

T2W10 Class Test 4 (Friday Group)
Macroeconomic Aims, Issues & Policies
Mark Scheme

The Covid-19 pandemic led to border lockdowns creating supply chain disruptions. Many governments fear that there could be a world-wide recession as spending falls.

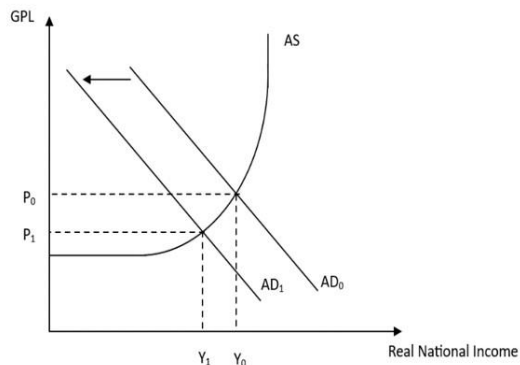
- (a) Explain how the Covid-19 pandemic may affect Singapore's unemployment rate and inflation rate. [10]
- (b) Discuss whether governments should adopt fiscal policy or manage interest rates when faced with a recession. [15]

Part (a)

R1: Pandemic → Unemployment Rate

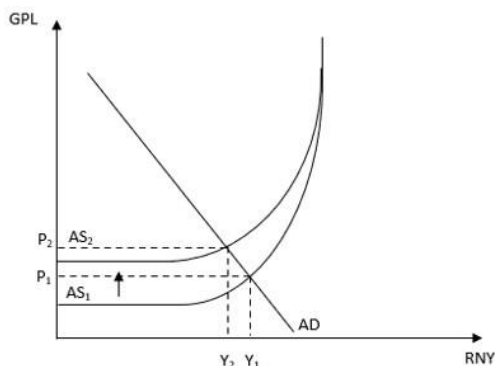
On AD:

- Covid-19 led to pessimism and people cut down on spending as they fear a looming recession. Furthermore, strict lockdowns lead to less consumption at restaurants and entertainment outlets. Border lockdowns also make it difficult for goods to reach foreign consumers.
- In all, the fall in C and X causes a fall in AD. Being open, the fall in X will have an adverse impact on Singapore's AD.
- Using an AD-AS diagram, show the multiple shifts in AD curve to the left.



- The fall in AD works through the reverse multiplier to reduce real GDP by more than proportionate. One man's fall in spending leads to less income for the next person. The process goes through many rounds of fall in induced consumption to reduce real GDP and causes loss of many indirect jobs. The result is a rise in cyclical unemployment since a fall in output leads to a decrease in demand for labour as a factor of production.

On AS: The rise in unemployment is also caused by fall in AS. Supply-chain disruptions lead to rise in import prices causing production cost to rise. The fall in AS leads to inflation. Due to the rising inflation, households and foreigners cut down on spending. The downward movement along the AD curve leads to a fall in real GDP, thereby reducing the demand for labour – causing an increase in unemployment.



R2: Inflation Rate [need both effects]

On AS:

- goods and [sometimes] labour cannot move across borders due to government restrictions for fear of Covid-19 transmissions
- total restrictions or delay in shipments lead to shortages of raw materials and labour – causing rise in prices
- being an open economy, the rise in import prices cause rise in production cost leading to a fall in AS
- Use AD-AS diagram to show how the upward shift of the horizontal and upward sloping portion of the AS curve causes a rise in GPL – known as imported cost-push inflation

On AD:

- As explained earlier, Covid-19 pandemic could have led to a fall in C and X. The fall in AD causes a leftward shift of the AD curve. As the economy moves from the upward sloping portion of the AS curve to the horizontal segment, the surplus of goods causes producers to reduce prices to clear excess stock. In this case, there may be deflation or a fall in demand-pull inflation.
- **Briefly on Combined Effect:** The fall in AS is likely to weigh more significantly as supply-chain disruptions have a more immediate impact since border lockdowns were implemented across many countries. Conversely, the pandemic may not have led to a recession or a drastic fall in AD. It might have been a slow-down in growth instead of a world recession. For example, UK and US did not suffer much in terms of growth though China did slow down.

