**Chapter 9 Economic Growth**

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**1. Economic growth, Actual growth and Potential growth**

**1.1 Economic Growth**

- The growth of production in actual production or potential capacity.

- Economic growth refers to the growth of the production in terms of actual production or potential production capacity.

**1.2 Actual Growth**

- Actual economic growth refers to the actualization of resources into monetized products and services which is commonly measured in terms of the percentage change in real GDP.

- Growth is realized where there is an increase in actual production of the economy. (increase in quantity of goods and services.)

- Actual economic growth is the percentage annual increase in national output actually produced that is the **percentage change in the Gross National Product/Gross Domestic Product** over the **previous** year. (Real GDP – real NY – determines production – determines demand for Labour – change in employment when NY increases – can use AS-AD diagram to explain employment level

- It fluctuates with the swings of the trade cycle and is affected by changes in aggregate demand components.

**1.3 Potential Growth**

- Potential growth refers to the expansion of the availability of resources for production which is measured in terms of rightward shift of the long run supply curve and outwards shift of the production possibility curve (PPC) – shift of the Yf level indicating rise in potential production capacity[SN1]

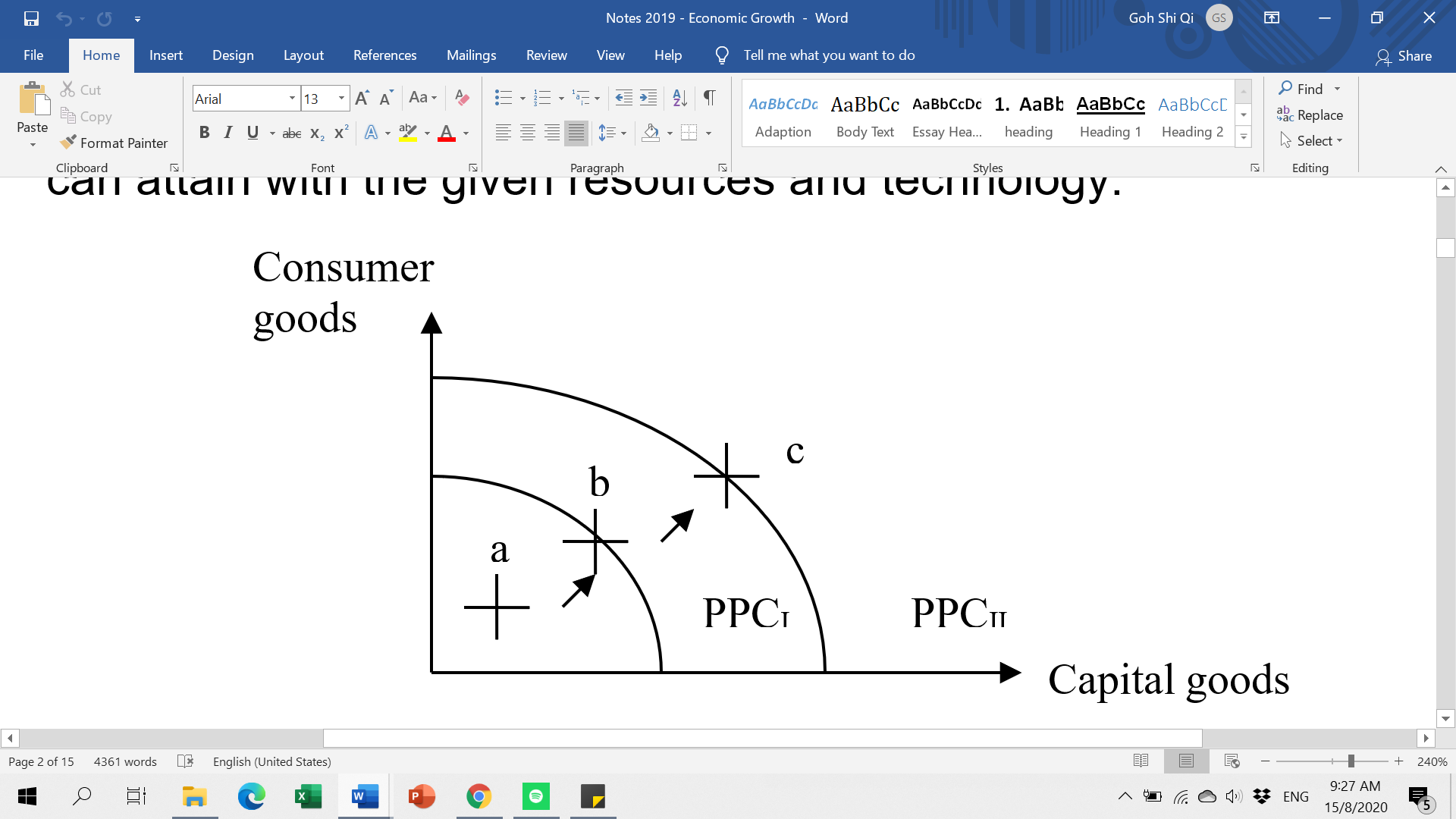
- Potential growth is the speed at which the economy could grow. It is the **percentage annual increase in the economy’s capacity to produce**: the rate of growth in potential output. (resource capacity)

