**2017 Economics – Chapter 3 – NID – Essays**

**Essay Question 1**

Explain how an increase in government expenditure will affect the economy?

**Essay Question 2**

“A recession in the United States (US) and Europe would badly hurt Asian economies, especially Singapore’s, which still rely heavily on these two export markets for growth, according to economists.”

Source: 23rd January 2008, The Straits Times

Explain the effects of the US slowdown on the Singapore economy. [12]

**Essay Question 3**

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

**Essay Question 4**

(a) Explain the necessary information an economist would require to determine whether the standard of living of an economy has improved. [10]

(b) Consider whether high household savings is always beneficial to Singapore. [15]

**Essay Question 5**

Assess whether the Singapore government currently adopts appropriate policies to achieve high standard of living (SOL). [25]

**Essay Question 1**

Explain how an increase in government expenditure will affect the economy?

**(impact on economic growth, potential growth, the price level, employment and external equilibrium)**

Introduction

 Government expenditure refers to expenditure on goods and services spent that are for ordinary and development expenditure in areas such as, provision of public goods and defense. The change in government expenditure will affect the economy and this can be explained by the economic analysis of AD-AS.

Main Body

 Government expenditure is used to improve infrastructure for the country to raise the efficiency of the industries and indirectly boost consumption through the increase in the disposable income that will provide a higher level of purchasing income. As a result, the increase in government expenditure will increase aggregate demand and via the multiplier process, lead to an increase in real GDP. Hence, the increase in government expenditure will raise actual growth.

 In the multiplier process, the initial increase in the aggregate expenditure expands the circular flow of income, increasing the income of the factor earners to further expand the circular flow of income with new will co transactions. As long as transactions are made, the circular flow of income will continue to expand until the withdrawal effects is equal to the initial injections which will crease the expansion of the 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 Marginal Propensity to Withdrawal (MPW) that consists of Marginal Propensity to Save, Tax and Import. (MPW = MPS+MPSMPT+MPM).

 The increase in government expenditure also involves infrastructural development and research and development (R&D) that leads to an expansion of resources, made possible with high degree of mobility of resources that the economy can attain with more infrastructures. As a result, efficiency of production is raised, allowing firms to produce more with the same units of resources at lower cost of production, thus attaining potential growth, as seen by the rightwards shift of the long run supply curve.

Y1=YF0

Y2

YF2

LRAS0

LRAS1

P1

P0=P2

GPL

Real GDP

AD1

Y0

ADo

 As seen from the diagram, the increase in government expenditure will induce a rise in aggregate demand from AD0 to AD1, contributing to a rise in real GDP from Y0 to Y1 and a rise in GPL from P0 to P1. Since the increase in government expenditure also leads to the expansion of resource capacity, the aggregate supply will shift to the right from LRAS0 to LRAS1, whereby the full employment is raised from YF1 to YF2, lowering the cost condition, which will induce an increase in aggregate demand on a quantitative basis and thus, raise the real GDP from Y1 to Y2 with a reduction in GPL from P1 to P2. Hence, sustained economic growth is attained.

 The increase in government expenditure will bring about spillover effects. One such benefit would be the improvement in standard of living, which can be seen from the higher degree of convenience and comfort brought about by improved infrastructure and public facilities.

 Besides this, there will be a higher degree of efficiency in the economy which will raise productivity as the infrastructural development will raise the productivity of the industries while expenditure on manpower development will raise the skill competency of the workers.

 As for government expenditure, given out as subsidies to lower income group, this will help to eradicate the unequal distribution of income and wealth, and thus eradicating the social dissatisfaction.

 Most of all, the increase in government expenditure due to more provision of public services and infrastructural development will induce more production and thus provide more employment, especially significant for economies with large population.

 However, there are detrimental impacts to be considered as seen in terms of the inflationary condition. When there is excess increase in aggregate demand under rising cost condition or full employment or when the economy’s potential growth fails to expand adequately, price level will rise, undermining the aim of the fiscal stimulus.

 It is also important to take note of the rising public debts that may arise when the government is unable to raise sufficient tax revenue and may need to borrow more to finance public expenditure. Consequently, debts may be incurred. If the debts are internally incurred, it will be a higher tax burden for future generation and if the debts are externally incurred, it will lower economy’s future growth.

Conclusion

 In sum, the impact of government expenditure on the economy is significant. The degree of impact depends on factors like the value of multiplier the areas of government expenditure and the nature of the economy.

**Essay Question 2**

**“A recession in the United States (US) and Europe would badly hurt Asian economies, especially Singapore’s, which still rely heavily on these two export markets for growth, according to economists.”**

**Source: 23rd January 2008, The Straits Times**

**Explain the effects of the US slowdown on the Singapore economy. [12]**

1. **how US slowdown occurs and affect the AD components of SG**
* **how US slower rise in real GDP will lower our export demand and FDI from US into SG**
1. **how the decreasing value of AD for SG lower real GDP**

**(economic causation, diagram and description)**

1. **aims of the government (Singapore economy)**

Introduction

The effects of US economic slowdown can be quite impactful for Singapore as US is one of the main sources of export demand and foreign direct investment (FDI) for Singapore.

