**Essay Question 23**

**(a) Pump priming is an action taken by the government to stimulate an economy, usually during a recessionary period. Explain why such a measure is more effective when a greater portion of the extra income earned by households is consumed than withdrawn. [10]**

**(b) Assess the view that a large increase in national income is always desirable. [15]**

**What is the command word? (what are the skills required for this question?)**

* ‘Explain why’ → Use economic theory to provide reasons in detail, using examples

**What is the content word?**

(what are the relevant concepts required to answer this question?)

* ‘Pump priming’
  + Action taken by govt to stimulate economy during recessionary period
  + Expansionary fiscal/monetary policy to raise AD via rises in C, I and/or G
* ‘measure is more effective’ = the successful impact of increase in AD on NY to stimulate an economy
* ‘a greater portion of the extra income earned by households is consumed than withdrawn’ = larger mpc value vs smaller mpw value
  + `determines the size of the multiplier effect

**What is the context word? (where or when to apply for this question?)**

* Examples of at least 2 different countries, with different mpc values

**Schematic Plan**

* Pump priming (expansionary fiscal and monetary policies) →stimulate higher domestic C, I and G → higher AD → via multiplier → real NY rises more than proportionate (assume economy <Yf)
* The extent of the increase in NY depends on the size of the multiplier effect → k = 1/(1-mpc) = 1/mpw = 1/(mps+mpt+mpm) → factors that affect size of k
* The larger the mpc, the larger the k, and hence the more effective expansionary policy has on raising NY and stimulating an economy during a recessionary period, through a rise in AD.

Introduction

* Pump priming refers to use of expansionary fiscal and monetary policies to increase AD.
* The level of spending by households (Consumption), firms (Investment) and government (Govt spending) are components of aggregate demand (AD) in a country.
* Expansionary fiscal and monetary policies aim to increase domestic C and I via expansionary FP (cut in direct tax and rise in government spending) or via expansionary MP (via cut in interest rates) to increase aggregate demand. The real national income (NY) in the country (assuming the economy is below full employment, that is economy has unemployed resources) will increase more than proportionately, via the multiplier process, to the increase in AD. The extent of the impact of increases in C, I and G on NY depends on the multiplier effect, which is determined by the size of the multiplier (k).
* The size of k is determined by the marginal propensity to consume i.e. k = 1/(1-mpc) = 1/mpw = 1/(mps+mpt+mpm) for a 4-sector economy.
* The higher the mpc, or the lower the mpw, the greater the size of k, and hence the greater will be the extent of increase in NY given any rise in C, I or G.

Main Body

**1) Expansionary fiscal and monetary policies aim to increase C, I and G and thus increase AD.**

Expansionary fiscal policy involves a rise in G and a cut in taxation. When the government cuts personal income tax rate, households enjoy increases in disposable income and thus higher purchasing power. Households can then increase consumption. A cut in corporate tax rate will increase after-tax profits and thus expected rate of returns for firms. Firms undertake more investments.

Expansionary monetary policy refers to cuts in interest rates. Interest rate is also the cost of borrowing. Thus, a cut in interest rate would make it less expensive for consumers to borrow money and buy on credit for big-ticket items. Also, lower interest rate would encourage consumers to consume (and save less) because the opportunity cost of spending has decreased, that is, less interest forgone on savings. This would cause an increase in consumption. Similarly, business would enjoy lower interest charges on loans for investment. More investment projects are now profitable for the same expected rates of returns. This leads to a rise in investment.

Hence, expansionary fiscal and monetary policies will boost C, I and G. Increases in C, I and G cause AD to increase. For some countries like the US and UK, consumption is the largest component of aggregate demand. A rise in C will have increase AD and hence NY significantly. However, for countries like Singapore where consumption is a relatively small component of AD, a rise in C will increase AD and NY less significantly.

**2) When AD rises, NY will rise by a larger extent due to the knock-on effect on income-induced consumption. The extent of the rise in NY depends on the size of the multiplier (k). What determines the size of the multiplier effect on NY is the marginal propensity to consume (mpc).**

The marginal propensity to consume (mpc) indicates the portion of additional or extra income that is used for consumption expenditures. The size of the multiplier, k, is directly related to mpc, that is K = 1/(1- mpc) = 1/mpw = 1/(mps + mpt + mpm). Assume 4-sector economy here.

Assuming mpc = 0.9, K = 1/(1-0.9) = 1/0.1 = 10. When AE rises by $100m, NY will rise by 10 times to $1000m.

For example, if autonomous investment expenditure rises by $100m, the national income of the economy is immediately raised by $100m via the increase in the incomes of factor input owners. These factor owners will then spend 0.9 (= mpc) of their rise in income on consumption of goods and services, i.e. $90m (mpc x ∆Y = 0.9 x $100m) is passed on to the next round of producers of goods and services, with only 0.1 (= mpw) of the rise in income being withdrawn from the circular flow (0.1 x $100m = $10m). These producers will then spend 0.9 of their rise on income on domestic goods, i.e. $81m is passed on in this third round and $9m withdrawn. The process continues, with each round of domestic spending on goods and services being the next round of income for the producers of goods and services. The process comes to an end when the change in withdrawal is $100m is equal to the initial change in injections of $100m. Final increase in income is 10 times the initial rise of $100m, that is, $1000m.

