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Introduction

Keynes does not agree with the older quantity theorists that there is a direct and proportional relationship between quantity of money and prices. According to him, the effect of a change in the quantity of money on prices is indirect and non-proportional.

Keynes complains “that economics has been divided into two compartments with no doors or windows between the theory of value and the theory of money and prices.” This dichotomy between the relative price level (as determined by demand and supply of goods) and the absolute price level (as determined by demand and supply of money) arises from the failure of the classical monetary economists to integrate value theory with monetary theory. Consequently, changes in the money supply affect only the absolute price level but exercise no influence on the relative price level.

Further, Keynes criticises the classical theory of static equilibrium in which money is regarded as neutral and does not influence the economy’s real equilibrium relating to relative prices. According to him, the problems of the real world are related to the theory of shifting equilibrium whereas money enters as a “link between the present and future”.

Keynes’s Reformulated Quantity Theory of Money:

The Keynesian reformulated quantity theory of money is based on the following:

Assumptions:

1. All factors of production are in perfectly elastic supply so long as there is any unemployment.
2. All unemployed factors are homogeneous, perfectly divisible and interchangeable.
3. There are constant returns to scale so that prices do not rise or fall as output increases.
4. Effective demand and quantity of money change in the same proportion so long as there are any unemployed resources.

Given these assumptions, the Keynesian chain of causation between changes in the quantity of money and in prices is an indirect one through the rate of interest. So when the quantity of money is increased, its first impact is on the rate of interest which tends to fall. Given the marginal efficiency of capita], a fall in the rate of interest will increase the volume of investment.

The increased investment will raise effective demand through the multiplier effect thereby increasing income, output and employment. Since the supply curve of factors of production is perfectly elastic in a situation of unemployment, wage and non-wage factors are available at constant rate of remuneration. There being constant returns to scale, prices do not rise with the increase in output so long as there is any unemployment.

Under the circumstances, output and employment will increase in the same proportion as effective demand, and the effective demand will increase in the same proportion as the quantity of money. But “once full employment is reached, output ceases to respond at all to changes in the supply of money and so in effective demand. The elasticity of supply of output in response to changes in the supply, which was infinite as long as there was unemployment falls to zero. The entire effect of changes in the supply of money is exerted on prices, which rise in exact proportion with the increase in effective demand.”

Thus so long as there is unemployment, output will change in the same proportion as the quantity of money, and there will be no change in prices; and when there is full employment, prices will change in the same proportion as the quantity of money. Therefore, the reformulated quantity theory of money stresses the point that with increase in the quantity of money prices rise only when the level of full employment is reached, and not before this.

This reformulated quantity theory of money is illustrated in Figure 67.1 (A) and (B) where OTC is the output curve relating to the quantity of money and PRC is the price curve relating to the quantity of money. Panel A of the figure shows that as the quantity of money increases from O to M, the level of output also rises along the OT portion of the OTC curve.

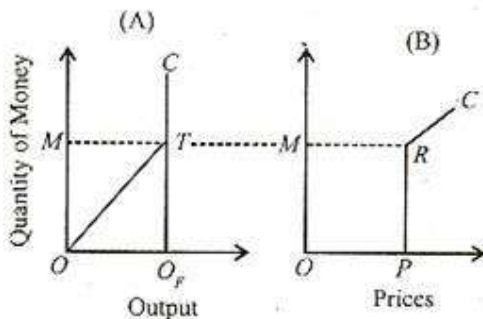


Fig. 67.1

As the quantity of money reaches OM level, full employment output OQF is being produced. But after point T the output curve becomes vertical because any further increase in the quantity of money cannot raise output beyond the full employment level OQ_F.

Panel B of the figure shows the relationship between quantity of money and prices. So long as there is unemployment, prices remain constant whatever the increase in the quantity of money. Prices start rising only after the full employment level is reached.

In the figure, the price level OP remains constant at the OM quantity of money corresponding to the full employment level of output OQ_1 . But an increase in the quantity of money above OM raises prices in the same proportion as the quantity of money. This is shown by the RC portion of the price curve PRC.

Keynes himself pointed out that the real world is so complicated that the simplifying assumptions, upon which the reformulated quantity theory of money is based, will not hold. According to him, the following possible complications would qualify the statement that so long as there is unemployment, employment will change in the same proportion as the quantity of money, and when there is full employment, prices will change in the same proportion as the quantity of money.”

- (1) “Effective demand will not change in exact proportion to the quantity of money.
- (2) Since resources are homogenous, there will be diminishing, and not constant returns as employment gradually increases.
- (3) Since resources are not interchangeable, some commodities will reach a condition of inelastic supply while there are still unemployed resources available for the production of other commodities.
- (4) The wage-unit will tend to rise, before full employment has been reached.
- (5) The remunerations of factors entering into marginal cost will not all change in the same proportion.”

Taking into account these complications, it is clear that the reformulated quantity theory of money does not hold. An increase in effective demand will not change in exact proportion to the quantity of money, but it will partly spend itself in increasing output and partly in increasing the price level. So long as there are unemployed resources, the general price level will not rise much as output increases. But a sudden large increase in aggregate demand will encounter bottlenecks when resources are still unemployed.

It may be that the supply of some factors becomes inelastic or others may be in short supply and are not interchangeable. This may lead to increase in marginal cost and price. Price would accordingly rise above average unit cost and profits would increase rapidly which, in turn, tend to raise money wages owing to trade union pressures. Diminishing returns may also set in. As full employment is reached, the elasticity of supply of output falls to zero and prices rise in proportion to the increase in the quantity of money.

