**Essay Question 1**

**Explain the relative importance of factors that enhance economic growth in Singapore. [12]**

Introduction

 Economic growth refers to the growth of the production in terms of actual and potential production capacity. Actual economic growth refers to the actualization of resources into monetized products and services which is commonly measured as a percentage change in real GDP while potential growth refers to the expansion of availability of resources for production, measured in term of the rightward and outward shift of the production possibility curve (PPC). It is imperative to first examine the determinants of economic growth that affect both potential and actual growth before the importance of every factor can be analysed.

Main Body

 Actual and potential growth can be achieved with the increase in aggregate demand and aggregate supply, such that sustainable economic growth is attained.

 As seen from the diagram, the increase in aggregate demand from AD0 to AD1 will lead to an increase in real GDP from Y0to Yi but also an increase in price from P0 to P1. With a corresponding increase in aggregate supply from AS0 to AS1, the cost condition is lowered, such that aggregate demand will increase on a quantitative basis. Consequently, real GDP increases from Y1 to Y­2 and price falls from P1 to P2 without experiencing rising cost condition, thus sustainable economic growth is attained.

 The rise in aggregate demand can be seen in terms of domestic and external aspects. For internal demand, the rise in domestic demand is caused by the increase in consumption, government expenditure and investment. The increase in these aggregate demand components is influenced by factors such as low interest rate, rise in consumers' household income, positive market sentiment, social and economic needs. As for external demand, the global economic condition will affect economic activities and trading activities of the countries. For instance, the rise in national income in foreign countries and high inflation rate in trading partners of Singapore will contribute to greater reliance on Singapore imports. Also, the quality of goods produced will be affected by Free Trade Agreement (FTA), raising Singapore's export demand. Global positive market sentiment will lead to inflow of more Foreign Direct Investment (FDI) into the country.

 Factors that affect potential growth in Singapore will determine the availability of resources for production. One such factor is land and raw materials. As Singapore lacks natural endowments, the shortage in supply of resources will lower resource capacity and undermine potential growth. Therefore, Singapore overcomes the shortage through trade, particularly the import of essential raw materials for production. Another factor that affects potential growth would be labour resources. This is determined by the population size of Singapore and the labor participation rate. Singapore experiences a labour shortage due to the low birthrate and small population size, thus it overcomes this limitation through the import of foreign workers and talents.

 Besides, there are factors that affect the availability of resources. One such determinant is manpower development, which will affect the availability of skilful workers to match the needs of the industry, in terms of the quality and quantity of workers. Technological advancement will determine the extent of the utilization of the resources and efficiency of production. Also, an efficient and effective infrastructural and institutional development would expand Singapore's availability of resources and ensure the efficient utilization of resources.

 To do so, the Singapore government has to implement effective economic policies and establish systems to sustain cost of import and expand sources of supply of resources from international markets as Singapore relies extensively on international market for these resources. In order to achieve this, the government needs to maintain a stable exchange rate which would help bring down the cost of imports. Furthermore, the adoption of an effective trade network system with efficient trading facilities and other Free Trade Agreements (FTAs) will help to expand our sources of supply of resources from international markets as trading activities will be proliferated.

Analysis – key determinants

Given the nature of Singapore's economy, it can be noted that the external influence that affects the determinants of economic growth will be more significant as Singapore relies on the external market for market demand and sources of resources. The foreign trade sectors are important sources of growth for the economy. In addition, the lack of funding and the need of higher degree of technological advancement to raise the rate of economic growth also supports the need for foreign direct investment (FDI), justifying the view that external factors influencing the flow of FDI will be more significant, such as exchange rate stability and an efficient trade network.

Conclusion

 In sum, external factors of economic growth are more significant in Singapore due to the nature of Singapore's economy. However, it is still imperative to Singapore to implement policies and establish effective and efficient systems to ensure that the internal factors would benefit Singapore.

**Essay Question 2**

**(a) Pump priming is an action taken by the government to stimulate an economy, usually during a recessionary period. Explain why such a measure is more effective when a greater portion of the extra income earned by households is consumed than withdrawn. [10]**

**(b) Assess the view that a large increase in national income is always desirable. [15]**

**What is the command word? (what are the skills required for this question?)**

* ‘Explain why’ → Use economic theory to provide reasons in detail, using examples

**What is the content word?**

(what are the relevant concepts required to answer this question?)

