payments and policies to improve the upward mobility of its workforce.

Knowledge, Application, Understanding and Analysis		
L1	The answer shows some knowledge e.g. understanding and explanation of the various economic aims, but does not indicate that the meaning of the question has been properly grasped. Basic errors of theory and/or inadequate development of analysis may be evident.	1-8
L2	The answer shows the ability to identify facts, some ability at graphs, fair ability to apply laws to new situations. E.g. Ability to explain various policies to increase economic growth with little attempts to apply to the Singapore context.	9-14
L3	A good knowledge of facts and theory of the question, clear evidence of the ability to use facts and theory with accurate reference to the question that may have presented the candidate with a novel application. E.g. Students are able to explain growth and its policies and analyze whether this results in conflicts. Students can be awarded these marks as long as one of these conflicts is well applied.	15-20
E1	Mere statements with little/no judgement. Mere summary	1
E2	Mainly unexplained judgement	2-3
E3	Judgement based on analysis	4-5