- 6. The use of expansionary demand-side policies designed to achieve economic growth or to lower unemployment may lead to undesirable consequences.
 - (a) Explain why expansionary fiscal policy designed to achieve economic growth or lower unemployment may lead to undesirable consequences. [10]
 - (b) Discuss whether expansionary supply-side policies would be effective in achieving the macroeconomic policy aims of an economy. [15]

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Suggested Answers to part (a):

Introduction:

Discretionary fiscal policy involves the **change in government spending** (ΔG) and/or **taxation** (ΔT) to influence the level of economic activities and living standards. An expansionary fiscal policy will involve raising government expenditure (G) and/or reducing taxes (T) to increase aggregate demand (AD).

Requirement 1: Explain briefly how EFP works and explain one undesirable consequence

a. Briefly explain how EFP works to achieve economic growth and lower unemployment:

[Reduction in taxation] A government can reduce personal income tax and/or corporate income tax to increase consumption expenditure (C) by households or investment expenditure (I) by firms. For example, a reduction in corporate income tax rates will increase firms' post-tax profits which raises the expected yields from investments. Firms are more willing to invest which in turn increases investment expenditure.

[Increase in government spending] A government can also increase spending on public projects like building of roads, healthcare, or education.

With an increase in C, I and/or G, this will lead to an increase in AD, ceteris paribus. Assuming the economy operates with spare capacity as shown in Figure 1 below, the increase in AD will result in a rise in real output by a multiplied amount due to the working of the multiplier where one's spending becomes another's income. As real output increases from Y1 to Yf, actual growth is attained. The increase in production would mean that firms would increase their demand for factors of production, including labour. ADL increases and thus, demand-deficient unemployment is reduced.

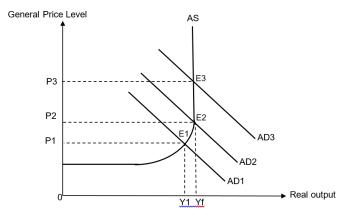


Figure 1

b. Explain one undesirable consequence of EFP → conflict with other macroeconomic goals (e.g. price stability and favourable BOT position)

Expansionary fiscal policy may have the unintended effect of conflicts with other goals.

Impact on Inflation: If the economy is at or near full employment, excessive increases in AD which are persistently greater than AS cause **demand-pull inflation** where the excess total demand cannot be met because existing resources are fully or almost fully employed.

Assuming that the economy is operating near full employment where the initial equilibrium is at E1 and expansionary fiscal policy is implemented to increase AD. The increase in AD causes total spending to exceed total output resulting in a shortage at OP1. This leads to a fall in inventories which provides an incentive for producers to increase output to meet demand. As there are limited spare resources, firms will have to bid up factor prices causing GPL to rise. There is a movement up along the AD & AS curve.

The rise in income arising from the initial rise in AD causes a rise in income-induced consumption that results in a further increase in AD. As one's spending becomes another's income, there will be multiple increases in AD until a new equilibrium is reached at E2 where AD2 = AS. Real output increases by a multiple from Y1 to Y, while GPL rises from P1 to P2.

However, AD continues to increase from AD2 to AD3, due to for example, greater consumer confidence which leads to an increase in consumer expenditure on domestic goods and services (Cd). This causes a further increase in GPL from P2 to P3. The persistent increase in AD creates a situation of <u>sustained excess demand</u> in the economy and brings about a sustained increase in general price level and hence demand-pull inflation, which would have an adverse impact on the country's standard of living.

High and rising inflation can be destabilising for an economy because it results in rising costs for households and businesses and can cause a loss of competitiveness for

domestic businesses in international markets. This could conflict with the government's objective of price stability and a favourable balance of trade position.

Requirement #2: Explain another undesirable consequence of EFP → crowding out effect and its impact on the economy

Besides inflation and its negative consequences, expansionary fiscal policy may have another unintended effect in the form of crowding out effect. Should the government budget be in deficit and the increase in government spending financed by borrowing, it will be competing with the private sector for loanable funds. When demand for loanable loans increases, it drives up the price of loans, which is interest rate.

Higher interest means higher cost of borrowing which in turn will discourage firms from investing (reducing I) and individuals from buying on credit (reducing C). Thus, government expenditure crowds out private expenditure.

In figure 2 below, the intended effect of an expansionary fiscal policy EFP via borrowing to increase G was to increase AD to AD2, hence increasing real output to Y2 thus achieving actual growth. However, with the crowding out effect, AD2 falls to AD3 due to fall in C and I. Thus, the net effect on AD is that AD only increases to a smaller extent from AD1 to AD3, lowering the extent of increase in real output (Y1 to Y3 only) and hence actual growth.