Main Body

**1. Explain how US slowdown will cause a fall in the real GDP using the AS-AD analysis**

* The slowdown in US economic growth would mean a fall in the real GDP of US which will contribute to a fall in the real GDP per capita. This will mean a lower real purchasing power, which will lower their importing expenditure, assuming a constant level of MPM. Then, our export demand will reduce as US citizens sent down expenditure on foreign good.
* Similarly, the slowdown in US will mean that the firms in US will be making less profit or are making losses and this will force them to cut down their investment abroad. Consequently, our foreign investment will decrease.
* Consequently, the fall in real export demand and FDI will lead to a fall in the aggregate demand and this will contribute to a fall in real GDP for Singapore via the multiplier process. (Elaborate the paragraph on multiplier process)

AD0

Y0=YF

Y1

AS0

GPL

AD1

Real GDP

P0

P1

As seen from the diagram, the fall in AD from AD0 to AD1 as a result of the reduction in export demand and FDI will contribute to the fall in real GDP from Y­0 to Y1. The fall in real GDP will mean that there is a fall in standard of living as the real GDP per capita will fall, given that the fall in real GDP growth rate exceeds the inflation rate.

**2. Explain how the fall in export demand and FDI will affect other aspects of the economy**

* The fall in export and FDI will US will incur a reduction in the production level which means a fall in employment as demand-deficient unemployment has occurred. (Why this form of demand-deficient unemployment is excessive for Singapore?)
* *export demand is 2.5 times of GDP – determines extensive aspect of production – will affect large areas of employment*

**3. Explain how the economic slowdown in US will lower price level for Singapore**

* As the US economic slowdown may lead to a deflationary condition which means that the goods imported from US is cheaper. This will help to lower cost of living and cost of imports as we depend on US for consumption of processed food and capital goods.

**4. Explain how the economic slowdown in US will contribute to the worsening of balance of trade and balance of payment**

* As export demand decreases and import demand increases, the net value of trade with US will worsen but it is unlikely that our balance of trade with US will fall into deficit as our source of import demand is still relatively small due to our small capacity of economy and US’ largest economy in the world.

Conclusion

The impact of US slowdown on Singapore can be seen from how it affects our main aims of the economy and its extent of impact will depend on the extent of Singapore's reliance on US market for export demand, import demand and foreign direct investment.

**Essay Question 3**

**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 4**

**(a) Explain the necessary information an economist would require to determine whether the standard of living of an economy has improved. [10]**

Define of material standard of living: the bundle of goods and services available for consumption to an average citizen

Material Standard of Living information:

* Measurement of Economic Growth: Choice between GDP or GNP with valid reasoning [Growth rate preferred (reflects relative improvement) to value of GDP or GNP]
* Population statistics to compute GDP or GNP per capita - reasoning for why per capita measurement is more reliable.
* Measurement of Inflation: Consumer Price Index over time to adjust material standard of living measurement for inflation.- determine real GDP or GNP - explanation of the difference between real and nominal values and its impact on data interpretation is required.
* Important to emphasise that the information required has to be over a period of time and that data from the consistent time period is required.

Evaluation of material standard of living

* It only reflects the measurable/ qualitative aspect of standard of living. However, it is a potentially misleading indicator as it ignores non-income indicators which are important signal of the overall performance of an economy. Hence there is the need for non-material standard of living information.

Non-material Standard of Living (Quality of Life) information:

* Pollution data (Carbon dioxide emissions per capita) helps reflect environmental quality that influences one's quality of life.
* Inequality trends (Gini Coefficient values) to depict extent that changes in income distribution among individuals or households within an economy deviates from perfect equal distribution. Tensions and unhappiness created with a widening income gap.
* Education levels of the population (literacy rates)
* Life expectancy data (Demography Index, mortality rate)

Conclusion

It is hard to find a single comprehensive measurement. Suggested complements include:

* Use of Human Development Index - a composite statistic based on life expectancy, education levels and per capita GDP at PPP
* Use of Measure of Economic Welfare - adjusted measure of total national output which considers the value of leisure and the underground economy, with deductions (such as environmental damage).
* An alternative is the use of Green GDP (advocated by Stiglitz) to measure environmental degradation.

**Essay Question 4**

**(b) Consider whether high household savings is always beneficial to Singapore. [15]**

Beneficial to the economy: Whether it improves the economic performance of the economy - affects the macroeconomic goals of an economy. (Suggested approach of examining internal and external effects on the economy)

High savings is a leakage/ withdrawal from the circular flow of income - part of disposable income that is not spent on consumption.