* ‘Pump priming’
	+ Action taken by govt to stimulate economy during recessionary period
	+ Expansionary fiscal/monetary policy to raise AD via rises in C, I and/or G
* ‘measure is more effective’ = the successful impact of increase in AD on NY to stimulate an economy
* ‘a greater portion of the extra income earned by households is consumed than withdrawn’ = larger mpc value vs smaller mpw value
	+ `determines the size of the multiplier effect

**What is the context word? (where or when to apply for this question?)**

* Examples of at least 2 different countries, with different mpc values

**Schematic Plan**

* Pump priming (expansionary fiscal and monetary policies) →stimulate higher domestic C, I and G → higher AD → via multiplier → real NY rises more than proportionate (assume economy <Yf)
* The extent of the increase in NY depends on the size of the multiplier effect → k = 1/(1-mpc) = 1/mpw = 1/(mps+mpt+mpm) → factors that affect size of k
* The larger the mpc, the larger the k, and hence the more effective expansionary policy has on raising NY and stimulating an economy during a recessionary period, through a rise in AD.

Introduction

* Pump priming refers to use of expansionary fiscal and monetary policies to increase AD.
* The level of spending by households (Consumption), firms (Investment) and government (Govt spending) are components of aggregate demand (AD) in a country.
* Expansionary fiscal and monetary policies aim to increase domestic C and I via expansionary FP (cut in direct tax and rise in government spending) or via expansionary MP (via cut in interest rates) to increase aggregate demand. The real national income (NY) in the country (assuming the economy is below full employment, that is economy has unemployed resources) will increase more than proportionately, via the multiplier process, to the increase in AD. The extent of the impact of increases in C, I and G on NY depends on the multiplier effect, which is determined by the size of the multiplier (k).
* The size of k is determined by the marginal propensity to consume i.e. k = 1/(1-mpc) = 1/mpw = 1/(mps+mpt+mpm) for a 4-sector economy.
* The higher the mpc, or the lower the mpw, the greater the size of k, and hence the greater will be the extent of increase in NY given any rise in C, I or G.

Main Body

**1) Expansionary fiscal and monetary policies aim to increase C, I and G and thus increase AD.**

Expansionary fiscal policy involves a rise in G and a cut in taxation. When the government cuts personal income tax rate, households enjoy increases in disposable income and thus higher purchasing power. Households can then increase consumption. A cut in corporate tax rate will increase after-tax profits and thus expected rate of returns for firms. Firms undertake more investments.

Expansionary monetary policy refers to cuts in interest rates. Interest rate is also the cost of borrowing. Thus, a cut in interest rate would make it less expensive for consumers to borrow money and buy on credit for big-ticket items. Also, lower interest rate would encourage consumers to consume (and save less) because the opportunity cost of spending has decreased, that is, less interest forgone on savings. This would cause an increase in consumption. Similarly, business would enjoy lower interest charges on loans for investment. More investment projects are now profitable for the same expected rates of returns. This leads to a rise in investment.

Hence, expansionary fiscal and monetary policies will boost C, I and G. Increases in C, I and G cause AD to increase. For some countries like the US and UK, consumption is the largest component of aggregate demand. A rise in C will have increase AD and hence NY significantly. However, for countries like Singapore where consumption is a relatively small component of AD, a rise in C will increase AD and NY less significantly.

**2) When AD rises, NY will rise by a larger extent due to the knock-on effect on income-induced consumption. The extent of the rise in NY depends on the size of the multiplier (k). What determines the size of the multiplier effect on NY is the marginal propensity to consume (mpc).**

The marginal propensity to consume (mpc) indicates the portion of additional or extra income that is used for consumption expenditures. The size of the multiplier, k, is directly related to mpc, that is K = 1/(1- mpc) = 1/mpw = 1/(mps + mpt + mpm). Assume 4-sector economy here.

Assuming mpc = 0.9, K = 1/(1-0.9) = 1/0.1 = 10. When AE rises by $100m, NY will rise by 10 times to $1000m.

For example, if autonomous investment expenditure rises by $100m, the national income of the economy is immediately raised by $100m via the increase in the incomes of factor input owners. These factor owners will then spend 0.9 (= mpc) of their rise in income on consumption of goods and services, i.e. $90m (mpc x ∆Y = 0.9 x $100m) is passed on to the next round of producers of goods and services, with only 0.1 (= mpw) of the rise in income being withdrawn from the circular flow (0.1 x $100m = $10m). These producers will then spend 0.9 of their rise on income on domestic goods, i.e. $81m is passed on in this third round and $9m withdrawn. The process continues, with each round of domestic spending on goods and services being the next round of income for the producers of goods and services. The process comes to an end when the change in withdrawal is $100m is equal to the initial change in injections of $100m. Final increase in income is 10 times the initial rise of $100m, that is, $1000m.