- It is reflected in the shift of the aggregate supply curve to the right.

- An outward expansion of the PPC from PPC I to PPC II shows the potential growth of the country.

**2. Production Possibility Curve (PPC)**

- The PPC reflects the resource and production capacity an economy can attain with the given resources and technology.



- When the production level shifts from a to b, there is actual economic growth while the outward shift of the PPC from PPCI to PPCII will induce potential growth.

Qn: Using the PPC, explain how increase in government spending will affect the growth of the economy. (actual and potential growth)

Focus:

a. Show how increase in government expenditure will lead to actual growth (raise production and real GDP) /

b. Show how increase in government expenditure will lead to potential growth (expansion of resources shift LRAS to the right/outward shift of PPC)

Introduction

definition of growth of economy – actual and potential growth

increase in government spending- a form of increase in AD

Main Body

1) How increase in government spending leads to actual growth

2) How increase in government spending leads to potential growth

3) How this is seen by the illustration from PPC

- draw the diagram and description of diagram

4) Analysis – key determining factor of this economic effects

- amount of increase in government spending/ type of govt spending

- value of the multiplier

- govt spending on roads – raise mobility of resources – increase efficiency – expand resource capacity – raise potential growth

- type of government spending – sr / lr Conclusion

**3. Determinants of economic growth**

Qn: Explain why certain economics have higher rates of economic growth than other nations.

**3.1 Physical Capital**

- Physical capital refers to tangible investment goods like plants, equipment, machinery and building.

- Physical capital accumulation increases the productivity of labour. Machines allow one worker to raise productivity and allow more efficient use of the limited natural resources such as land and raw materials.

- Physical capital accumulation can occur if there is investment in machines and equipment. The rate of investment in an economy depends on

* Level of household savings that provides the fund for investment
* Expected returns in the future from the investment of capital
* Rate of interest which determines the cost of borrowing
* Government policy and terms of tax policy, expenditure and direction given.

- In order to achieve capital accumulation, there must be a positive net investment, investment level that is higher than the depreciation.

**3.2 Labour Resources**

- The labour force is critical in determining the growth of the national income.

- The quantity of labour force can be increased through the increase in the working population, labour participation rate or import of more foreign workers

- Training and development of the workers and import of foreign talents raise the productivity of the workers, improving the quality of the labour force.

- Singapore overcome our labour shortage and lack of quality of labour through import of foreign workers and talents

**3.3 Land and Raw Materials**

- Availability of land space and raw materials determines the resource capacity which affects the cost of production.

- Better management and utilization of resources will minimise the cost of resources which will determine the cost of production. (Production and Allocative efficiency) (E.g. Constructing taller buildings – enable greater utilisation of land capacity)

- Higher cost of production will undermine the economy from attaining a higher level of national income and thus lowering actual economic growth.

- The shortage in the supply of resources will also reduce the resources capacity and thus undermine potential growth and this is usually overcome by the import of resources as seen in the case of Singapore.

**3.4 Entrepreneurship**

- Entrepreneurs’ skills are essential in the organization of production. The effectiveness and efficiency of the entrepreneur will determine the productivity of the production and distribution process which will affect the production capacity of the economy, in actual and potential terms.

