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# Faculty of Education and Methodology

Faculty Name- JV'n Dr. Md Meraj Alam
Program- BA (Hons) Economics 2nd Semester
Course – Macroeconomics II
Digital session name – Hicks's Theory of Business Cycles:

## **Hicks's Theory:**

Hicks has associated business cycles to the growth theory of Harrod-Domar. According to him, business cycles take place simultaneously with economic growth; therefore, business cycles should be explained in association with the growth theory.

## In his theory, he has used the following concepts to explain business cycles:

- a. Saving-investment relation and multiplier concepts given by Keynes
- b. Acceleration concept given by Clark
- c. Multiplier-acceleration interaction concepts given by Samuelson
- d. Growth model of Harrod-Domar

Hicks has also framed certain assumptions for describing business cycle concept.

## The important assumptions of Hicks's theory are as follows:

(a) Assumes an equilibrium rate of growth in a model economy where realized growth rate (Gr) and natural growth rate (Gn) are equal. As a result, the increase in autonomous investment is constant and is equal to the increase in voluntary savings. The equilibrium growth rate can be obtained with the help of rate of autonomous investment and voluntary savings.

(b) Assumes the consumption function given by Samuelson, which is  $C_t = \alpha Y_{t-1}$ . As discussed earlier, according to Samuelson theory consumption takes place after a lag of one year. The time

lag in consumption occurs due to the gap between income and expenditure and gap between Gross National Product (GNP) and non-wage income.

The gap between income and expenditure produces when income is ahead of expenditure. The gap between GNP and non-wage income produces when fluctuations in GNP occur more frequently than the fluctuations in non-wage income.

The saving function becomes the function of past year's income. With the time lag between income and investment-saving, the multiplier process has a diminishing impact on business cycles.

(c) Assumes that autonomous investment is a function of output at present. In addition, autonomous investment is used for replacing capital goods. However, induced investment is regarded as the function of changes in output.

The change in output produces induced investment, which marks the beginning of the acceleration process. The acceleration process interrelates with the multiplier effect on income and consumption.

(d) Makes use of the words ceiling and bottom for explaining the upward and downward flow of business cycles. The ceiling on upward flow is a result of scarcity of resources required. On the other hand, the bottom on downward flow does not have a direct limit on contraction. However, an indirect limit is the effect of accelerator on depression.

Hicks's theory can be explained with the help of Figure-9:



Source: Internet

In Figure-9, the y-axis represents the logarithms of output and employment while x-axis represents the semi-logarithm of time AA line represents the autonomous investment that is rising at the same rate.

EE line shows the equilibrium line that is a multiple of autonomous investment. FF line expresses the full employment or the peak phase of economy, while LL line expresses the trough phase of an economy.

Hicks explains business cycles by assuming that the economy has reached to Po point of equilibrium path and autonomous investment is the result of innovation. The autonomous investment results in the increase of output.

Consequently, the economy moves upward from the equilibrium path. After a certain point of time, the autonomous investment brings the multiplier process at work, which further increases output and employment. The increased output makes the induced investment to work that further results in accelerator process to work.

The multiplier-accelerator interaction results in the growth of the economy. Consequently, the economy enters in the phase of expansion. The economy moves on the expansion path of  $P_0P_1$ . At point  $P_1$ , the economy is in full employment condition. Now, the economy cannot grow further, it can only move on the FF line.

However, it cannot remain at FF line because autonomous investment becomes constant; therefore, now at FF, only the normal autonomous investment would be produced. This infers that the expansion of the economy is governed by induced investment only.

When the economy reaches to point  $P_1$ , the increase in induced investment becomes stable and the growth of economy starts declining. This is because of the reason that the output produced at FF line is not sufficient for induced investment.

As a result the induced investment stops. The decline of the economy can be postponed, if the time lag between output and investment is of three to four years. However, the decline in output cannot be ceased. When the decline in output occurs at point P then the decline in output would continue till the economy reaches back to EE line.

After arriving at EE line, it would continue to fall further. The rate of decline in economy is very slow because disinvestment depends on the rate of depreciation. The decrease in output leads to the decline in the rate of depreciation.

The effect of reverse accelerator on the depression is not as frequent as in the case of expansion. During the path  $Q_1Q_2$ , the induced investment is nil while autonomous investment is less than normal. In addition, the indefinite decline of economy is represented by  $Q_1q$ . However,  $Q_1q$  is a very rare case that does not occur normally.

When the economy reaches to trough, it moves along the LL line, which is associated with AA line that represents autonomous investment. Therefore, output starts increasing again with the increase in autonomous investment.

Increase in output makes the accelerator to work again. This phase is termed as recovery phase. Along with accelerator, multiplier also comes into action and their interaction makes economy run on the growth path and reaches to equilibrium EE line again.

### There are certain limitations of Hicks's theory, which are as follows:

a. Fails to explain the reasons for linear consumption function and constant multiplier. When the economy is going through different phases of business cycles, the income is redistributed that affects the marginal propensity to consume, which further affects the multiplier process.

b. Suspects the constancy of multiplier in changing economic conditions. Without practical evidence, the accelerator and multiplier cannot be assumed to be constant.

c. Takes into consideration the abstract theory, which cannot be applied in the real world.

**Course Outcome:** The goal of this paper will be to expose the students to the basic principles of macroeconomics. The emphasis will be on thinking like an economist and course will illustrate how economic concepts can be applied to analyse real-life situations. In this course, the students are introduced to money and interest, theories of inflation, rate of interest, trade cycle and growth models.