

MACROECONOMICS

Table of contents

Question One 3
Question Two..... 5
Question Three..... 6
Question Four..... 7
Reference: 9

Question One

a) On the basis of the information by using the value added method it will be easier to calculate GDP of the 'Kraftwerk' economy. In this case, there were three producers and they are interrelated with other. In order to calculate the GDP by using value added method the formula will be (Value of output)-(Cost of intermediate goods purchased from the other firms, including imports)

In the case of Timmy's forestry, firm the value of the total output is \$128m and in this case Timmy has no input cost but in case of Gab's Guitar factory the total value of the output is \$192m and the guitar factory imports the \$32m amount of product and the other input cost of the guitar company is \$32m. On the other hand, the Sue's superstore sells \$256m amount of total goods and in this case Sue purchase \$96m musical instrument, which is the intermediate goods to Sue. Therefore, the GDP of the country will be:

$$=(128m+192m+256m)-(32m+32m+96m)$$

$$= (576m-160m)$$

$$= \$416m$$

Therefore, \$416 is the total GDP of the 'Kraftwerk' economy by applying value added method within the economy.

In order to calculate GDP by applying the income method then the 'Kraftwerk' economy has to apply the formula of $GDP = W + R + I + PR$ where W is the wage income of the people, R is the rental income of the people, I is the investment income of the people and PR is the profit. In this case, Timmy's total value is \$128m and the cost of Timmy is $(\$16m + \$16m = \$32m)$. Therefore, the profit of Timmy is $(\$128m - \$32m) = \$96m$.

On the other hand, the total value of Gab's guitar factory is \$ 192m and the cost of Gab is $(\$32m + \$32m + \$32m + \$16m) = \$112m$ there the profit of Gab is $(\$192m - \$112m) = \$80m$

In addition to that, the total value of Sue is \$256m and the cost of Sue is $(\$32m + \$96m + \$48m + \$32m) = \$208m$ and the profit of Sue is $(\$256 - \$208) = \$48m$

In order to use the income method the GDP of the 'Kraftwerk' economy the total GDP of the country is to

$$= (\$16m + \$32m + \$48m) + (\$16m + \$16m + \$32m) + \$32m + (\$96m + \$80m + \$48m)$$

$$= (\$56m + \$68m + \$32m + \$224)$$

Where \$56m is the wage income of the country, \$68m is rental income of the country, \$224m is the profit of the country, and additionally \$32m is the inventory that means investment of the country. Therefore, the GDP of the 'Kraftwerk' economy is \$380m

In order to calculate the total GDP by applying expenditure method the formula used by 'Kraftwerk' economy is $(C + G + I + NX)$

In this case, C is the consumption of the economy G is the government expenditure of the economy, I is the investment of the economy and NX is net export earning of the economy.

In case of Timmy's factory the net export earning is \$96m and in case of Gab's guitar factory the net export earning is $(\$96m - \$32m) = \$64m$ and in case of Sue's superstore the net export earning is \$32m. Therefore the total net export earning of the country is $(\$96m + \$64m + \$32m) = \$192m$

In this economy the total consumption \$128m and the government expenditure is \$96m. In addition to that, total investment of the 'Kraftwerk' economy is \$32m

$$\text{Therefore, total GDP is } (\$128m + \$96m + \$32m + \$192m)$$

$$= \$448m$$

In this case by applying the expenditure method the total GDP of 'Kraftwerk' economy will be \$448m.

b) The possible reasons are there in the economy for which growing GDP is not necessarily mean everyone in the economy will be better off. In this case, the three possible reasons are:

1. In equal distribution of income, within the economy that means concentration of income in the hand of one section of people. Therefore, the section of people become richer and the other people become poorer though the GDP is growing.
2. Due to hyperinflation, the GDP of the economy will increase but economic condition of one section of people will be worst.
3. Due to inappropriate resources allocation, the earning of the total economy will be concentrated within the one section of people (Cooper *et al.*2013).

Question Two

a) On the basis of the given data to calculate the real GDP of the economy the formula ($Y = C + I + G + NX$) will be used in this case C is the consumption and the amount of consumption is $300 + 0.8Y$ and I is the investment within the economy and the amount of investment is \$200b. In addition to that, G is the government expenditure; In this case, the amount of government expenditure is \$200b. In this case, NX is net export earnings and the based on the data net export earning of the economy is -100. Therefore, by using the formula the real GDP of the economy will be:

$$Y = 300 + 0.8Y + 200 + 200 + (-100)$$

$$Y - 0.8Y = 600$$

$$Y(1 - 0.8) = 600$$

$$Y = 600 / 0.2$$

$$Y = 3000$$

Therefore, the real GDP of the economy will be \$3000b by applying the formula.

- b) With the help of multiplier the economy can be able to increase the real GDP of the economy.
- c) Assuming the full employment output for this economy is \$3500b it is the potential GDP of the economy. Based on the above calculation the economy is below by \$500b from the full employment output or far from the potential GDP of the economy.

d) In this case, if the government expenditure is increased from \$200b to \$300b then the real GDP of the economy will increase. In this case, the real GDP will be:

$$Y = 300 + 0.8Y + 200 + 300 + (-100)$$

$$Y - 0.8Y = 700$$

$$Y(1 - 0.8) = 700$$

$$Y = 700 / 0.2$$

$$Y = 3500$$

In this case, the real GDP of the economy will be equal to the potential GDP of the economy. In this case, all other factors of the GDP will be unchanged.

e) By increasing the government expenditure the governmental authority of an economy can be able to increase the investment and in effect of this the employment will increase. As result of this the income of the economy will increase therefore the real GDP of the economy will increase. Therefore, it can be said that the government expenditure has a multiplier effect so by increasing the government expenditure real GDP of the economy can be increased.