The larger the mpc, the greater will be the multiplier k and thus the multiplier effect. This is because when incomes rise, households are spending more on domestic goods out of any additional increase in income (rather than withdraw it) and thus each round of the multiplier process leads to a greater increase in national income. When people receive extra (additional) income and consume more of the extra income on locally produced goods, this will create a greater increase in AD and NY in subsequent rounds.

When people save, pay for taxes or spend more of their extra income on imports less money will be passed on through the circular flow as more of the extra income is withdrawn. Hence there will be a smaller increase in AD and NY. Assuming mpc = 0.6, k = 1/(1-0.6) = 1/0.4 = 2.5. When AE rises by $100m, NY will rise by 2.5 times to $250m.

Thus, a higher mpc (smaller mpw) leads to a larger multiplier effect whereas the larger the mpw (smaller mpc) leads to weaker multiplier effect.

**3) Different countries have different values of mpc and thus different sizes of the multiplier, and hence different degrees of effect of rise in AD on NY.**

Singapore has a smaller multiplier than other countries because of our mpc is relatively lower. This is because of our unique Central Provident Fund (CPF) scheme which requires workers to save a certain percentage of their monthly earned income. Singapore has one of the highest savings rate in the world (high mps). In addition, mpm is relatively higher for Singapore too because of our heavy reliance on imports due to our lack of resources. In contrast, USA has a bigger multiplier because their mpc is relatively higher, while the savings rate and import rate are rather low in that country. Assumption is that mpt is the same for both countries.

Asian countries tend to have a higher marginal propensity to save compared to Western countries. This can be attributed to the value of thriftiness, a cultural factor. The propensity to save voluntarily (for retirement or payment for higher medical expenditure due to ageing population & lack of established social safety networks) may also be higher in many Asian countries. Hence, the mps and thus the mpw of many Asian countries will tend to be larger compared to other Western countries (mpc smaller).

Conclusion

In conclusion, pump priming through the use of expansionary fiscal and monetary policies to stimulate an economy during a recessionary period work more effectively in countries with relatively larger mpc as a larger mpc value implies a greater multiplier effect. The rise in AD will lead to larger increases in NY via the multiplier to help the economy. In countries where the mpc is smaller, the government will need to raise C, I or G by greater amounts to achieve the same desired rise in NY to stimulate the economy.

**(b) Assess the view that a large increase in national income is always desirable. [15]**

**What is the command word?**

(what are the skills required for this question?)

* ‘Assess’ – consider both thesis and antithesis and synthesize with a judgment

**What is the content word?**

(what are the concepts required to answer this question?)

* ‘large increase in national income’ = rapid or accelerated economic growth
* ‘always desirable’ = always beneficial, with positive effects on the economy

**What is the context word?**

(what is the context for this question?)

* Different countries, time period

**Schematic Plan**

Increase in national income = Economic growth = Actual and/or potential growth Large increase in national income = Accelerated economic growth

Causes of large ↑Y → Positive & Negative effects of large ↑Y on macro and micro goals

Thesis: A large increase in NY is desirable

Anti-Thesis: A large increase in NY is undesirable

Conclusion

* Whether a large increase in NY is always beneficial depend on the source of the increase in NY (whether it is from rise in AD e.g. from higher C or rise in AS e.g. from higher I), availability of idle resources (whether economy is operating near Yf), the current state of the economy as there may be conflicts between different macroeconomic goals (for example, the economy could currently be facing a BOP deficit) and the extent of material gains compared to non-material costs incurred in achieving the rise in NY.
* It also depends on the factors that led to the large increase in NY. For example, if govt spending contributed to the increase in NY but it was funded from borrowing and greater govt debt, this leads to further negative repercussions. The desirability of a large increase in NY greatly depends in the objectives of the govt.