**3.5 Technological Advancement**

- It will increase efficiency of factors of production

- Technological improvement includes:

* Creation of new knowledge/Invention
* Innovation which is the application of new knowledge to the production of goods and services
* Innovation which is the application of current knowledge in new ways to the production of goods and services
* The quality of production, improving competitive edge, which will raise the efficiency of production contributing to lower cost of production and innovate

- New technology → capital investment possibilities → greater productivity and higher incomes → changing demand patterns and encourages more R&D → further technological improvements

- The rate of technological progress depend on:

* supply of scientists, engineers
* environment for research and development
* the development of intellectual property

→ assurance on the return on capital

→ Significance of intellectual property rights in aiding Singapore in attracting more high-valued and R&D based FDI – This is beneficial to Singapore as it will enable Singapore to derive more tax revenue and make it easier for the industries to raise wage rate for the workers

**3.6 Other Determinants**

Favourable cultural, social and political environments would promote growth. Legal institutions are needed to provide law and order and to enforce contracts between parties of economic transactions. Cultural attitudes towards work and material advancement are determinants of incentives to work. A social structure that allows fluid upward and downward mobility based on performance and merit is more appropriate than a rigid social structure that puts a premium on the station of one’s birth.

**4. Positive impact of economic growth**

Desirability of economic growth

**4.1 Higher Standard of Living**

- The main benefit of growth is the increase in the amount of goods and services which becomes available for the country’s citizens to enjoy.

- Economic growth also increases the income of the country allowing citizens to enjoy more of both local and foreign goods. (Raise GDP – Increase in real GDP as long as percentage increase in GDP is greater than percentage increase in price level and population growth)

- Provides more tax revenue for the government to improve the infrastructures that will raise the convenience and comfort of the citizens

**4.2 Redistribution of Income is Easier**

- With more overall income available, the government will have the resources to redistribute wealth to the poor.

**4.3 Encourages Investment**

- A stable level of economic growth increases firms and consumer confidence which will induce an accelerator effect on the economy. This will encourage more investment which, in turn, induces a positive cycle of economic growth.

**4.4 Provide a higher degree of employment**

- Higher level of economic growth will mean a higher level of production, demanding for labour. This is especially significant for a country with a large population where growth in the labour intensive industries will produce more employment opportunities for the massive population. (E.g. China, India)

**4.5 Care More for the Environment**

- As people grow richer, they satisfy their basic needs in life and have attained a certain material standard of living.

- They move on to achieve more the qualitative side of life, becoming concerned about living in a clean environment.

- Growth also allows more resources to be used for the correction or regulation to reduce external costs.

**5. Negative impact of economic growth**

Why government should not focus excessively on economic growth)

**5.1 Current Opportunity Costs of Growth**

- To achieve faster growth, firms will probably need to invest more and require financing. The finance can come from higher savings or higher taxes. Either way, there must be a cut in consumption. In the short run, therefore, higher rate of growth must mean less consumption which will lower the standard of living in the short run

**5.2 May lead to structural unemployment (jobless growth)**

- The need to accelerate economic growth will mean a need to focus on high-valued industries to raise competitiveness of the economy and this will induce the need for technological advancement and sectoral adjustment to adjust the industries towards capital intensive development. Consequently, there will be skills incompatibility and displacement of workers as industries rely more on machinery.

**5.3 May induce inflationary condition**

- As economic growth is accelerated, there is a higher degree of demand for resources which will induce an increase in cost of resources, contributing to cost-push inflation. Economic growth will also contribute to higher level of disposable income or rise in real GDP per capita and thus, this will induce higher level of composition which will contribute to demand-pull inflation

**5.4 Inequality in Income Distribution**

- Growth often involves changing patterns of demand and supply conditions. Given that resources are not perfectly mobile, there will be individuals who are unable to adapt to the rapid changes. Those who are able to adapt well will benefit significantly. Income may be redistributed in favour of certain economic groups, undermining other groups.

- With greater income disparity, the social framework of the country becomes less stable; more social problems would occur.

**5.5 Depletion of Non-Renewable Resources**

- Increased production often involves using a greater amount of resources. This means that certain non-renewable resources (e.g. coal, oil, natural gas) will run out more rapidly.

**5.6 Increase in Negative Externalities**

- Increased output and consumption levels tend to consume more resources, putting more and more pressure on the environment.

- This leads to pollution, more emission of greenhouse gas and, in turn, global warming, etc.

**5.7 Non-Economic Costs**

- Economic growth may bring increased stress and anxiety. Workers may have to learn new skills and have to change their lifestyles. Economic growth may also be accompanied by increased working hours and pressure to come up with new ideas and improvements. Some workers may find this difficult to cope with and the level of stress related diseases, suicides, divorce and other social problems tend to rise.

- E.g. Japan, where GDP per capita is among the highest in the world yet citizens rank low on happiness.

**6. Actual and Sustained Economic growth**

**6.1 Actual Growth -**

**Explain how actual growth is achieved from the increase in aggregate demand due to an economic event.**

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 (how the respective AD component will increase via k)**

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 an 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 arners, 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).