There is a negative relationship between savings and consumption.

• A high MPS increases the rate of savings of the economy.

**Thesis: High savings is beneficial to the economy**

Internal Effect

Employment, Price levels, National Income:

* An increase in savings implies a reduction in consumption. AD decreases contracting the economy through the multiplier effect. A deflationary gap is created/ widened.
* Unemployment increases, demand-pull inflationary pressures are reduced, national income falls indicating a reduction in actual growth.
* Meanwhile, an increase in savings increases supply of loanable funds available, easing pressure on interest rates, lowering the cost of borrowing. This increases investments, increasing AD, expanding the economy through the multiplier effect. Potential increase in inflation rate.
* The resultant effect on the economy depends on which of the opposing effects is stronger.

Potential Growth:

* High savings helps encourage investment (both public and private) in human and physical capital as well as technological progress.
* Aggregate supply increases in the long run as the resource base expands, resulting in greater economic growth in the long run.
* Real output per capita increases leading to higher material standard of living.

External Effect

* Increases export competitiveness:
* Lower interest rates due to the increase in supply of loanable funds will lead to outflow of short term capital, depreciating the value of the external currency.
* This enables price of exports to be relatively cheaper, increasing the value of exports, assuming PEDx>1.
* Reduces demand for imports:
* As there is an inverse relationship between savings and consumption, high household savings limits consumption spending, including demand for imports.
* Resultant effect on BOP: Favourable current account balance.

**Anti-thesis: High savings need not be beneficial to an economy**

Internal Effect

* Limits current standard of living the economy can achieve - due to trade-offs between consumer and producer goods. However, this might mean improved living standards in the future.
* During a recession, high savings hinders the government's efforts to stimulate the economy through demand management policies. Singapore's CPF has a strong contractionary fiscal influence.
* Increased investments from high savings may not be channelled to productive purposes – E.g. over investment in infrastructure and housing

External Effect

Over-dependence on exports to drive the economy and excesses in persistent trade surpluses in the BOP may be problematic to the economy in the future.

Conclusion

High savings is beneficial to an economy as it helps the economy to achieve selected macroeconomic aims. However, it is not always beneficial to an economy especially during a recession.

**Essay Question 5**

**Assess whether the Singapore government currently adopts appropriate policies to achieve high standard of living (SOL). [25]**

Introduction

* Define SOL
* State the policies Singapore government currently used to achieve high SOL

Main Body

**1. Identify and explain what makes high SOL - material and non-material well-being**

* High material well-being is measured by high Real GDP per capita as high real GDP per capita means more goods and services are available for consumption. To achieve high real per capita GDP, policies would need to target inflation, raise GDP and population control.
* Equitable income distribution ensures that the high level of real GDP per capita is evenly distributed ie. all citizens can afford to consume. No negative externalities, public goods, etc ensures quality of life for the people.

**2. Explain policies for each**

Real EG - policies targeting inflation and stimulates growth

* Exchange rate policy to target cost push inflation as Singapore is dependent on imported materials, any increase in prices of imported goods will raise the COP leading to higher general price level making goods & services more expensive for people.
* Tripartite relationship between National Wage Council, Government and the unions to ensure wages grow in line with productive. This prevents wage push inflation which would compromise Singapore's competitiveness in the global market.
* To stimulate growth, SS-side policies to bring in I and trade policies to help stimulate X since Singapore's domestic market is small, need external sector for growth.
* In the beginning years of development, Singapore adopted policy to control population growth. Per capita GDP rose quickly allowing Singapore to achieve high GDP per capita

*Are the policies appropriate?*

Given Singapore's small domestic market, we depend very much on the external market and hence growth policies targeting the expansion of the external market are appropriate. Raw materials are also imported since we have very little resources hence inflation is mainly import price push.

**Equitable income distribution - policies targeting the low income**

Progressive income tax and GST rebates - redistribution of income to reduce income inequality.

Training and re-skilling scheme to help low wage workers upgrade. These policies work hand-in-hand as cannot rely on Progressive income tax and rebates for lower income. Too progressive a tax system reduces incentive for increased work effort and too high rebates or income transfers encourage the low-wage earners to be complacent/over reliant on the government.

Training and re-skilling schemes helps the low-wage workers to upgrade hence being able to earn higher wages however, these policies take a long time to see effects.

Hence when both policies are executed together, it provides immediate relief for the low income and an avenue for them to earn higher wages in the longer term.

*Are the policies appropriate?*

**Reducing negative externalities, provision of public goods, etc - policies targeting traffic congestion, pollution, public provision of goods, etc.**

Policies targeting negative externalities reduces the impact of external cost on the people. E.g. Regulating the areas for smokers to light up minimizes the external cost on 3rd parties. Imposing fines on littering ensures a quality environment.

Public provision of public goods eg. defence, street lighting ensures national security and safety.