Introduction

* Increase in national income means the economy is achieving economic growth, which could be actual growth and/or potential growth. A large increase in national income is equivalent to targeting high rate or accelerated economic growth compared to normally.
* Actual growth can be achieved when the economy has excess capacity to accommodate any rise in AD. The rise in AD could be from a rise in C, I, G or X.
* Potential growth can be achieved when the quantity and quality of the resources are expanded or the level of technology is improved to increase the productive capacity of the economy and sustain actual growth without causing a rise in GPL.
* The rise in AD must be large to achieve the large increase in NY via the multiplier effect. The real NY will grow quickly provided the economy has excess capacity

Main Body

**1) A large increase in NY allows the country to achieve other macroeconomic goals, namely lower unemployment rate and lower inflation rate, and probably improvement in BOT.**

This is because higher actual economic growth leads to a greater utilization of resources and hence move the economy towards full employment. There is greater production of goods and services to meet the rise in AD, leading to greater demand for labour and other resources. Hence, unemployment rate falls as demand for labour is derived from the demand for goods and services.

Moreover, greater output and potential growth in the country could have also been based on supply factors such as rise in level of technology and higher productivity. This enables the aggregate supply to rise and hence overall output and employment can rise. This rise in aggregate supply may lead to a fall in general price level, leading to a low rate of inflation, which is another important macroeconomic aim of a country.

As the goods and services can now be produced at lower prices, exports of the country

become more price-competitive to the rest of the world. This can lead to a rise in export

earnings, improving the BOT in the country.

Thus, a large increase in NY is desirable as it can reduce both unemployment and inflation, and improve BOT.

**2) A large increase in NY brings about a higher standard of living.**

First, with a larger income, as measured by Gross Domestic Product (GDP), and with a given population, higher GDP per capita will mean more goods and services are produced and available for consumption for the average person in the country. This should lead to higher standard of living.

Economic growth has led to a greater quantity and range of goods and services for consumers, which contributed to a significant increase in living standard in the country. Citizens have having purchasing power now with the large increase in NY and hence they will be able to enjoy a wider range of consumer goods, improving their material standard of living.

In addition, a large increase in NY enables the government to collect more tax revenues to help fund welfare payments to improve the lives of the citizens. Those in the lower income groups can be assisted in many ways to ensure a better standard of living for them, for e.g. subsidies for housing and healthcare.

Thus, a large increase in NY leads to improvements in the standard of living, a significant aim for many, especially the developing economies.

**3) However, it is necessary to note that rapid economic growth and large increase in NY may bring about conflicts with other macroeconomic goals, namely rising structural unemployment in the long run.**

If potential growth is accomplished with economic restructuring in manufacturing and

industrialization to ensure exports of the country remain competitive, the new jobs created will be in industries where higher skills and education is required. Thus, the less skilled and lowly-educated workers may find that there is a mismatch between their skills and the job requirement, especially those in primary industries, leading to rising structural unemployment in the country.

For example, the problem of structural unemployment is a real concern in Singapore. Professionals, Managers, Executives and Technicians (PMETs) have joined the less skilled, lowly-educated workforce in the ranks of structural unemployed. The ageing workforce in Singapore which is made up of a large group of less skilled and educated workers in their 40s and 50s has further compounded this problem of structural unemployment.

Nevertheless, despite this conflict, economic growth is still a significant aim because it provides government with the tax revenue to fund retraining schemes for the structurally unemployed and the redesigning of jobs. In addition, higher economic growth helps to provides funds for more social security schemes to help the lower-income workers improve their living standards, thus achieving the aim of a more equitable distribution of income in the country as well.

Thus, it is important to note that rapid potential economic growth may bring about large increase in NY but the economic restructuring to achieve it may result in structural unemployment. Although rapid economic growth helps to promote higher employment, it can result in some workers to be permanently out of a job. So it is important for the govt to implement measures to minimize this negative impact of economic growth.

**4) However, the pursuit of large increase in NY may lead to a conflict in pursuing other macroeconomic aims of low inflation and BOP equilibrium in the short-run.**

Rapid actual growth and large increase in NY may lead to higher rate of inflation and balance of payments deficit especially when the country is approaching full employment.

This is because as aggregate demand (AD) rises near full employment where the economy is reaching its full capacity, demand-pull inflation set in due to inability of AS to match increases in AD. This will affect the export competitiveness and hence worsen the country’s balance of payments (BOP).

Higher economic growth and purchasing power may also lead to rising demand for imports of consumer and capital goods and hence worsen the balance of payments further, especially if the economy is already facing a BOP deficit.