Diagram - how an increase in AD leads to rise in real GDP



**6.2 Explain how government can attain sustainable growth**

- Sustained growth refers to the expansion of the actual production capacity without incurring excessive rise in cost conditions.

- This is made possible by the increase in production capacity with corresponding expansion of the resource capacity.

To achieve sustained economic growth, there is a need for the government to raise both potential and production capacity. This can be achieved with the use of demand management policies, trade development policies and supply-side management policies to raise both AD and AS respectively.

Diagram - explain how sustained economic growth is attained.



As seen from the diagram, the increase in aggregate demand from AD0 to AD1 will raise Real GDP from Y0 to Y1 but price level will increase from P0 to P1. With corresponding increase in supply, the LRAS will expand from AS0 to AS1, and thus, lower the cost condition to decrease price which will induce increase in AD on a quantity basis. Consequently, the real GDP will increase from Y1 to Y2 while price falls from P1 to P2 without incurring inflationary effect where sustained economic growth is attained.

**6.3 Sustainable Economic Growth**

Sustainable economic growth refers to the economic condition where the economy has attained sustained economic growth in the long run and is able to renew the resources for long term production without damaging the economy.

**Question for analysis:**

**Explain why sustained economic growth is imperative.**

* Help to ensure that economic growth is perpetual
* To achieve inclusive growth as output can be produced at low cost and maintained to sustain standard of living in the long run
* To prevent the rise of environmental damage to achieve prevent rise of negative externality

**7. Obstacles to economic growth**

**7.1 Lack of financin**g – low collection of tax revenue and reserves built up from previous budgets will mean less funds for the government to use to finance their projects.

**7.2 Lack of capable and efficient government bodies to develop and implement plans to achieve the aims** – the absence of manpower due to low salaried and poor manpower development in the government agencies will mean that policies are badly developed and executed. This shortage of efficient and capable manpower is also the result of brain drain in the economy. Furthermore, some governments are corrupted and thus this undermines the development of sound strategy that will benefit the society.

**7.3 Restraint of the economy** – small economies with deprived resources may find it hard to achieve the aims as the policies are constrained by the nature of economy such as the lack of resources to implement their plans. (E.g. size of population will undermine the economy from having a skilful working population)

**7.4 Constraints of the policies** – the policies are faced with certain inadequacies as a result of the unfavourable conditions. For example, Singapore’s demand management policies are not effective as we have a small multiplier effect, thus demanding a large change in aggregate expenditure to achieve the aims.

eg. small multiplier

**7.5 Inability to control systemic factors** – Certain international political and economic events that may affect the country are beyond the control of the economy and the nation can only adapt but are incapable of removing the causes that will affect the development of sound policies.

**8. Explanation on how slow growth will occur**

When slow growth occurs, it implies that the economy has attained a small percentage rise in economic growth around the rate of zero to 2 percent. This happens when the economy is near full employment and the production capacity is limited, forbidding large increases in actual production. It can also be due to a small percentage increase in aggregate demand as the economy is restricted by economic constraints like absence of affluence and high public debt.

For a developed economy, the base year GDP is high and incremental increase in the year may be considered as a small percentage of growth rate. These countries are also constrained by limited capacity of production and need for economic development as the economy has reached a saturated pace of economic development.

**8.1 Diagram on slow growth**



**Description of the diagram for slow growth**

**8.2 Impact of Slow growth**

**9. Concept of inclusive growth**

**9.1 How can the government achieve inclusive growth?**

Inclusive growth is achieved when the economy can attain sustained economic growth and ensure that the distribution of the benefits of economic growth is spread dimensionally to different segments of the income group. To achieve economic growth is to ensure that the economy is able to share the benefits of economic growth to different layers of economic class. In achieving this, the government must ensure that there is substantial growth in real GDP and an equal distribution of income

**9.1.1 Attain sustained economic growth**

Policies are directed to raise more aggregate demand and aggregate supply to attain actual and potential growth, whereby the economy can raise GDP without inflationary conditions. These can be achieved through technological advancement, manpower development, free trade agreement and infrastructural development.

**9.1.2 Progressive tax structure and social welfare programme**

Progressive tax structure that will be able to induce work effort and innovation to raise production and economic growth rate and a distributive social welfare programme that encompasses the different sectors of the society and ensure distribution of economic benefits will be dimensional.