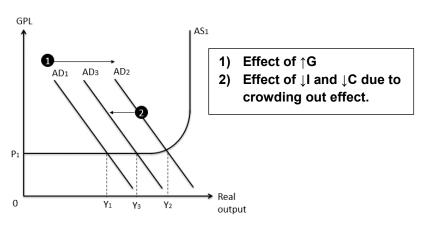


Figure 2

In the extreme case, the fall in consumption and investment expenditure may completely offset the rise in government expenditure, with the result that AD does not rise at all and remains at AD1. Hence, government's attempt to tackle negative growth may be rendered ineffective as there is no change in real output (remain at Y1).

Mark Scheme				
Level	Descriptors	Marks		
L3	For a response which shows strong economic analysis in terms of how EFP works briefly to achieve EG and low unemployment AND two undesirable consequences.	8 – 10		
L2	For an under-developed explanation. Appropriate economic concepts and analysis are used but application is lacking.	5 – 7		
L1	For an undeveloped answer with a listing of points	1– 4		

(b) Discuss whether expansionary supply-side policies would be effective in achieving the macroeconomic policy aims of an economy. [15]

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Suggested Answers to part (b):

Introduction:

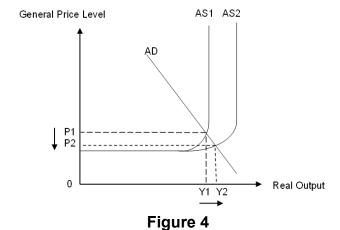
Governments usually aim to achieve growth and stability in the economy. Aside from expansionary fiscal policy es explained in (a), expansionary supply-side policies can also help to achieve government aims such as non-inflationary growth and lower unemployment.

Requirement #1: Explain how SS-side policies work to achieve non-inflationary growth

Unlike expansionary fiscal policy which can bring about demand-pull inflation (explained in part a) when used to achieve growth, supply-side policies are useful in achieving non-inflationary growth.

[What it is] The government can use long-term supply-side policies targeted at increasing the productive capacity of the economy. This will cause a rightward shift of the vertical segment of the AS curve.

[How it works] Policies targeted at raising productivity levels through government spending on research & development improves the quality of factors of production in an economy, hence an increase in the efficiency in the use of these FOPs. This causes an increase in productive capacity of the Singapore economy, hence shifting LRAS to the right. There is potential growth as full employment output increases. Assuming economy is operating with limited spare capacity, with an increase in long run AS to AS2, there will be a surplus at GPL P1. As such, inventories build up causing downward pressure on GPL. The economy adjusts until the surplus is eliminated which in turn leads to a rise in real output from Y1 to Y2 & fall in GPL from P1 to P2, easing inflationary pressure to prevent onset of demand-pull inflation.



[Link back to Qn] As such, expansionary supply-side policies can be used to achieve macroeconomic policy aims such as non-inflationary growth or price-stability in terms of reducing demand-pull inflation.

[How well it works]

- (+) The undesirable consequence in terms of the conflict between actual growth and price stability can be avoided, unlike the case of expansionary demand-management policies.
- (-) However, it takes time for the effects of R&D to take place and the effects are not guaranteed. In the short run, the increase in government spending may cause AD to increase without an increase in LRAS, thus potentially exacerbating price instability.

Evaluation of requirement #1:

[E/Criterion: State of the economy] Whether supply-side policies are effective to achieve non-inflationary growth depends on the amount of spare capacity in the economy.

[E/Reasoning] In the case of an economy that is undergoing severe recession, for instance during the Covid pandemic, attempts to increase LRAS may lead to increases in potential output without any actual growth. This is because the economy is likely to be operating with much spare capacity and hence AD is not sufficiently high for actual growth to occur when LRAS increases.

[E/Opinion] Hence, in such situations, SS-side policies alone may not be effective in promoting growth, and will need to be accompanied by demand-management policies to increase AD.

Requirement #2: Explain how SS-side policies work to achieve low unemployment

Besides non-inflationary growth, governments aim to achieve stability in terms of low unemployment. While expansionary fiscal policy can help to reduce demand-deficient unemployment (explained in part a), expansionary supply-side policies can help to address structural unemployment.

[What it is] A government could implement supply-side policies like subsidising education and skills upgrading to help mitigate structural unemployment because it improves the quantity, quality, and mobility of labour.