Hence, such negative effects of higher actual growth may cast doubt on the significance of promoting rapid actual growth in the country.

**5) Besides the possible negative effects of rapid economic growth and large increase in NY on employment, inflation and balance of payments, there are other adverse impacts on income distribution and non-material SOL.**

The large increase in NY could be a result of rapid growth and expansion in certain industries and will only benefit certain groups of people in the country. Those working in the industries that enabled such large increase in NY could see a quick and high increase in their incomes while those working in other industries not related to this growth may see stagnant or even falling real incomes if GPL rises, leading to a worsening income gap.

Large increase in NY is a result of higher levels of productive activities. This often results in higher levels of negative externalities or spillover effects on third parties, resulting in lower consumer well-being. There will be higher levels of air and water pollution, traffic congestion, longer working hours and stress levels, all leading to a decrease in non-material SOL.

Therefore, such negative effects of large increase in NY may cast doubts on the benefits of promoting rapid economic growth in the country.

Conclusion

Whether a large increase in NY is always beneficial depend on the source of the increase in NY (whether it is from rise in AD e.g. from higher C or rise in AS e.g. from higher I), availability of idle resources (whether economy is operating near Yf), the current state of the economy as there may be conflicts between different macroeconomic goals (for example, the economy could currently be facing a BOP deficit) and the extent of material gains compared to non-material costs incurred in achieving the rise in NY.

It also depends on the factors that led to the large increase in NY. For example, if govt spending contributed to the increase in NY but it was funded from borrowing and greater govt debt, this leads to further negative repercussions. The desirability of large increase in NY also greatly depends on the objectives of the govt as well as the existing world economic situation.

**Essay Question3**

**Amidst the slow growth in the EU, the persistently high budget deficit and ballooning public debt have become major concerns for many governments in the EU. As a result, they have implemented 'austerity measures' to reduce their budget deficit by raising taxes and cutting back on public spending.**

**(a) Explain what would limit the effectiveness of the austerity measures in the EU. [10]**

Introduction

 The aim of the austerity measure is to prevent budget deficit and cut down the public debt and to do so, the government needs to be prudent in government spending and capable in raising tax revenue by creating economic activities that are taxable. There is also a need for the government to ensure that austerity measures will be able to sustain or even raise production, employment and economic growth. However, the effectiveness of these measures is affected by certain economic factors.

Main Body

 One such economic factor to consider is the composition of government expenditure, which can be classified as ordinary or developmental governmental expenditure. The cut down in expenditure will not be feasible since the salaries of civil servants cost of welfare and ordinary public spending cannot be reduced easily. If the reduction in spending is for developmental expenditures, the government will able to reduce such public spending but this will undermine the development of the nation. Thus, there is a need to consider the types of government expenditure which the government can reduce to ensure that there is a balance in achieving the aim to cut public debt and budget deficit without compromising development and the proper functioning of the government.

 There is also a need to consider the influence of other aggregate demand components and the impact of the austerity measures on these aggregate components. If the aggregate demand components like export demand and private and foreign investment can be raised during this period, the cut down in government will be feasible and will not undermine the economic activities. If the cut in government expenditure will lower down the consumption level as the government expenditure is extensively for transfer payment. Thus such cut is less likely to be feasible as this is not supported by the people.

 Another factor to take note is the size of multiplier as the cut down to balance budget or a small surplus may be beneficial as it will still be able to generate adequate expansion of the circular flow of income to raise economic growth and sustain production and employment if the size of the multiplier is large or still equal to one for balanced budget. This will lead to extensive contraction of the circular flow of income if the size of the multiplier is large when the budget is in deficit although it may help to reduce public debt. The fall in economic activities may undermine the economy from raising tax revenue and this may render the effort to cut government expenditure as the lower tax revenue will make it more difficult for the government to reduce public debt.

 It is also important for EU to consider the level of private or public saving and the extent of distribution of the saving among the population as this will help the government to consider the areas of government expenditure it may reduce so as not to lower the private consumption level as high level of saving among the group of consumers will enable them to sustain consumption when the transfer payment is reduced and the public expenditure is cut.

In sum, it is not an easy economic implementation when the government in EU attempts to introduce austerity measures as there many economic factors that will undermine such measure. Many sacrifices must be made to ensure that the aims of the austerity measures are met.

