# The Hicksian Theory of Trade Cycle

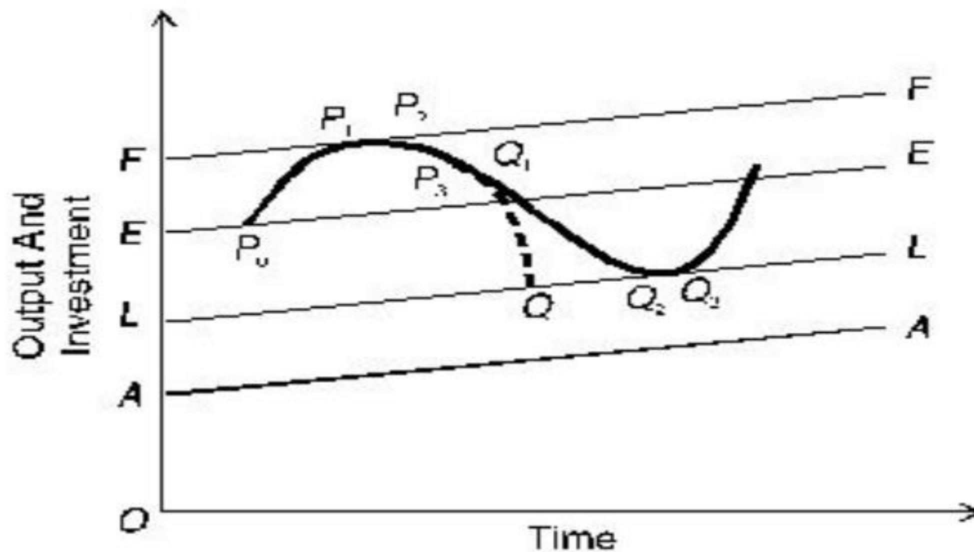


**Figure 1**

Hicks explains his theory of the trade cycle in Figure 1 . Line AA shows the path of autonomous investment growing at a constant rate. EE is the equilibrium level of output which depends on AA and is deduced from it by the application of the multiplier accelerator interaction to it. Line FF is the full employment ceiling level above the equilibrium path EE and is growing at the constant rate of autonomous investment. LL is the lower equilibrium path of output representing the floor or 'slump equilibrium line'. Hicks begins from a cycleless situation Po on the equilibrium path EE when an increase in the rate of autonomous investment leads to an upward movement in income. As a result, the growth of output and income propelled by the combined operation of the multiplier and accelerator moves the economy on to the upward expansion path from Po to P1 . According to Hicks, this upswing phase relates to the standard cycle which will lead to an explosive situation because of the given values of the multiplier and the accelerator. But this does not happen because of the upper limit or ceiling set by the full employment level FF. Hicks writes in this connection: “I shall follow Keynes in assuming that there is some point at which output becomes inelastic in response to an increase in effective demand.” Thus certain bottlenecks of supply emerge which prevent output from reaching the peak and instead encounter the ceiling at P1 .

When the economy hits the full employment ceiling at P1 , it will creep along the ceiling for a period of time to P2 and the downward swing will not start immediately. The economy will move along the ceiling from P1 to P2 depending upon the time period of the investment lag. The greater the investment lag, the more the economy will move along the ceiling path. Since income at this level is decreasing relative to the previous stage of the cycle, there is a decreased amount of investment. This much of investment is insufficient to keep the economy at the ceiling level, and then the downturn starts.

During the downswing, "the multiplier-accelerator mechanism sets in reverse, falling investment reducing income, reduced income reducing investment, and so on, progressively. If the accelerator worked continuously, output would plunge downward below the equilibrium level EE, and because of explosive tendencies, to a greater extent than it rose above it." The fall in output in this case might be a steep one, as shown by P2 P3 Q. But in the downswing, the accelerator does not work so swiftly as in the upswing. If the slump is severe, induced investment will quickly fall to zero and the value of the accelerator becomes zero. The rate of decrease in investment is limited by the rate of depreciation. Thus the total amount of investment in the economy is equal to autonomous investment minus the constant rate of depreciation. Since autonomous investment is taking place, the fall in output is much gradual and the slump much longer than the boom, as indicated by Q1Q2 . At Q2 , the slump reaches the bottom or floor provided by the LL line. The economy does not turn upward immediately from Q2 but will move along the slump equilibrium line to Q3 because of the existence of excess capacity in the economy. Finally, when all excess capacity is exhausted, autonomous investment will cause income to rise which will in turn lead to an increase in induced investment so that the accelerator is triggered off which alongwith the multiplier moves the economy toward the ceiling again. It is in this way that the cyclical process will be repeated in the economy.

**Criticisms**

The Hicksian theory of the business cycle has been severely criticised by Duesenberry, Smithies and others on the following grounds:

**1. Value of Multiplier not Constant**. Hicks's model assumes that the value of the multiplier remains constant during the different phases of the trade cycle. This is based on the Keynesian stable consumption function. But this is not a realistic assumption, as Friedman has proved on the basis of empirical evidence that the marginal propensity to consume does not remain stable in relation to cyclical changes in income. Thus the value of the multiplier changes with different phases of the cycle.