The larger the mpc, the greater will be the multiplier k and thus the multiplier effect. This is because when incomes rise, households are spending more on domestic goods out of any additional increase in income (rather than withdraw it) and thus each round of the multiplier process leads to a greater increase in national income. When people receive extra (additional) income and consume more of the extra income on locally produced goods, this will create a greater increase in AD and NY in subsequent rounds.

When people save, pay for taxes or spend more of their extra income on imports less money will be passed on through the circular flow as more of the extra income is withdrawn. Hence there will be a smaller increase in AD and NY. Assuming mpc = 0.6, k = 1/(1-0.6) = 1/0.4 = 2.5. When AE rises by $100m, NY will rise by 2.5 times to $250m.

Thus, a higher mpc (smaller mpw) leads to a larger multiplier effect whereas the larger the mpw (smaller mpc) leads to weaker multiplier effect.

**3) Different countries have different values of mpc and thus different sizes of the multiplier, and hence different degrees of effect of rise in AD on NY.**

Singapore has a smaller multiplier than other countries because of our mpc is relatively lower. This is because of our unique Central Provident Fund (CPF) scheme which requires workers to save a certain percentage of their monthly earned income. Singapore has one of the highest savings rate in the world (high mps). In addition, mpm is relatively higher for Singapore too because of our heavy reliance on imports due to our lack of resources. In contrast, USA has a bigger multiplier because their mpc is relatively higher, while the savings rate and import rate are rather low in that country. Assumption is that mpt is the same for both countries.

Asian countries tend to have a higher marginal propensity to save compared to Western countries. This can be attributed to the value of thriftiness, a cultural factor. The propensity to save voluntarily (for retirement or payment for higher medical expenditure due to ageing population & lack of established social safety networks) may also be higher in many Asian countries. Hence, the mps and thus the mpw of many Asian countries will tend to be larger compared to other Western countries (mpc smaller).

Conclusion

In conclusion, pump priming through the use of expansionary fiscal and monetary policies to stimulate an economy during a recessionary period work more effectively in countries with relatively larger mpc as a larger mpc value implies a greater multiplier effect. The rise in AD will lead to larger increases in NY via the multiplier to help the economy. In countries where the mpc is smaller, the government will need to raise C, I or G by greater amounts to achieve the same desired rise in NY to stimulate the economy.

**(b) Assess the view that a large increase in national income is always desirable. [15]**

**What is the command word?**

(what are the skills required for this question?)

* ‘Assess’ – consider both thesis and antithesis and synthesize with a judgment

**What is the content word?**

(what are the concepts required to answer this question?)

* ‘large increase in national income’ = rapid or accelerated economic growth
* ‘always desirable’ = always beneficial, with positive effects on the economy

**What is the context word?**

(what is the context for this question?)

* Different countries, time period

**Schematic Plan**

Increase in national income = Economic growth = Actual and/or potential growth Large increase in national income = Accelerated economic growth

Causes of large ↑Y → Positive & Negative effects of large ↑Y on macro and micro goals

Thesis: A large increase in NY is desirable

Anti-Thesis: A large increase in NY is undesirable

Conclusion

* Whether a large increase in NY is always beneficial depend on the source of the increase in NY (whether it is from rise in AD e.g. from higher C or rise in AS e.g. from higher I), availability of idle resources (whether economy is operating near Yf), the current state of the economy as there may be conflicts between different macroeconomic goals (for example, the economy could currently be facing a BOP deficit) and the extent of material gains compared to non-material costs incurred in achieving the rise in NY.
* It also depends on the factors that led to the large increase in NY. For example, if govt spending contributed to the increase in NY but it was funded from borrowing and greater govt debt, this leads to further negative repercussions. The desirability of a large increase in NY greatly depends in the objectives of the govt.

Introduction

* Increase in national income means the economy is achieving economic growth, which could be actual growth and/or potential growth. A large increase in national income is equivalent to targeting high rate or accelerated economic growth compared to normally.
* Actual growth can be achieved when the economy has excess capacity to accommodate any rise in AD. The rise in AD could be from a rise in C, I, G or X.
* Potential growth can be achieved when the quantity and quality of the resources are expanded or the level of technology is improved to increase the productive capacity of the economy and sustain actual growth without causing a rise in GPL.
* The rise in AD must be large to achieve the large increase in NY via the multiplier effect. The real NY will grow quickly provided the economy has excess capacity

Main Body

**1) A large increase in NY allows the country to achieve other macroeconomic goals, namely lower unemployment rate and lower inflation rate, and probably improvement in BOT.**

This is because higher actual economic growth leads to a greater utilization of resources and hence move the economy towards full employment. There is greater production of goods and services to meet the rise in AD, leading to greater demand for labour and other resources. Hence, unemployment rate falls as demand for labour is derived from the demand for goods and services.