**Amidst the slow growth in the EU, the persistently high budget deficit and ballooning public debt have become major concerns for many governments in the EU. As a result, they have implemented 'austerity measures' to reduce their budget deficit by raising taxes and cutting back on public spending.**

**(b) Discuss the extent to which the austerity measures in the EU will have an adverse impact on the Singapore economy.**

Introduction

 The impact of the austerity measures in EU will have an adverse impact on Singapore and this can be observed from how the slowdown of the economic activities in Europe will affect Singapore’s trading and investment activities and the flow of fund. These adverse impacts can be observed from how it lower our economic growth and employment and worsen the inflationary and balance of payment.

Main body

 The austerity measure will cause a slowdown in the economic growth of European Union and this will mean a reduction in the standard of living of the member nations. There will be a reduction in the real GDP per capita of the citizens, which will mean the purchasing power of the people will reduce and this will contribute to a fall in import expenditure made by the member nations. As for firms in these economies, they are likely to face bleak business development and there will be lower revenue and profitability will be adversely affected, influencing the firms in Europe to cut down their investments in Asia and thus, Singapore too. As the economic adversity will also mean that the EU may cut their interest rate to stimulate their economic activities, there is likely an outflow of fund from EU and inflow of fund into Asia and Singapore due to interest rate differences.

 This adverse development in EU will cause a fall in Singapore’s export demand to the EU and the inflow of foreign direct investments from EU into Singapore will be adversely affected. The adverse development in the EU will **worsen balance of trade and long term capital account**, which undermine production activities while the inflow of fund from EU in terms of hot money will destabilize the short term capital account and the exchange rate of Singapore.

 The reduction in export demand and the inflow of FDIs will also contribute to the fall in aggregate demand which will **lower the value of real GDP via the reverse multiplying effect**

. In the multiplier process, the initial reduction in aggregate expenditure contracts the circular flow of income and then reduces the income of factor earners, which will further reduce the circular flow of income with further reduction in consumption activities. As long as consumption activities are reduced, circular flow of income will continue to contract at the respective level of economic activities until the withdrawal effect is finally equal to the initial reduction in aggregate demand, which will cease the contraction of circular flow of income. Consequently, the national income will reduce by several folds, depending on the value of the multiplier which is determined by the sum of the MPW (Marginal Propensity to withdraw - MPS + MPT +MPM), indicating that there will be **negative growth**.

(Draw diagram and show how the real GDP will be reduced.)

AS

P₀

P₁

GPL

Real GDP

AD0

Y1

AD1

Y0=YF

 As seen from the diagram, the reduction in aggregate demand from AD0 from AD1 will lead to a fall in real GDP from Y0 to Y1.

 The adverse impact can also be seen from how the **rise in unemployment rate** as the fall in export demand for Singapore and the reduction in the inflow of FDIs will mean that there is lower production level and there will be lower level of demand for labour. With the rise in unemployment rate and the condition of slow economic growth, this will lower **the standard of living as the real GDP per capita falls.**

 It is also likely that there will be excessive rise in price level, especially contributed by **asset-based inflation**. Inflow of hot money from EU will raise the money supply in Singapore, lowering down the interest rate to encourage borrowing for speculative activities as seen in property market. This will contribute to the rise in the price of property which are the non-core inflation but are significant in the influence of inflation in Singapore; rising price of property will raise the amount of mortgage payment and this will lead to higher cost of rental which will **aggravate cost-push inflation.** Consequently, price instability sets in.

 In this review of the extent of the adverse impact on Singapore, there are several factors to take note. First, Singapore is highly dependent on EU for trade as EU is our largest trading partner and the EU’s main composition of FDIs are mainly in the field of pharmaceutical industries which are Singapore’s key industries. Thus, it is inevitable that Singapore’s economic growth and production level will be affected.

 Furthermore, the inflow of hot money from EU and other regions like US as investors look for more lucrative returns on their fund will lead to extensive inflow of hot money. As Singapore is an open market and the financial sector is another key industry, it is difficult to restrict the inflow of hot money and its impact on the property market which are likely to be destabilizing on the price level and social stability.

 As Singapore’s market demand is from the international market due to the concentration of MNCs in our production capacity, the negative development in EU will affect the global economy, given its significance. This will affect Singapore’s export demand extensively since it is highly export-oriented, given that trade is 4.5 times to GDP. Thus, the impact on economic growth and employment is inevitable and consequential.

