H2 Economics Essay Practice – Essay Model
Date: 28 March 2010
Topic: National Income Equilibrium
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Explain what is meant by the equilibrium level of national income. [10]

National income measures the money value of the flow of output of goods and services in the economy over a period of time, usually one year. The equilibrium level of national income is thus a national income level that is attained given the forces in the economy as a result of the economy's consumption patterns, tax regime, trade and investment. There are several ways of deriving this equilibrium level of national income.

From the analysis of Aggregate Expenditure, which is the total expenditure on all goods and services produced in the economy, we observe that the national income equilibrium occurs at the point where the Aggregate Expenditure (AE) intersects the line of AE=Y. Assuming a 4-sector, economy, the AE = C + I + G + (X-M); AE=Y is the 45-deg line draw where the values of the 2 axes are equal.

[Diagram of AE at a particular level and AE=Y; label the point where they intersect and trace the values of AE and National Income]

In the national economy, Aggregate Expenditure varies with the national income; at low national incomes, the autonomous expenditure takes up a large proportion of the AE but as income rises, the induced expenditure increases. As a result the AE curve slopes upwards. Since the economy must have an income level that would support the expenditure in it, the aggregate expenditure must be equals to the national income so that the money earned in the economy is able to purchase all the output of the economy. This equilibrium level of national income can be at full employment level, lower than full employment level or even higher. While the Aggregate Expenditure analysis only provides us with the derivation of the national income equilibrium, it does not show the level of employment or even the price levels.

To observe the equilibrium national income relative to employment and general price levels, we could derive the equilibrium from Aggregate Demand and Aggregate Supply analysis. Aggregate Demand is the willingness and ability to pay for all the output of the economy, a summation of all the demands in all the markets encapsulated in the national economy. On the other hand, Aggregate Supply is the ability to produce, much like a measure of the productive capacity of the economy.

[Diagram of AD-AS, showing the national income and price level equilibrium resulting from the interaction; show the full employment level and the existence of the output gap]

Aggregate Demand, like AE, consist of the components, Consumption (C), Investment (I), Government Expenditure (G) and net exports (X-M). The intersection of the Aggregate Demand and the Aggregate Supply would also give the equilibrium level of national income as the willingness and ability to consume in the national economy is matched by the capacity to produce that level of output in the economy. This analysis would also give us a general price level of the economy, read off the vertical axis of the diagram from the equilibrium. Full employment level is denoted by the vertically rising portion of the Aggregate supply where any further increase in demand for output can no longer be satisfied by the productive capacity of the economy and would thus translate only to price increases.

Finally, the equilibrium level of national income also occurs when the Withdrawals (W) in the economy is equals to the Injections (J) into the national economy. The Withdrawals in the economy consists of Savings (S), Taxes (T) and Imports (M) whereas the Injections consist of (Investments, Government Expenditure and Exports). At any level of national income, if W is exceeded by J, the national income would rise and if J is exceeded by W, the national income will fall. Therefore the equilibrium would have to occur at the point where W=J as shown in the diagram below.

[Diagram of W&J, showing a positive level of injections in the economy and label the national income equilibrium at the intersection]

Hence, the equilibrium national income is the point where the productive capacity and expenditure in the economy balances in such a way that the flow of the output in the economy within the fixed period of time would persist at that level of equilibrium. This equilibrium could be interpreted as a point whereby Expenditure = Income, Aggregate Demand = Aggregate Supply or Withdrawals = Injections.

Analyse the effect on the equilibrium level of national income of (i) an increase in the level of savings and (ii) an increase in the level of exports. [15]

The equilibrium national income changes given a change in patterns of consumption or the other components of Aggregate Expenditure and Aggregate Demand. Therefore, both the increase in level of savings and that of exports would have the impact of altering the equilibrium level of national income in the economy through changes in AD, AE, or Injections & Withdrawals.

Savings is basically the income that is not spent within the time period of measurement of national income. As a result, assuming all other components of AE and AD are constant the increase in savings would imply the reduction in consumption since the income of the consumers are either spent or saved in short run. This rise in savings could be a result of a reduction in confidence of future income growth and thus consumers are saving more to prepare for the future or a result of higher levels of interest rates. Since both AE and AD has consumption (C) as one of their component, both of them would fall in face of an increase in the level of savings in the national economy.

[Diagram of AE falling, with AE_1 and AE_2 denoting the before and after of the rise in savings; label the fall in equilibrium national income as a result]

Due to the rise in level of savings, the AE shifts from AE_1 to AE_2, resulting in a fall in national income; this appears to be the same result in our AD-AS analysis where AD falls because of the falling consumption caused by increased level of savings.

[Diagram of AD-AS, with AD_1 and AD_2 denoting the before and after of the rise in savings; label the fall in equilibrium national income as a result]

Finally, the result of an increase in savings on the equilibrium level of national income is also illustrated from the analysis of withdrawal and injections. Since savings is a form of withdrawal, the increase in level of savings would mean an increase in withdrawal; assuming no changes in the level of injections in the economy, the rise in withdrawals would cause a fall in equilibrium national income as illustrated.

[Diagram of W&J, with W_1 and W_2 denoting the before and after of the rise in savings; label the fall in equilibrium national income as a result]

In the event of full employment, this rise in level of savings would reduce the equilibrium national income to a level lower than full employment but if the economy is already overheating, the increase in level of savings is welcomed as it would reduce the upward pressure that is mounting on prices and possibly help to reduce the prices.

As for the increase in level of exports, we should be aware that 'exports' (X) is a direct component of both AD and AE in the 4-sector economy and thus a rise in exports would help to boost both AD and AE. If the imports stay constant, the net export (X-M) figure should increase with an increase in exports. Assuming that all other components (C, I and G) stays constant, the increase in exports would thus cause an upward shift of the AE and a rightward shift of the AD curve as illustrated below:

[Diagram of AE rising, with AE_1 and AE_2 denoting the before and after of the rise in exports; label the rise in equilibrium national income as a result]

[Diagram of AD-AS, with AD_1 and AD_2 denoting the before and after of the rise in exports; label the rise in equilibrium national income as a result]

This increase in exports could be the result of an increase in the competitiveness of the goods exported by the economy or a shortage of these goods from competing markets. Regardless of the reasons, the increase in exports is effectively an increase in injections into the economy since the export revenue serves to inject

income into the circular flow of income in the national economy. Using the W&J analysis, we could thus also demonstrate how the increase in exports could have a positive effect on the national income equilibrium.

[Diagram of W&J, with W_1 and W_2 denoting the before and after of the rise in exports; label the rising equilibrium national income as a result]

An increase in the level of savings would thus result in a fall in national income equilibrium thanks to the reduction in consumption which would then lower national income; on the other hand, the increase in exports would result in a higher level of national income equilibrium than before because it boost the income of the economy from the rising export revenues and could then lift up national income. In both cases, the full extent of changes in national income equilibrium that is illustrated in the analysis above incorporates the effects of the multiplier effects in the economy.