Mark Scheme: Knowledge, Application, Understanding, Analysis

L1	Lack application of relevant economic framework and context Critical errors in analysis Significant conceptual gaps in explanation	1 - 4
L2	Some economic analysis for both requirements (R1 and R2) but with gaps or lapses in explanations Some application of context and use of examples Lacking in full scope of analysis	5 - 7

*No reverse k and no price adjustment process **max 7***

L3

*A well-developed answer that demonstrates:
Rigorous analysis for BOTH requirements
Good scope of coverage
Good application of contextual examples*

8-10

*Only 1 cause of inflation analysed and no brief link to combined effect **max 8***

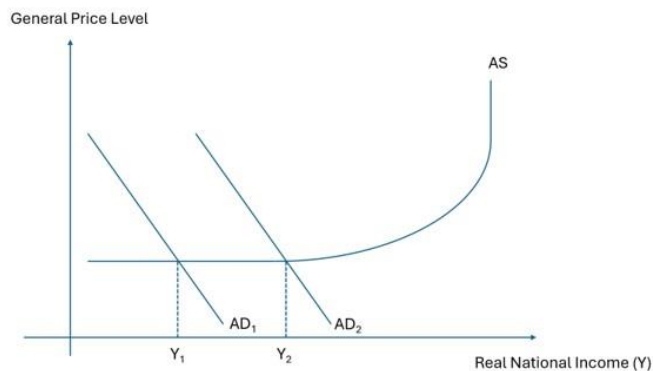
Part b

In a recession, the key objectives of government intervention will be to increase real GDP and reduce cyclical unemployment

R1: Fiscal Policy

Thesis: Explain how it works

- An increase in G in areas such as infrastructure is a direct injection into the circular flow of income. A decrease in personal income taxes raises the disposable income of households, while a fall in corporate taxes raises the post-tax profits of firms. These may cause a rise in household consumption and firms' investment respectively.
- Together, the rise in AD will work through the multiplier to increase real GDP by more than proportionate. As output rises, there will be a derived demand for labour input and that reduces cyclical unemployment.



- The multiplier process is based on the principle that one man's spending creates income for the next person, and that income generates more spending. The process goes through many rounds of spending to create more income and indirect jobs. Each round of increase in AD gets smaller due to leakages in the form of savings, taxes and imports. The process does not go on indefinitely and will end when the initial increase in injections has totally leaked out as withdrawals. Eventually, the real GDP would have risen by more than proportionate to the initial increase in injections.

Anti-thesis: Should not adopt [any 1 or 2 ideas]

- Inability to finance and problem of crowding out

- if a government is not able to finance its spending from reserves, it may have to borrow from the public through the issue of bonds. As competition for limited loanable funds rises, the higher interest rates may lead to a fall in C and I as borrowing cost increases. The fall in C and I reduce the expansionary impact of an increase in G. [the analysis can also be linked to external crowding out in a freely floating exchange rate regime]
- Budget deficit and its implications on future spending and growth
 - sustained use of FP can create problems since more spending and less tax revenue can result in a budget deficit and its associated problems. A persistent budget deficit can reduce the ability of the government to spend in future. They may have to raise taxes in the future, and this worsens inter-generational inequity as the disposable incomes of future generations fall. And an adverse effect may arise in that if people fear that the government is not going to be able to sustain its spending, the households and firms may reduce C and I in response. This in turn results in a contractionary effect on the economy.
- Long time lag due to long implementation lag
 - the use of FP has longer implementation lag since the government needs to discuss where to spend the money on, the size of the spending and consider the ramifications on the budget. With a longer time lag, it may be difficult to reduce the hardship of the people [eg. loss of jobs and incomes] before the policy starts taking effect.
- pessimism – C and I may not increase as direct taxes fall [*this point applies for both direct taxes and interest rate cut*]

R2: Reduce interest rates

Thesis: How policy works

- In a recession, the fall in interest rates leads to a lower cost of borrowing. Households may borrow to purchase big-ticket items while firms borrow to finance their investment if $MEI >$ lower interest rate. With C and I rising, the increase in AD will work through the multiplier to increase real GDP and reduce cyclical unemployment.