 However, it is still possible for Singapore to dampen these adverse impacts as Singapore has been able to diversify the trading dependency with EU by expanding the trading activities with other major trading partners. At the same time, it is also raising the size of domestic market demand through her population growth and development of local enterprises and this will help to raise the local production and employment, thus dampening any adverse impact from EU.

The government of Singapore is also capable to introduce policies like expansionary fiscal policies to help to cushion the unemployment condition with provision of public services. For other problems like inflationary condition, it is able to introduce rues and regulation like Additional Buyers’ Stamp Duty to curb speculative activities. Long term plan like manpower development are also introduced to develop the skills of the workers to raise their skill competency to prepare for problems from EU

Conclusion

 In sum, it can be seen that Singapore is greatly affected by the development in EU with issues like austerity measures as Singapore relies extensively on trade and FDIs from EU but the government has attempted to reduce this impact through short and long term policies. It is quite impossible for Singapore to completely shield herself from it but the policies will make it feasible to dampen the impact and make responsive recovery from the adverse situation.

**Essay Question 4**

**"With the opening of Resorts World Sentosa and Marina Bay Sands in early 2010, the Ministry of Trade and Industry projects that each of the Integrated Resorts (IRs) would add $2.7 billion to Singapore's Gross Domestic Product (GDP)."**

**Source: Economic Survey of Singapore 2010**

**Explain possible factors that may limit the effectiveness of the integrated resorts in generating short-term economic growth in Singapore. [10]**

**Definition of short-term economic growth and link the project stated**

**How this project leads to EG ) project – increase in the respective components of AD - increase in AD via the k - rise in real GDP**

**What are the factors will affect how this project leads to Economic growth**

Introduction

* Definition of short-term economic growth – Actual growth
* The factors that will generate short-term economic growth can be seen from the effect of the resorts in generating higher economic activities to raise real GDP

Main Body

**1. Explain how the opening of RWS and MBS will lead to the growth of real GDP through its impact on appropriate via the multiplier**

 Consumption will occur as there will be more visitors to the two integrated resorts as there are new leisure activities which include dining, shopping and gaming that will induce more consumption in an affluent society, like Singapore. In addition, there will be inflow of tourists who will raise demand for export services as they raise expenditures at these new resorts. Consequently, this will stimulate the economy as more hotels and other forms of investment are made in the service industry to support the demand for such services brought about by the opening of the Integrated Resorts (IRs). Besides, government expenditure will increase as there is a high degree of building of public infrastructure to support the development of IRs. Therefore, the increase in aggregate demand will induce an increase in the real Gross Domestic Product (GDP) via the multiplier effect, implying that there will be a short-term economic growth.

 In the multiplier process, the initial increase in aggregate expenditure expands the circular flow of income and then increases the income of factor earners, which will further expand the circular flow of income with new consumption activities. As long as more consumption activities are made, circular flow of income will continue to expand at the respective level of economic activities until the withdrawal effect is equal to the initial injection, which will cease the expansion of circular flow of income. Consequently, the national income will increase by several folds, depending on the value of the multiplier which is determined by the sum of the MPW (Marginal Propensity to withdraw - MPS + MPT +MPM).

Y1=Y2=YF

Real GDP

GPL

AS0

AD2

AD1

AD0

Y0

P1

P2

P0

 As seen from the diagram, the rise in aggregate demand will lead to a rise in real GDP from Y0 to Y1, indicating that there is short-term economic growth.

 However, there are certain factors that will impede this growth. Firstly, the extent of growth brought about by the IRs depends on their ability to increase aggregate demand compared to other industries. As Singapore’s main contribution comes from manufacturing, finance and pharmaceutical, the negative from these industries may undermine the contribution of the two industries to the short-term of economic growth.

 Besides this, the value of the multiplier will limit the short-term economic growth as there is a lower degree of expansion of the circular flow of income by the injection brought about due to a higher level of withdrawal, seen in terms of high marginal propensity to save (MPS) and marginal propensity to import (MPM). The value of MPS is high as there is compulsory CPF saving scheme while the value MPM is high as there is a high degree of reliance on import due to our lack of resources.

 Thirdly, the condition of high commodity prices and rising wage control will also impede the growth of real GDP as the rising cost condition will reduce the production, undermining the degree of production of services from these industries. (the amount of increase in real GDP is limited by the availability of resources when the economy is near full employment)

Furthermore, production is at full employment level, which will induce an increase an increase in nominal gross domestic product but no real increase in actual production level. The increase in aggregate demand from the two integrated resorts will only raise the price level without any increase in production due to a limited capacity of production. Under such circumstances, the growth of the real GDP will be limited in the short term.