The complicated model of the Keynesian theory of money and prices is shown diagrammatically in Figure 67.2 in terms of aggregate supply (S) and aggregate demand (D) curves. The price level is measured on the vertical axis and output on the horizontal axis.

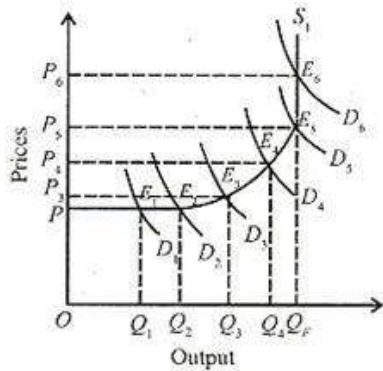


Fig. 67.2

According to Keynes, an increase in the quantity of money increases aggregate money demand on investment as a result of the fall in the rate of interest. This increases output and employment in the beginning but not the price level. In the figure, the increase in the aggregate money demand from D_1 to D_2 raises output from OQ_1 to OQ_2 but the price level remains constant at OP . As aggregate money demand increases further from D_2 to D_3 output increases from OQ_2 to OQ_3 and the price level also rises to OP_3 .

This is because costs rise as bottlenecks develop through the immobility of resources. Diminishing returns set in and less efficient labour and capital are employed. Output increases at a slower rate than a given increase in aggregate money demand, and this leads to higher prices. As full employment is approached, bottlenecks increase. Further-more, rising prices lead to increased demand, especially for stocks. Thus prices rise at an increasing rate. This is shown over the range in the figure.

But when the economy reaches the full employment level of output, any further increase in aggregate money demand brings about a proportionate increase in the price level but output remains unchanged at that level. This is shown in the figure when the demand curve D^5 shifts upward to D_6 and the price level increases from OP_5 to OP_6 while the level of output remains constant at OQ_F .

Superiority of the Keynesian Theory over the Traditional Quantity Theory of Money:

The Keynesian theory of money and prices is superior to the traditional quantity theory of money for the following reasons.

Keynes's reformulated quantity theory of money is superior to the traditional approach in that he discards the old view that the relationship between the quantity of money and prices is direct and proportional. Instead, he establishes an indirect and non-proportional relationship between quantity of money and prices.

In establishing such a relationship, Keynes brought about a transition from a pure monetary theory of prices to a monetary theory of output and employment. In so doing, he integrates

monetary theory with value theory. He integrates monetary theory with value theory and also with the theory of output and employment through the rate of interest.

In fact, the integration between monetary theory and value theory is done through the theory of output in which the rate of interest plays the crucial role. When the quantity of money increases the rate of interest falls which increases the volume of investment and aggregate demand thereby raising output and employment. In this way, monetary theory is integrated with the theory of output and employment.

As output and employment increase they further raise the demand for factors of production. Consequently, certain bottlenecks appear which raise the marginal cost including money wage rates. Thus prices start rising.

Monetary theory is integrated with value theory in this way. The Keynesian theory is, therefore, superior to the traditional quantity theory of money because it does not keep the real and monetary sectors of the economy into two separate compartments with 'no doors or windows between the theory of value and the theory of money and prices.'

Again, the traditional quantity theory is based on the unrealistic assumption of full employment of resources. Under this assumption, a given increase in the quantity of money always leads to a proportionate increase in the price level. Keynes, on the other hand, believes that full employment is an exception.

Therefore, so long as there is unemployment, output and employment will change in the same proportion as the quantity of money, but there will be no change in prices; and when there is full employment, prices will change in the same proportion as the quantity of money. Thus the Keynesian analysis is superior to the traditional analysis because it studies the relationship between the quantity of money and prices both under unemployment and full employment situations.

Further, the Keynesian theory is superior to the traditional quantity theory of money in that it emphasises important policy implications. The traditional theory believes that every increase in the quantity of money leads to inflation.

Keynes, on the other hand, establishes that so long as there is unemployment, the rise in prices is gradual and there is no danger of inflation. It is only when the economy reaches the level of full employment that the rise in prices is inflationary with every increase in the quantity of money. Thus "this approach has the virtue of emphasising that the objectives of full employment and price stability may be inherently irreconcilable."

Criticisms of Keynes Theory of Money and Prices:

Keynes' views on money and prices have been criticised by the monetarists on the following grounds.

1. Direct Relation:

Keynes mistakenly took prices as fixed so that the effect of money appears in his analysis in terms of quantity of goods traded rather than their average prices. That is why Keynes adopted an indirect mechanism through bond prices, interest rates and investment of the effects of monetary changes on economic activity. But the actual effects of monetary changes are direct rather than indirect.

2. Stable Demand for Money:

Keynes assumed that monetary changes were largely absorbed by changes in the demand for money. But Friedman has shown on the basis of his empirical studies that the demand for money is highly stable.

3. Nature of Money:

Keynes failed to understand the true nature of money. He believed that money could be exchanged for bonds only. In fact, money can be exchanged for many different types of assets like bonds, securities, physical assets, human wealth, etc.

4. Effect of Money:

Since Keynes wrote for a depression period, this led him to conclude that money had little effect on income. According to Friedman, it was the contraction of money that precipitated the depression. It was, therefore, wrong on the part of Keynes to argue that money had little effect on income. Money does affect national income.