Moreover, greater output and potential growth in the country could have also been based on supply factors such as rise in level of technology and higher productivity. This enables the aggregate supply to rise and hence overall output and employment can rise. This rise in aggregate supply may lead to a fall in general price level, leading to a low rate of inflation, which is another important macroeconomic aim of a country.

As the goods and services can now be produced at lower prices, exports of the country

become more price-competitive to the rest of the world. This can lead to a rise in export

earnings, improving the BOT in the country.

Thus, a large increase in NY is desirable as it can reduce both unemployment and inflation, and improve BOT.

**2) A large increase in NY brings about a higher standard of living.**

First, with a larger income, as measured by Gross Domestic Product (GDP), and with a given population, higher GDP per capita will mean more goods and services are produced and available for consumption for the average person in the country. This should lead to higher standard of living.

Economic growth has led to a greater quantity and range of goods and services for consumers, which contributed to a significant increase in living standard in the country. Citizens have having purchasing power now with the large increase in NY and hence they will be able to enjoy a wider range of consumer goods, improving their material standard of living.

In addition, a large increase in NY enables the government to collect more tax revenues to help fund welfare payments to improve the lives of the citizens. Those in the lower income groups can be assisted in many ways to ensure a better standard of living for them, for e.g. subsidies for housing and healthcare.

Thus, a large increase in NY leads to improvements in the standard of living, a significant aim for many, especially the developing economies.

**3) However, it is necessary to note that rapid economic growth and large increase in NY may bring about conflicts with other macroeconomic goals, namely rising structural unemployment in the long run.**

If potential growth is accomplished with economic restructuring in manufacturing and

industrialization to ensure exports of the country remain competitive, the new jobs created will be in industries where higher skills and education is required. Thus, the less skilled and lowly-educated workers may find that there is a mismatch between their skills and the job requirement, especially those in primary industries, leading to rising structural unemployment in the country.

For example, the problem of structural unemployment is a real concern in Singapore. Professionals, Managers, Executives and Technicians (PMETs) have joined the less skilled, lowly-educated workforce in the ranks of structural unemployed. The ageing workforce in Singapore which is made up of a large group of less skilled and educated workers in their 40s and 50s has further compounded this problem of structural unemployment.

Nevertheless, despite this conflict, economic growth is still a significant aim because it provides government with the tax revenue to fund retraining schemes for the structurally unemployed and the redesigning of jobs. In addition, higher economic growth helps to provides funds for more social security schemes to help the lower-income workers improve their living standards, thus achieving the aim of a more equitable distribution of income in the country as well.

Thus, it is important to note that rapid potential economic growth may bring about large increase in NY but the economic restructuring to achieve it may result in structural unemployment. Although rapid economic growth helps to promote higher employment, it can result in some workers to be permanently out of a job. So it is important for the govt to implement measures to minimize this negative impact of economic growth.

**4) However, the pursuit of large increase in NY may lead to a conflict in pursuing other macroeconomic aims of low inflation and BOP equilibrium in the short-run.**

Rapid actual growth and large increase in NY may lead to higher rate of inflation and balance of payments deficit especially when the country is approaching full employment.

This is because as aggregate demand (AD) rises near full employment where the economy is reaching its full capacity, demand-pull inflation set in due to inability of AS to match increases in AD. This will affect the export competitiveness and hence worsen the country’s balance of payments (BOP).

Higher economic growth and purchasing power may also lead to rising demand for imports of consumer and capital goods and hence worsen the balance of payments further, especially if the economy is already facing a BOP deficit.

Hence, such negative effects of higher actual growth may cast doubt on the significance of promoting rapid actual growth in the country.

**5) Besides the possible negative effects of rapid economic growth and large increase in NY on employment, inflation and balance of payments, there are other adverse impacts on income distribution and non-material SOL.**

The large increase in NY could be a result of rapid growth and expansion in certain industries and will only benefit certain groups of people in the country. Those working in the industries that enabled such large increase in NY could see a quick and high increase in their incomes while those working in other industries not related to this growth may see stagnant or even falling real incomes if GPL rises, leading to a worsening income gap.

Large increase in NY is a result of higher levels of productive activities. This often results in higher levels of negative externalities or spillover effects on third parties, resulting in lower consumer well-being. There will be higher levels of air and water pollution, traffic congestion, longer working hours and stress levels, all leading to a decrease in non-material SOL.

Therefore, such negative effects of large increase in NY may cast doubts on the benefits of promoting rapid economic growth in the country.

Conclusion

Whether a large increase in NY is always beneficial depend on the source of the increase in NY (whether it is from rise in AD e.g. from higher C or rise in AS e.g. from higher I), availability of idle resources (whether economy is operating near Yf), the current state of the economy as there may be conflicts between different macroeconomic goals (for example, the economy could currently be facing a BOP deficit) and the extent of material gains compared to non-material costs incurred in achieving the rise in NY.

It also depends on the factors that led to the large increase in NY. For example, if govt spending contributed to the increase in NY but it was funded from borrowing and greater govt debt, this leads to further negative repercussions. The desirability of large increase in NY also greatly depends on the objectives of the govt as well as the existing world economic situation.