Lastly, the exchange rate will also be a key factor that undermines the contribution of the two IRs towards attaining short-term economic growth as an appreciation of the exchange rate will raise the price of tours to Singapore. A fall in number of tourists visiting Singapore due to higher price of tour will reduce the demand for types of services from the service-related industry and thus, lowering the value of aggregate demand.

Conclusion

In sum, the various factors identified have shown that the short-term economic growth attained through the integrated resort industry may be hampered. Therefore, it is imperative that policies are introduced to ensure that these factors would not surface to undermine the beneficial contributions that can be reaped from the IRs.

**Essay Question 5**

**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]**

**benefits of growth to be distributed to more segments of the citizens**

* **sustainable economic growth (consistent rise in real GDP) -> sustained economic growth – increase in real GDP without increasing price**
* **equal distribution of the gain from economic growth**

**why must have inclusive growth**

* **raise SOL for more people**
* **reduce the negative effects of unequal distribution of income**

**(social dissatisfaction, cost of helping lower income group)**

* **induce a more permanent and large base of consumption – pivot to growth (even distribution of income – create more consumption in terms of quantity – increase production – increase in demand for labour – increase employment and further generate more growth)**
* **increase in tax revenue – more consumption – increase in tax collection from GST**
* **more saving to generate more funding for investment**
* **lower the needs for government to spend more on welfare to help lower income group – cut down budget strain**
* **long term development of the local economy through a large base consumption**

**Essay Question 7**

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**(b) Evaluate the measures adopted by the Singapore government to achieve**

**inclusive growth. [15]**

Analysis of the question:

definition and meaning of inclusive growth – manifestation of inclusive growth – sustainable growth and well-distributed growth to different segments of population

measures – policies and directives that can be used to achieve sustainable EG and eradicate disparity of income

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.

Main Body

Measures to achieve inclusive growth include:

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

**Fiscal Policy to achieve economic growth and reduce income gap**

* ↑ in G → ↑ in AD assuming economy operating below full employment level, via muitiplier → ↑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 → ↑ 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.



* ↓corporate tax rates from 20% to 17% → ↑in after tax profits → ↑ investment local business and foreign firms → ↑AD shifting to the right from AD1 to AD2 → ↑actual growth from Y1 to Y2.
* ↑ in investment→ ↑productivity → ↑LRAS shift to the right from AS 1 to AS2 → ↑potential growth from Yf1 to Yf2.

 **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 shock, 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. – prevent unemployment and reduce income inequality
* 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.

**Lower income group will be taxed more than higher income group (GST is regressive) – govt tries to switch to GST to raise tax base – more will be taxed**

**SS-side policies to enhance productivity for sustainable growth**

* Improvement in Infrastructure in Jurong Island, Biopolis → ↑external EOS→ ↑productivity
* The Productivity and Innovation Credit Scheme (PIC) scheme was introduced by the government to encourage productivity and innovation in Singapore. It creates the incentive to invest in areas to improve their productivity. Businesses enjoy 400% tax deductions/allowances if they qualify.
* The increase in investment → ↑ productivity → ↑AD and AS → ↑sustainable growth.

**Appropriateness:**

* PIC support local businesses which might not enjoy internal EOS due to the small domestic market and therefore, cannot compete with foreign firms in the global market.

**Limitations:**

* Expensive to fund and costly to monitor the appropriate use of the PIC.
* Higher global economic uncertainty, leaving little impetus for firms to invest in productivity-enhancing capital despite these SS side policies.

**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 labor 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 policies:

* Exchange rate policy
* Wage policy

Conclusion

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.

**Essay question 1**

In the midst of the impact of COVID-19 and US-China Trade War, countries like China and US has turned to their domestic market for growth. It will not be easy for small countries like Singapore to turn inward and induce growth in their domestic market demand.

a) Consider the factors that determine whether countries can achieve to switch from an external demand driven growth to a domestic driven growth. (10)

b) Evaluate the policies Singapore can adopt to adopt to counter the greatest impact of the economic downturn in the current problem of COVID-19 and US-China trade. (15)

**Essay Question 2**

**a) Is slow growth a concern to developed and developing economy (12)**

**b) Can an economy avoid slow growth? (13)**