Anti-thesis: Should not adopt [any 1 or 2 ideas]

- If interest rates already very low and near 0
 - it is no longer feasible to use interest rates as a policy tool. When the economy is caught in a liquidity trap, there is a general climate of pessimism. People hoard cash for precautionary purposes [fear of loss of incomes and jobs] and do not want to spend. They also do not make long-term investment in financial assets such as bonds. There will be less funds available for firms to borrow. Cumulatively, the fall in C and I will instead have a contractionary effect on the economy.
- If investment in the country is mainly FDI
 - the policy is less effective if firms in the country are mainly MNCs. They are less likely to borrow from the local banks as they have their own sources of funding.
- If the country is an interest rate taker like Singapore
 - Singapore gives up control of interest rate as it allows for capital flows and manages its exchange rate. As an illustration, if US rates were to fall, there may be hot money inflow into Singapore. The appreciation of the S\$ may cause the government to intervene by increasing the supply of S\$. This creates a surplus and causes Singapore's interest rate to fall. So Singapore has no control over its interest rate and it follows international rates. In short, Singapore is an interest-rate taker.

- Pessimism and interest-inelastic investment [*this point applies for both taxes and interest rate cuts*]

Synthesis/Comparison

- **Should use FP instead of interest rate cuts:**
 - since an increase in G is a direct injection into the circular flow of income and there is more certainty in effect compared to a reduction in interest rate which depends on interest-sensitivity of consumption and investment. [Do note however that a fall in direct taxes will have the same uncertain effect.]
 - since the reduction of income taxes may have an added incentive of increasing the incentive to work and attracting human capital. This serves to increase productive capacity and potential growth. [Nonetheless, do note that the effect of an increase in I through both interest rate cuts and corporate tax rate cuts also have a positive impact on potential growth.]
 - if interest rates are already near 0 and it is difficult for nominal interest rates to fall any further. As explained earlier, in this regard, the government may have to rely on using FP since interest rate is no longer effective as a policy tool.
 - if like in the case of Singapore, interest rate cannot be used. Therefore a country like Singapore often relies on the use of FP as an interim measure in a world recession and sometimes allows a slight depreciation of its exchange rate, and it foregoes the use of interest rate as a policy tool.
 - firms in the country are mainly MNCs. They are less likely to borrow from the local banks as they have their own sources of funding. In this regard, increasing G instead of reliance on private sector demand i.e. C and I may be a better option. Furthermore, there is a higher likelihood of lower corporate taxes attracting domestic I and FDI as it directly improves their post-tax profits.
- **Should adopt interest rate policy instead of FP:**
 - If domestic C and domestic I are relatively large % of the country's GDP. Then the use of interest rate is likely to be more effective – barring issues such as pessimism and uncertainty in outcomes.
 - If the government wants a shorter time lag for policy to take effect. Typically, use of interest rate has a shorter implementation lag as the Central Bank can act quickly upon the directive from the government. A shorter time lag may allow the effects of the policy to take place more quickly to reduce the hardship of the people.
 - **This issue can work either way:** If the government does not have the ability to finance an increase in G and fears the problem of crowding out which affects effectiveness, then managing interest rates may be the way to go
 - The ramifications of a persistent budget deficit with its adverse effects on future growth may also make the use of interest rates a more viable option. In this scenario, a government that runs persistent budget deficits may have to consider using interest rate cuts as a policy measure.
- ❖ Make a summative assessment:
 - ❖ decide which you like
 - ❖ assert that the policy choice in sum depends on the conditions of the government and its budget constraints, the size of the domestic private sector demand, ease of implementation as well as the prevailing interest rate level.

Mark Scheme:

Knowledge, Application, Understanding, Analysis

- | | | |
|-----------|--|---------------|
| L1 | No use of relevant economic framework
<i>Answer is mainly descriptive or mere listing of points</i>
<i>Significant conceptual errors in explanation</i> | 1 - 4 |
| L2 | Some application of relevant economic concepts and framework in analysis
<i>Some use of contextual examples</i>
<i>Lacking in full scope of analysis</i> | 5 - 7 |
| L3 | A well-developed answer that demonstrates: <ul style="list-style-type: none">▪ Rigorous analysis for BOTH requirements▪ Good application of contextual examples▪ Good application of relevant economic framework | 8 - 10 |

Evaluation

- | | | |
|-----------|--|--------------|
| E1 | Unsupported judgment
<i>Superficial conclusion/assertion</i> | 1 – 2 |
| E2 | Substantiated judgment, recommendation supported by reasons/ economic analysis | 3 - 4 |
| E3 | Insightful and perceptive evaluation and recommendation well discussed and evaluated using economic analysis and good application to the context
<i>At least 2 well explained insights covering both R1 and R2 and with a summative evaluation at the end</i> | 5 |