## PJC 2018 H2 P2 Question 4:

Singapore had experienced annual deflation in a number of years, particularly during economic recessions in 2002, 1998 and 1986. However, the lower prices in 2015 and 2016 are due mostly to lower global crude oil prices and cheaper housing and utilities as well as transport costs.

Source: Adapted from Singapore Business Review 24 May 2016

a) Explain why deflation might be a concern to a government.

[10]

- b) Assess alternative policies that the Singapore government might adopt to manage the economy when faced with deflation. [15]
- (a) Deflation is the sustained fall in general price level. Government will be more concerned with deflation if the deflation is caused by a fall in aggregate demand during economic recessions. The lower prices seen in 2015 and 2016 due to lower global crude oil prices are probably seen to be less concerned. However, the government will also need to assess whether this lower oil prices is due to oversupply of oil or a fall in world demand for oil due to worldwide recession in order to determine the impact on the economy.

For Singapore, a worldwide recession is likely to cause a fall in exports and hence a fall in in aggregate demand. This will result in a leftward shift in the AD causing the general price level to fall and also a fall in the real GDP. As demand for goods and services fall, firms will cut back on their production and this will lead to a fall in the demand for labour. Producers will start to retrench workers and this will lead to a rise in cyclical unemployment. To the producers, lower prices also cause uncertainties to the firms and firms will start hold back on investment resulting in a further fall in aggregate demand and higher unemployment.

Consumers, on the other, will benefit from the lower prices in the short run. Lower prices will allow consumers to buy more goods and services. There will be redistribution of income caused by a fall in general price level. To the saver, their savings will also increase in real value. This will increase their material standard of living. Fixed income earners will now enjoy higher real income and hence higher purchasing power to consume. Borrowers, on the other hand, will lose out as they have to repay their loans that have an increasing real value. However, in the long run, if prices continue to fall, consumers will hold back their consumption in anticipation of further fall in prices. This will result in firms cutting back on production and hence a fall in AD which results in higher unemployment. With lower or no income, consumers will cut back on consumption and this will result in a deflationary spiral which worsens the country's economic growth and rising unemployment, thus penalizing consumers.

To the government, lower prices creates uncertainties and will affect consumers and investors' confidence hence affecting the government's ability to achieve macroeconomic objectives such as sustained economic growth and low unemployment. Foreign firms are less willing to invest in the country given the bleak outlook and this will affect the country's capital account and balance of payments. Government also collects less tax revenue with falling incomes and profits and spend more on unemployment or welfare benefits which may end up worsening the budget balance. Lower tax revenue will also mean less expenditure on merit and public goods which will affect the citizens' standard of living.

In conclusion, it is important for the government to identify the cause of deflation and assess the impact on the economy and finally implement appropriate policies to manage the economy when faced with deflation.

(b) Deflation caused by a fall in AD is a concern to the Singapore government and hence the need to identify the root cause of this deflation. Deflation caused by a downward shift in AS may not be of a concern to the government as a fall in prices due to a fall in cost of production may actually be good to the economy, increase its export competitiveness and lower prices for the consumers, improving material well-being of SOL.

Singapore had experienced annual deflation in a number of years, particularly during economic recessions in 2002, 1998 and 1986 where there is a fall in AD. This is likely caused by a worldwide recession resulting in a fall in exports for Singapore. Exports forms a large portion of the overall AD. To deal with a falling exports, an appropriate policy will be monetary policy centred on exchange rate.

If deflation arise from a fall exports, depreciation of the currency may be appropriate to lower the price of exports. Depreciation will lead to a fall in the price of exports and rise in the price of imports. in net exports. Assuming demand for X and M is price elastic, a fall in price of exports will lead to a more proportionate rise in the quantity demanded for exports. Likewise, a rise in imports will lead to a more proportionate fall in the quantity demanded for imports. Hence, export revenue will rise and import expenditure will fall, this will lead to a rise in net exports and hence AD. A rise in AD will cause the general price level to rise assuming the economy is operating near full employment, hence, solving the problem of deflation.

However, Singapore do not have natural resources and needs to imports her necessity and raw materials. Hence, a depreciation of the currency may directly raise the cost of necessity goods which will lower the material aspect of the standard of living. At the same time, it will also increase the cost of production for firms due to higher import raw material prices. This will reduce the export competitiveness of the country.

Also, even with a depreciation of currency to increase net exports, foreigners may not buy Singapore's exports if their countries are facing a recession resulting in a fall in NY and hence monetary policy centred on exchange rate may not be effective. Hence, depreciation of exchange rate can only mitigate the negative impact of deflation but not eradicate it. It should be complemented with other policies such as the Job Credit scheme and expansionary fiscal policy.

In the short run, falling prices leading to cyclical unemployment poses an immediate problem to the government as it could further depress consumers' confidence and worsen the deflation. To deal with rising cyclical unemployment, government introduced Job Credit scheme in 2001 to preserve jobs. Job credit scheme is a direct subsidy from the government to the firms. This directly lower the cost of production for the firms, preventing firms from making loss thus helping firms to keep their workers. Government also increase subsidies for training and provide additional support for lower-income workers who face a reduction in pay during the downturn. Finally, the Government can also expand recruitment across ministries and statutory boards, for all levels of employees, and including mid-career professionals to boost employment.

However, it should be noted that the Job Credit scheme is very costly and may cause a strain on the government's budget. During a deflation where government is facing falling tax revenue due to falling economic growth and rising unemployment, the Job Credit scheme caused the government to incur a budget deficit which requires the government to either tap into their reserves or borrow. Fortunately, with the healthy reserves, Singapore government is able to avoid the need to borrow which will lead to a higher national debt penalizing future generations. As such, the Job Credit scheme is a useful short term policy to minimize the negative effect brought about by deflation.

If the deflation arises from a fall in consumption and investment due to pessimism, government may need to take the lead and increase government spending to compensate the fall in consumption and investment. An expansionary fiscal policy will be appropriate to increase AD. A fall in income tax will increase the disposable income of consumers and lead to rise in consumption. Likewise, a fall in corporate tax will increase the after tax profits for firms allowing the firms to reinvest these profits and hence spur growth. Through the multiplier effect, national income will rise by multiple times and hopefully this will regain confidence from the consumers and firms.

To attract investment, corporate tax is not the only factor given that Singapore has one of the lowest corporate tax around the region. Hence, other pro-investment policies are needed in order to attract investment. For example, giving tax holidays to retain the existing important industries (oil and gas, pharmaceutical, life science etc.), to provide infrastructure support, R&D subsidies to attract new

sunrise industries (cyber security, AI and automation) and so on.

Government can also increase public spending on infrastructures, healthcare and education. Big projects like new MRT lines, underground tunnels are often built during times of recession to improve economic outlook and build consumers and investors' confidence. This will, however, worsen the budget balance for the government. However, with greater foreign investment, this will lead to a more sustained economic growth for Singapore bringing about higher tax revenue and a healthy budget balance in the future.

## Conclusion

Whether the Singapore government is able to manage her economy using appropriate policies when faced with deflation will depend on whether they are able to identify the root cause of the deflation and to manage the extent of the harmful effects of deflation. Most of the times, if deflation is caused by a worldwide recession, there is very little the government can do except to mitigate the effects by focusing on the immediate problem like cyclical unemployment and targeting at the long term economic growth. Based on past performances, Singapore has been able to make strong recovery from a recession and avoid the deflationary trap does show that the combination of exchange rate policy and fiscal policy focusing on supply-side effects have been effective in tackling deflation in Singapore.