**9.1.3 Promotion of high economic growth rate**

Technological development to promote high growth rate by focusing on high-valued production will help the economy to attain high tax revenue to enable it to conduct their distributive social welfare programme.

**9.1.4 Distribution of economic benefits**

It is imperative that the countries can create channels of distribution of economic benefits to be distributed to different segments of the economic benefits like having a high level of employment.

**9.2 Significance of inclusive growth to an economy**

The government of many countries has always regarded slow growth as a very important aspect of economic development as attaining slow growth helps the economy to achieve the main aims of government like economic growth, low unemployment, low inflation and external equilibrium. In achieving this aim of inclusive growth, the government can benefit in many ways.

**9.2.1 Meaning of inclusive growth (definition)**

Inclusive growth is economic growth that is distributed fairly across society and creates opportunities for all.

**9.2.2 Means to measure inclusive growth**

**Gini-coefficient ratio-meaning**

The Gini index or Gini coefficient is a statistical measure of distribution of economic inequality, measuring income distribution or, less commonly, wealth distribution among a population. The coefficient ranges from 0 (or 0%) to 1 (or 100%), with 0 representing perfect equality and 1 representing perfect inequality.

**Employment**

The unemployment rate is another measure of inclusive growth. Inclusive growth requires the maintenance of full employment as the economy expands. If the economy grows while maintaining a high unemployment rate, it means that there is a widening income distribution as the high-income workers are receiving higher wages while the poor remain unemployed. As such, inclusive growth involves a reduction of the unemployment rate.

**Degree of economic diversification and integration**

We can also measure inclusive growth by the degree of the spectrum of industries in an economy. Inclusive growth involves developing a broad spectrum of industries, reducing the country’s dependence on one sector of the economy. Developing different industries also diversifies the structure of employment, providing more job opportunities for workers in the economy who have various skills suited for different industries.

Inclusive growth also involves deepening the depth of industries. A deeper depth of industries can also lead to a lower level of unemployment due to more job opportunities created in a single industry. For example, China has very large industries which provide many jobs in each industry. Around 100 million workers are employed in China’s manufacturing industry while its financial industry provides 2.28 million jobs. Having a deeper depth of industries will also increase the competitiveness of that industry.

A broad spectrum and large depth of industries increases the degree of economic distribution and incentive for growth, creating more employment in the economy.

**10 Significance of inclusive growth**

**10.1 Equal distribution of income**

Inclusive growth ensures that the fruits of economic growth are enjoyed not only by high-income workers but also low-income workers. As such, all workers in the society will experience a rise in their incomes, ensuring an equal distribution of income.

**10.2 Price stability**

Inclusive growth involves an increase in the productive potential of the economy, through manpower development or technological improvements. As such, this ensures that the price level does not inflate even as aggregate demand rises, ensuring price stability and sustained economic growth.

**10.3 Low unemployment**

Sustained economic growth stimulates the demand for labour, leading to the creation of jobs and reducing unemployment in the economy.

**10.4 Creation of an affluent consumer base**

Inclusive growth creates a large and affluent consumer base. When higher incomes are generated, consumers purchasing power will increase, causing an increase in consumption spending. This leads to consumption-led growth for the economy.

**10.5 Sustain competitiveness**

Inclusive growth can also help a country to sustain competitiveness in the international market. Having a wide spectrum of industries will enable a country to compete in a variety of markets. This can help the country to sustain its competitiveness in a developing world and ensures that the country is not limited to one industry only.

**10.6 Improved SOL (material and non-material)**

Inclusive growth can also lead to improvements in the country’s standard of living in both material and non-material aspects. With higher incomes, consumers are able to spend more on goods and services to improve their material SOL. Governments are also able to collect higher tax revenues and use the revenue to improve public provision of merit goods such as education and healthcare, and also improve public infrastructure. This will improve the non-material SOL where people are able to enjoy a more comfortable lifestyle with better public facilities.

**11 Measures to achieve inclusive growth**

**11.1 progressive tax plus subsidies**

To achieve inclusive growth, the government can introduce a progressive tax and subsidies for the lower-income group. A progressive tax is a tax that imposes a lower tax rate on low-income earners compared to those with a higher income, making it based on the taxpayer's ability to pay. The government can then use this tax revenue earned to give as subsidies to the lower-income group. This will help to distribute the economic benefits from economic growth and tackle the unequal distribution of income.