[How it works] Structural unemployment occurs when the number of people looking for jobs is equivalent to the number of job vacancies at the prevailing wage rates, but workers are not able to take up the jobs available due to a mismatch between the skills they own and the requirements of the available jobs. Assuming there is a falling demand for traditional manufactured goods and rising demand for healthcare, this would lead to lower output for traditional manufactured goods and higher output for healthcare. Derived demand for labour in traditional manufacturing industry decreases while derived demand for labour in healthcare rises. Workers retrenched in the traditional manufacturing industry

are unable to take up available jobs in healthcare due to skills mismatch. So, with education and retraining, labour productivity increases, allowing workers to be more employable. Equipped with more relevant skills, this will help to reduce the mismatch of skills and thus improve labour mobility across industries (e.g. from traditional manufacturing to healthcare industry). With greater mobility, low skilled workers from the manufacturing industry are now able to take up jobs in the healthcare industry, thus increasing the supply of labour in the healthcare industry.

[Link back to Qn] This thus reduces structural unemployment in an economy, assuming that wages are flexible.

[How well it works]

- (+) The increase in labour productivity may enhance the attractiveness to foreign investors, thus increasing inflow of foreign direct investments in the long term. As more firms set up their businesses, investment expenditure rises and AD increases, ceteris paribus. If the economy operates with spare capacity, via the multiplier effect, there will be multiple increase in production, output, and real national income. As production increases, firms need to hire more factors of production like labour. Since labour is a derived demand, the aggregate demand for labour rises, thereby reducing demand-deficient unemployment.
- (-) However, it takes time to improve literacy & numeracy skills, and to complete an apprentice or a degree. Hence, it will take several years before improvements in education and training result in higher labour productivity. In addition, the effectiveness of this measure is rather uncertain as it depends on the receptivity of the workers being trained.

Evaluation of requirement #2:

[E/Criterion] The effectiveness of supply-side policy in reducing structural unemployment depends on the receptivity and aptitude of workers.

[E/Reasoning] Should workers be unreceptive to the training, then it may lead to the supply of high-skilled workers increasing to a smaller extent, and thus, structural unemployment will only be addressed to a smaller extent. In addition, if workers have not undergone training for quite a while, it may take them a longer time to learn.

[E/Opinion] Thus, considering the above constraints the use of supply-side policies in the form of education and training to achieve the aim of low unemployment would not be very effective in the short run.

Evaluative conclusion:

[E/Criterion: Size of government budget] In conclusion, whether supply-side policies would be effective in achieving the macroeconomic policy aims of a government depends

on the size of the government budget, in addition to whether the root cause of the problems are addressed.

[E/Reasoning] Should the government budget be in deficit, the government would not be able to effectively increase its expenditure to spend on supply-side policies. Should they end up borrowing to finance their expenditure (as explained in part a), this could lead to fiscal imbalances and a large and persistent national debt. The government's credit rating could be reduced and there would be negative impacts on the economy such as a weaker investment climate and thus negative growth. Thus, while the use of supply-side policies was intended to achieve the macroeconomic aims of non-inflationary growth and low unemployment, it may not be achieved due to falling AD and rising demand-deficient unemployment.

[E/Opinion] Hence, supply-side policies may thus be less effective in achieving the macroeconomic policy aims of a government if the government lacks the means to implement the policies successfully.

Mark Scheme				
Level	Descriptors	Marks		
L3	For a response which shows strong economic analysis and application in explaining how expansionary supply-side policies work to achieve at least 2 macroeconomic policy aims.	8 – 10		
L2	For an under-developed explanation. Appropriate economic concepts and analysis is used but application is lacking.	5 – 7		
L1	For an undeveloped answer with a listing of points.	1 – 4		

Evaluation marks			
A well-explained evaluative judgement about both requirements, that is, for an answer that builds on appropriate analysis to evaluate the effectiveness of supply-side policies to achieve macroeconomic policy aims.	E3	5	
PLUS an overall summative conclusion leading to a well-explained evaluative judgement about which, in any, is the best outcome (so far as required by the question).			
A well-explained evaluative judgement about both requirements OR Lower end of E2 (3 marks) which is a well-explained evaluative judgement about one requirement PLUS a learned evaluative statement for the second PLUS a summative conclusion.	E2	4	
A well-explained evaluative judgement about both one requirement PLUS a learned evaluative statement for the second.	E2	3	
A 'learned" evaluative statement for the two requirements. OR A well-explained evaluative judgement about one requirement.	E1	2	
A 'learned' evaluative statement for one requirement.		1	
No attempt at evaluation.	E0	0	