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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 – Kaldor's Theory of Business Cycles: Part-2

## The Model:

The adjoining figure 12.5 has been derived by combining the nonlinear I and S functions. This figure shows multiple equilibria of income with both A and B as stable positions. At income levels below  $Y_1$ , I> S, so the income level rises. At income levels between  $Y_1$  and  $Y_2$ , S > I, so the income level falls. C is an unstable position and, therefore  $Y_2$  is not a stable income level. If income happens to be between  $Y_2$  and  $Y_3$ , it will rise to  $Y_3$ , and if income is between  $Y_1$  and  $Y_2$ , it will fall to  $Y_3$ . It shows that the economy can reach stability either at some high level of income or at some low level of income  $Y_1$ .

This, however, does not give us a complete model of the business cycle, because a business cycle is made up of alternating expansions and contractions and this figure simply shows two possible positions of stable equilibrium. According to Kaldor, "The key to the explanation of the trade cycle is to be found in the fact that each of these two positions is stable only in the short period—that as activity continues at either one of these levels, forces gradually accumulate which sooner or later will render that particular position unstable." If it can be shown that the stable equilibrium at A becomes unstable over time and forces a movement to B, we will have given the basic genesis of the business cycle.



Source: Internet

Kaldor argnes about the onset of contraction and expansion with a series of diagrams. In Figure 12.4 we start off our analysis with the assumption that the economy is in. equilibrium position at B, which corresponds to a relatively high income, at which investment is also high. We have assumed that the higher the rate of investment, the more rapid is the increase in the size of the capital stock. As the capital stock grows, it means falling MEC, which in turn leads to downward shift in the ME1 curve.

This is denoted here by a downward shift in the I curve (beyond point B). At the same time, the growth in the capital stock of the economy means a growth in the total wealth of the economy. This will tend to push up the saving curve beyond point B in stage 1 of this figure. This means that there is a rise in the average propensity to save in the economy induced by an increase in its wealth. As shown by stage 2 of the diagram, the downward movement of the I curve and the upward movement of S curve result in a gradual shift to the left of the position of B and a gradual shift in the position of C to the right until B and C are brought close to each other. The critical point is reached when these gradual shifts of the I and S curves make the two curves tangential to each other at point B. This will bring B and C together as is shown in stage 3 of the diagram. Now, at the position of B + C, S > I in both directions.

This implies that the equilibrium is unstable, that the income will move in a downward direction. The cyclical contraction, once started reduces the income level until a new stable equilibrium is reached at the relatively lower level that corresponds with A.

It may be noted that even position is of stable equilibrium income only in the short run. As time passes the S and I curves gradually shift. For the economy is at a relatively low income level, the I curve shifts upward and the S curve shifts downward, as is shown by stage 4 in the diagram. If the level of investment corresponding to A is less than the replacement requirements, some inward shift in the I curve would occur on account of replacement reasons alone. Besides as time passes, more investment opportunities develop pushing up the MEI curve.

This means an upward shift in the I curve. At the same time, any decline in the capital stock of the economy that occurs during the period of low income will tend to lower the average propensity to save. This will push the S curve downward. These shifts cause the position of A to move to the right and that of C to move to the left, thereby bringing A and C together as is shown in stage 4 and stage 5 in the diagrams.

In the process, the critical point is reached when these gradual shifts of the I and S curves make the two curves tangential that bring A and C together, as is shown in stage 6 of the diagram. The + C position is unstable as income goes in an upward direction, since I > S on both sides. The expansion, once started, raises the income level where a new state of equilibrium is reached at the position B. The S&I curves thereafter are likely to return gradually to the position shown in stage 1 of the diagram and another cycle begins.

The cyclical process described by Kaldor is thus self-generating. The very movement to relatively high income levels brings into play forces which with the passage of time have produced a downward movement to relatively low income levels, as the changing APS and the accumulation or decumulation of capital that occur over the cycle are inherent in the capitalist economic process. They are endogenous forces in the full sense of the term.

Besides the switching of the S & I functions, Kaldor's model of trade cycle introduces the importance of the distribution of income. He contended that the income of the society is

distributed between two classes of workers and employers as wages and profits each of which has its own propensity to save, while the relations of income distribution determine the level of saving, achievement of equilibrium requires a matching level of investment.

According to Kaldor, the introduction of the distribution mechanism (of income) into the model (with the provision that profit seekers' savings are more than those of wage earners) makes the system more stable and more capable of automatically restoring equilibrium. Thus we find that Kaldor's model differs materially from Harrod's model. Kaldor believes that any change in I in relation to S— which in Harrod's model will tend to produce cumulative processes of decline or growth in income will set off in Kaldor's model the mechanism of income redistribution which adjusts S to the changed level of I.

Inflationary processes have an important part to play in this redistribution of income. Kaldor assumes that when I > S, the growth of demand under increased employment will result in faster growth of prices than of wages, thereby changing the distribution of income in favour of profit earners reducing the share of workers. Because savings from profits are assumed to be higher than the savings from wages (Sp > Sw) this will result in a growth of savings and the equality of S and I will be restored.

If, on the other hand, investment demand tends to decline, prices are likely to drop faster than wages, income distribution will tend to change in favour of the workers, savings will decline till the equality of S and I is restored. The stabilising effect which works through the mechanism of income distribution is called 'Kaldor effect'.

According to Kaldor, the forces which bring about the lower turning point are not so strong at the higher level of income. "A boom left to itself is certain to come to an end, but the depression might get into a position of stationariness and remain there until external changes (the discovery of new inventions or of the opening of new markets) come to the rescue."

Kaldor has observed also that cycles in his model are not of the same duration. Neither are expansions and contractions necessarily symmetrical. These attributes of the cycles depend upon the slopes of the I and S curves and the rate at which they shift in the course of the trade cycle.

Kaldor's trade cycle model is unique in nature. He has neither used the acceleration principle nor the monetary factors in explaining the turning points of the trade cycle. He has used the existence of non-linear S and I functions along with the income distribution mechanism to demonstrate the generation of a business cycle.

**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.