**11.2 expansionary FP/MP to raise employment**

Expansionary fiscal policy and monetary policy can also be introduced to raise employment. Expansionary fiscal policy involves an increase in government expenditure to increase aggregate expenditure directly through infrastructure development and provision of public services. Expansionary fiscal policy can also involve a tax reduction which increases disposable income and purchasing power, thereby increasing consumption spending and AD. Tax reduction also increases return to investment as there is lower tax on corporate earnings, which prompts businesses to increase their investment spending and increase AD.

An expansionary monetary policy on the private sector can also be implemented. This involves cutting interest rates in the economy which makes it cheaper to borrow. This encourages firms to invest and consumers to spend, which increases the overall demand in the economy.

These increases in AD will lead to the creation of more jobs and an increase in employment in the economy.

**11.3 supply-side policies focusing on infrastructural development (non-material SOL) / manpower development**

Supply-side policies concerning infrastructure and manpower development can also be introduced to enable economic distribution of wealth. The government can introduce supply side policies such as skills retraining and education to help to cultivate a more knowledgeable and skilled workforce. Skills development of workers overcomes the skill incompatibility and displacement of workers which helps low-income workers to break out of the cycle of low-paying jobs.

Infrastructure development involves building up new facilities that will attract more investment and raise the productivity of the economy. When infrastructure is developed, it can reduce the immobility of resources which will increase the efficiency of industries and lead to economic growth and higher incomes. With better infrastructure, there is also an improvement in the non-material SOL due to increased convenience of life.

**11.4 trade diversification for SG** → overcome limitations of market dd → policy to focus high-valued employment → high wage → increase SOL

The Singapore government can adopt trade diversification to overcome the problem of limited market demand.

**11.5 investment-driven policies → increase AD/AS**

Investment-driven policies can be adopted to achieve sustainable growth by increasing AD and AS.

**11.6 Why some countries cannot attain inclusive growth**

**i. Depth of poverty trap**

**Ii. lack of political and social stability**

**Iii. lack of infrastructural development and facilities to support growth**

**Iv. Lack of a progressive tax structure and transfer payment**

**V. small multiplier**

**Vi small population and low supply of labour**

**Vii lack an efficient government with proper rules and regulation**

**12. Government-based growth**

**Government-based growth refers to the adoption of manpower development and infrastructural development implemented by the government to promote economic growth. Based on these development, the government is able to raise governmental expenditure to raise aggregate demand and improve the production capacity to expand availability of resources for future production**

**Benefits of government-based growth**

* Improvement of amenities and facilities to help improve the quality of life
* Enable direction of development for the economy
* Institutionalization of the economy to support economic development
* A large source of injection towards a focal area of development
* Provision of more public services for the economy

**Hindrances**

* May lead to budget deficit
* Growth and development may be hampered by inefficiency of the governmental bodies
* Rise of corruption and creation of ‘white elephant’
* Small multiplier
* Lack of technology

**13. Investment driven growth**

- meaning of investment driven growth

* Investment driven growth refers to the attainment of economic growth through the injection of investment of new capital that can help increase aggregate demand, contributing to both actual production and potential production capacity

- benefits of investment driven growth

* Increased employment → increase in income and economic growth
* Increase in new sources of fund to expand the economy
* Transfer of technology if it is FDI
* Provide mass employment and high wage employment, a diverse variety of employment
* Create a new source of tax revenue for the country

- hindrances of investment driven growth

* Political instability
* Higher cost of production
* High tax rate
* Lack of skilful workers
* Lack of resources due to lower level of production capacity

**14. Export driven growth**

**- meaning of export-driven growth**

* Export-driven growth refers to economic growth that is generated from the exporting of goods and services from one country to another.

**- benefits of export-driven growth**

* Increase in exports generates revenues and profits for businesses. This leads to an increase in capital investment that can increase a country’s productive capacity.
* Reap the benefits of high affluent overseas market
* Accelerate economic growth with high valued industries
* Allow diversification of the economy
* Increase in size of market demand to allow firms and industries to reap EOS

**- hindrances that undermine export-driven growth**

* Being reliant on exports to generate economic growth can make the country vulnerable to external economic and political shocks.
* Rapid export-led growth might lead to demand-pull inflation and higher interest rates.
* Exchange rate fluctuation undermines the stability of the trading prices, leading to to trade fluctuation
* Trade protectionism undermines trading activities that undermine rise in AD to promote economic growth

**15. Consumption driven growth**

**- Meaning of consumption-driven growth**

* Consumption-driven growth refers to economic growth generated by consumer spending. This is associated with large economies with huge population growth like the US, China and Indonesia.