Question Three

a) If the government gives the subsidy on the price of housing then the price of the housing will be lower in the economy and the demand of the housing will be increase. On the basis of the general demand supply theory, if the price of the housing is lower the demand of the housing will be higher so it can be said that the housing become more affordable due to the government policy (Fogel *et al.*2013). In this case, due to subsidy of the government on the price of housing the housing become more affordable. In this case, the price of the housing will be lower because of the subsidy.

In additions to that, the due to subsidy the supply of housing will also increase therefore, the, market of housing will expand.

b) Yes, the one goal of macroeconomics is to reduce the measured unemployment rate of the economy and it may be the zero when the aggregate supply curve of the economy is vertically

parallel. The economy will be in the full employment situation when the aggregate supply curve of the economy is vertically parallel. This cannot be happen in reality but by adopting macroeconomic tools like expansionary fiscal and monetary policies, the government can be able to reduce the unemployment rate of the economy (Muller, 2014).

In this regard, by increasing the government expenditure the government can be able to generate employment within the economy, which reduces the unemployment rate of the economy. In reality, the unemployment rate cannot be zero because within the economy there must be voluntary unemployment. In this case, the unemployed persons are not interested to work in the existing wage rate of the economy (Muka *et al.*2015).

c) A cyclical unemployed can be a structural unemployed because of the technological up gradation or the introduction of new process within the production process for which the knowledge of the person is not necessary. In this case, a cyclical unemployed can be a structural unemployed in the economy. In this case, the person has to adopt the new process otherwise; the rate unemployment within the economy will increase. Cyclical unemployment happens in the economy due to the cyclical trend within the growth and production process of the economy and as result of the technological up gradation will take place within the economy. Therefore, it can be said that a cyclical unemployed can be a structural unemployed within the economy. In this case, the government has to arrange the training and development program in order to reduce the number of structural unemployment otherwise, the total unemployment rate will increase and it will hamper the growth process of the economy.

Question Four

a) The population growth is not bad for the developing countries according to the modern economist because it is the human capital of the developing country and with help of this human capital, the developing countries can be able to move to become the developed country. In this case, proper education is required in order to transform the population pressure to the human capital otherwise it will be a main hindrance to become a developed country. In addition to that, the health and food both are necessary part in order to transform the population pressure to the human capital (Harvie & Van Hoa, 2016).

In this case, for example it can be said that China was a developing country and it has huge pressure of population, However, China was able to transform its population to human capital and the country can be able to move towards becoming a developed country. In this case, by increasing the investment in education and health sector this transformation has taken place in China (Chen *et al.* 2014).

The main advantage of population growth is to create a human capital within the economy that helps the country to create value within the domestic production process.

If the country is not able to transfer the population growth to human capital then it becomes an obstacle to the growth process of the country and it is the main disadvantage of the population growth.

b) In this case, there was sustainability in the GDP growth rate of the country but strong fiscal and monetary policy is required in order to achieve the higher growth rate within the Australian economy (Hatfield-Dodds *et al.* 2015).

On the basis of data, it is clear that, in the year 2012, the GDP of the country was highest and it was 3.63 but in the year 2015 the growth rate has declined and it was 2.24.

Based on the inflation rate data of Australia the economic condition can be analyzed on the basis of the data of inflation it is clear that in the year 2015, the inflation rate was lower and it was 1.50, which is one of the good signs for the economic prosperity of Australia (Butlin, 2013). The unemployment rate of Australia was high because of the global economic crisis and the inflation rate of Australia was not so much high so the producers are not willing to produce more goods so the unemployment rate is higher within the economy (Singh-Peterson *et al.* 2014).

Reference:

- Butlin, N. G. (2013). *Investment in Australian economic development, 1861-1900*. Cambridge University Press.
- Chen, M., Huang, Y., Tang, Z., Lu, D., Liu, H., & Ma, L. (2014). The provincial pattern of the relationship between urbanization and economic development in China. *Journal of Geographical Sciences*, 24(1), 33-45.
- Cooper, R., Edey, H. C., & Peacock, A. T. (2013). *National income and social accounting*. Routledge.
- Fogel, R. W., Fogel, E. M., Guglielmo, M., & Grotte, N. (2013). The Emergence of National Income Accounting as a Tool of Economic Policy. In *Political Arithmetic: Simon Kuznets and the Empirical Tradition in Economics* (pp. 49-64). University of Chicago Press.
- Harvie, C., & Van Hoa, T. (2016). *The causes and impact of the Asian financial crisis*. Springer.
- Hatfield-Dodds, S., Schandl, H., Adams, P. D., Baynes, T. M., Brinsmead, T. S., Bryan, B. A., ... & McCallum, R. (2015). Australia is 'free to choose' economic growth and falling environmental pressures. *Nature*, 527(7576), 49-53.
- Muka, T., Imo, D., Jaspers, L., Colpani, V., Chaker, L., van der Lee, S. J., ... & Pazoki, R. (2015). The global impact of non-communicable diseases on healthcare spending and national income: a systematic review. *European journal of epidemiology*, 30(4), 251-277.
- Muller, N. Z. (2014). Boosting GDP growth by accounting for the environment. *Science*, 345(6199), 873-874.
- Singh-Peterson, L., Salmon, P., Goode, N., & Gallina, J. (2014). Translation and evaluation of the baseline resilience indicators for communities on the Sunshine Coast, Queensland Australia. *International journal of disaster risk reduction*, 10, 116-126.