**2. Value of Accelerator not Constant**. Hicks has also been criticised for assuming a constant value of the accelerator during the different phases of the cycle. The constancy of the accelerator presupposes a constant capital-output ratio. These are unrealistic assumptions because the capital-output ratio is itself subject to change due to technological factors, the nature and composition of investment, the gestation period of capital goods, etc. Lundberg, therefore, suggests that the assumption of constancy in accelerator should be abandoned

for a realistic approach to the understanding of trade cycles.11

**3. Autonomous Investment not Continuous**. Hicks assumes that autonomous investment continues throughout the different phases of the cycle at a steady pace. This is unrealistic because financial crisis in a slump may reduce autonomous investment below its normal level. Further, it is also possible, as pointed out by Schumpeter, that autonomous investment may itself be subject to fluctuations due to a technological innovation.

**4. Growth not Dependent only on changes in Autonomous Investment.**

Another weakness of the Hicksian model is that growth is made dependent upon changes in autonomous investment. It is a burst of autonomous investment from the equilibrium path that leads to growth. According to Prof. Smithies,12 the source of growth should lie within the system. In imputing growth to an unexplained extraneous factor, Hicks has failed to provide a complete explanation of the cycle.

**5. Distinction Between Autonomous and Induced Investment not Feasible.**

Critics like Duesenberry and Lundberg point out that Hicks's distinction between autonomous and induced investment is not feasible in practice. As pointed out by Lundberg, every investment is autonomous in the short run and a major amount of autonomous investment becomes induced in the long run. It is also possible that part of a particular investment may be autonomous and a part induced, as in the case of machinery. Hence this distinction between autonomous and induced investment is of doubtful validity in practice.

**6. Ceiling Fails to Explain adequately the onset of Depression.**

Hicks has been criticised for his explanation of the ceiling or the upper limit of the cycle. According to Duesenberry, the ceilling fails to explain adequately the onset of depression. It may at best check growth and not cause a depression. Shortage of resources cannot bring a sudden decline in investment and thus cause a depression. The recession of

1953-54 in America was not caused by shortage of resources.

Further, as admitted by Hicks himself, depression may start even before reaching the full employment ceiling due to monetary factors.

**7. Explanation of Floor and Lower Turning Point not Convincing.**

Hicks's explanation of the floor and of the lower turning point is not convincing. According to Hicks, it is autonomous investment that brings a gradual movement towards the floor and it is again increase in autonomous investment at the bottom that leads to the lower turning point. Harrod doubts the contention that autonomous investment would be increasing at the bottom of the depression. Depression may retard rather than encourage autonomous investment. Further, Hicks's contention that revival would start with the exhaustion of excess capacity has not been proved by empirical evidence. Rendings Fels's study of the American business cycles in the 19th century has revealed that the revival was not due to the exhaustion of excess capacity. Rather in certain cases, revival started even when there was excess capacity.

**8. Full Employment level not Independent of Output Path.**

Another criticism levelled against Hicks's model is that the full employment ceiling. As defined by Hicks, it is independent of the path of output. According to Dernburg and McDougall, the full employment level depends on the magnitude of the resources that are available to the country. The capital stock is one of the resources. When the capital stock is increasing during any period, the ceiling is raised. "Since the rate at which output increases determines the rate at which capital stock changes, the ceiling level of output will differ depending on the time path of output."

**9. Explosive Cycle not Realistic**.

Hicks assumes in his model that the average capital-output ratio (v) is greater than unity for a time lag of one year or less. Thus explosive cycles are inherent in his model.

But empirical evidence shows that the response of investment to a

change in output (v) is spread over many periods. As a result, there

have been damped cycles rather than explosive cycles.

**10. Mechanical Explanation of Trade Cycle**.

Another serious limitation of the theory is that it presents a mechanical explanation of

the trade cycle. This is because the theory is based on the multiplieraccelerator interaction in rigid form, according to Kaldor and Duesenberry. Thus it is a mechanical sort of explanation in which

human judgement, business expectations and decisions play little or no part. Investment plays a leading role based on formula rather than on judgement.

**11. Contraction Phase not Longer than Expansion Phase.**

Hicks has been criticised for asserting that the contraction phase is longer

than expansion phase of trade cycle. But the actual behaviour of the

postwar cycles has shown that the expansionary phase of the

business cycle is much longer than the contractionary phase.

**Conclusion.**

Despite these apparent weaknesses of the Hicksian model, it is superior to all the earlier theories in satisfactorily explaining the turning points of the business cycle. To conclude with Dernburg and McDougall, "The Hicks's model serves as a useful framework of analysis which, with modification, yields a fairly good picture of cyclical fluctuation within a framework of growth. It serves especially to emphasise that in a capitalist economy characterised by substantial amounts of durable equipment, a period of contraction inevitably follows expansion. Hicks's model also pinpoints the fact that in the absence of technical progress and other powerful growth factors, the economy will tend to languish in depression for long periods of time." The model is at best suggestive.

**References:**

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