**- how is consumption driven growth attained**

* Consumption driven growth is attained when real consumption growth exceeds real GDP growth.
* Provision of credits to induce credit consumption
* Provision of transfer payment to raise subsidy for the population and increase consumption, promoting economic activities for growth

**- benefits of consumption driven growth**

* Increase in demand for goods and services, increase in employment to increase output
* Improve income distribution
* Create a larger consumer market to generate economic activities
* Improve standard of living
* Provide more tax revenue based consumption tax like GST as there is a larger consumer base

**- hindrances that undermine consumption driven growt**h

* Small multiplier
* Tax rates
* Size of population
* Credit consumption
* Market confidence
* Effective when the country has positive GDP growth periods. During times of recessions or periods of negative GDP growth, consumers may have their purchasing power reduced and choose to decrease their consumption
* Growth is weaker when it is consumption-led
* If increase consumption is financed by debt, this may constrain spending in the future

16. ACJC 2019 H1 Econs Prelims Question 2

**Inflation and Labour Market Issues in the UK and Singapore**

**Extract 9: Singapore faces double whammy in labour supply**

Singapore has the most to fear from an ageing population among Asia-Pacific nations, according to a new study. It noted yesterday that the country faces a double whammy: a shrinking workforce coupled with slower progress than its Asian neighbours in getting more people into the labour market.

The report by Oxford Economics said Singapore's labour supply will shrink by 1.7 percentage points in the 10 years through 2026, and by 2.5 percentage points in the following decade. The report said almost all Asian nations will face demographic challenges over the next two decades, and policy measures or efforts to boost labour participation rates - such as by drawing more women or the elderly into the workforce - will only partially limit the impact.

The report added that the massive decline expected in Singapore's working-age population growth from 2027 will be due in part to less immigration after a recent policy shift.

Singapore's ageing population has long been flagged as a major challenge to the economy. It means higher healthcare expenditure and a decline in the domestic labour force, which will affect growth.

However, economists believe Singapore remains attractive as a destination for human capital and businesses, given its status as an international hub for finance, shipping and other activities. It also helps that Singapore has more flexibility in terms of immigration policy compared with other countries in the region.

Source: The Straits Times, September 2017

**Extract 10:** **Singapore's ageing population a ticking 'time bomb'**

Singapore’s population will reach a critical juncture next year, as the number of people above 65 will equal those under 15 for the first time in history. Economists warn that the situation is a ticking ‘demographic time bomb’, with implications on costs, taxes, labour and productivity.

Economists interviewed said that unless the government loosens its grip on immigration, taxes would have to be raised in the near future as a result of the rapidly greying population. The ageing population could prompt the government to look at imposing new taxes on e-commerce transactions for example, and raise the goods and services tax (GST) from the current 7 percent to 9 percent in 2019. The government could also prioritise spending in various areas in order to manage its growing expenditure.

Economists argued that loosening the immigration policy is necessary to cushion the adverse effects of a greying population. Raising the intake of working-age foreigners will help increase growth and fiscal revenue, and reduce the tax burden on younger Singaporeans.

However, after years of surging foreign manpower growth, the Singapore government has — since 2011 — moved to tighten the inflow of immigrants in its bid to reduce reliance on low-cost foreign labour. This ensures continued productivity growth in the economy. The government has made clear on several occasions that it will not perform a U-turn on its stance.

Still, some economists have said it may be time to re-look these policies, although they have cautioned that this must be done in a politically sensitive manner. Singaporeans will have to make the choice – they either pay higher taxes if they want a smaller pool of immigrants or pay lower taxes and open the doors to immigrants.

Source: *Today Online*, February 2017

(e) (i) Using AD and AS analysis, explain how an ageing population may harm Singapore’s economic growth in the short and long run. [6]

Answers

Short run effects:

On SRAS:

- An ageing population could lead to an increase in healthcare expenditure as mentioned in Extract 9, since the elderly are more likely to experience health related problems.

- In order to finance the increase in healthcare expenditure, the government may impose new taxes such as raising GST or taxing e-commerce transactions.

- Such taxes are imposed on producers, and raise their cost of production, resulting in a fall in the SRAS of the economy.

- This will lead to lower national output and slowdown growth in the short run.

On AD:

- An ageing population could result in falling incomes for the elderly as more workers retire. As disposable income falls, there is a decrease in consumption expenditure.

- In addition, the decline in the domestic labour force could affect business confidence as productivity falls and costs rise. This could lead to a fall in investments.

- The fall in C and I could then result in a fall in AD, leading to lower national output and slowdown growth in the short run.

Long run effect:

On LRAS:

- An ageing population could lead to a shrinking workforce as more workers retire. The number of workers retiring could exceed to number of workers joining the workforce.

- In addition, productivity may be lower as older workers may have skills that are out dated or less relevant to the progressing economy. The quality of workers may fall over time.

- As the government prioritises spending on healthcare over other areas such as building infrastructure, this would also limit the potential growth in the economy.

- Overall, LRAS may fall or remain stagnant, resulting in limited potential growth in the long run.

11. SAJC 2019 H1 Prelims Question 2

**Economic Challenges and Opportunities for Australia, Vietnam and Spain**

**Extract 8: Spain’s unemployment falls without an active government**

We are continually told that every country must have an activist government that intervenes with a range of policies to achieve its economic goals. No economy or society can be allowed to just bumble along by itself, the firm smack of political control is necessary for the world to continue to turn on its axis. This is not really what the empirical evidence tells us of course. Spain has not really had a government for the past 10 months and yet it is expected to be one of the fastest-growing Eurozone economies this year. Spain's central bank expects the country to expand by 3.2% this year, among the most robust growth rates in Europe, which has created more jobs. And as a result the unemployment rate has just fallen to 18.9%. While inflation is -0.2%, it is an improvement from -0.5% a year ago.

As more Spaniards have gone back to work, they have been spending more, boosting consumer spending and further accelerating economic growth. Spain has been expanding since the economy returned to growth in 2013 after a deep recession.

In addition, the growth may spark off higher migration to Spain in search for job opportunities. While generally welcoming to migrants, some are worried that these migrants may steal jobs from the locals due to their lower asking wage. However, some economists are more optimistic, citing empirical evidence that having an increased inflow of migrants can bring about faster growth.

However, analysts are cautious about the optimism as the better than expected performance is due to the global economic recovery which has led to more tourists in Spain and increasing demand for Spain’s exports. Robust growth may bring with it the harms of high inflation. Without a government, Spain is ill-equipped to deal with any potential recessions and political instability would affect its long-term growth prospects.

Adapted from Forbes.com, 27 Oct 2016

(e) Extract 8 tells us that Spain’s economy grew without a government. Explain how Spain was able to do so and comment on whether there is a need for an activist government in order to ensure sustainable growth. [7]

Answers

The improvement in the economic performance is due to the recovery of the global economy which would have increased household income for foreign households, leading to an increase in the demand for Spain’s exports. With the increase in exports, this will increase the AD and in turn lead to higher RNY via the multiplier effect, ceteris paribus. The increase in RNY, estimated at 3.2% growth, leads to firms employing more FOP such as labour and thus cyclical unemployment falls, contributing to the fall in unemployment rate to 18.9%.

However, while Spain is able to do so without an activist government, the growth in exports may lead to actual growth but not potential growth as seen from the extract about harms of inflation. Firms are unlikely to invest if there is political instability as they may expect low returns on investment. In addition, without any government to regulate the production of goods and services, firms may utilise natural resources at an unsustainable rate which in turn prevents Spain from enjoying sustainable growth. As such, an activist government is needed to implement policies to handle economic crises as well as to promote investment in the economy. Furthermore, the strong demand for exports might not continue in the future. In the event of a global downturn, there might be a fall in demand for Spain’s exports and AD might fall. Government intervention might then be required to boost AD to ensure continued economic growth.

17. GCE A Level H2 Economics 2019 Paper 2 Qsn 5

There is potential for governments to achieve both inclusive groth and sustainable growth.

(a) Explain what is meant by inclusive growth and sustainable growth. [10]

(b) Discuss the extent to which it is possible for a small, open economy such as Singapore to achieve both inclusive growth and sustainable growth. [15]

18. TJC Prelim 2019 Qsn 6

Four decades of breakneck economic growth turned China into the world’s biggest carbon emitter. But the government is trying to change that without damaging the economy—and perhaps even use its green policies to become a leader in technological innovation.

Source: Bloomberg News, 9 March 2018

(a)Explain the factors that contribute to sustainable growth in a country. [10]

19. Household final consumption expenditure in 2013 as a proportion of the country’s GDP was 38% for Singapore and 69% for USA.

Source: [http://data.worldbank.org/indicator,](http://data.worldbank.org/indicator) accessed 25 July 2014

Discuss whether raising consumption is the best approach for sustaining economic growth.