

Analysis of the Economic Ideas of Monetary Neutrality and its role in Modern Monetary Policy

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Abstract: Economic opinions and ideas about the idea of monetary neutrality and its role in market stability are one of the important pillars of economic research, given that these ideas give the real dimensions of everything related to this idea and the importance of applying it at certain times and avoiding applying it at other times. Perhaps economic thinkers have surrounded this idea with everything necessary in order to give economic research in the field of the market an important space to put a set of options available from the monetary authority on the one hand and the government on the other hand. On this basis, the research reached a set of results that can be summarized: the volume of production is determined according to the classical hypothesis by real factors, represented by the number of real means of production available in the economy, whether natural or human, and the volume of production is always at the level of comprehensive use, and any level below that does not exist. They based their hypothesis on Say's law, where the supply of goods and services creates demand for them, meaning that the volume of goods and services is constant at the level of comprehensive use and only in the long run.

Keywords: Monetary policy, monetary neutrality, economic theory.

Introduction: The topic of monetary neutrality is one of the theoretical challenges that has faced many criticisms from economic schools. To reach a realistic understanding of this concept, the researchers believe that it is necessary to identify this concept and surround this topic with the most important theoretical treatments that adopted the idea of monetary neutrality and its importance in controlling the market through the effective role of monetary policy represented by the central bank, in addition to the most important duties that the government must perform to facilitate the process of controlling price fluctuations in the market. On this basis, the topic was covered by reviewing the most important economic theories through the opinions of economic thinkers

who addressed the idea of monetary neutrality.

CHAPTER ONE

The Neutrality of Money: Concept and Theories

The idea of the neutral role of money has a longer history than the idea of the neutral role of the interest rate; the neutrality of money is studied by studying the monetary equilibrium and its effect on the real equilibrium, which requires analyzing the causal relationship between money and economic activity by measuring the effect or lack thereof of changes in the quantity of money issued on economic activity; the idea of money being neutral means that an increase in the quantity of money must lead to an increase in the general price level, and affect all prices in a regular

manner and in the same proportion, leaving the relative exchange values unchanged. Then money is neutral and will have no overall effects on production and employment relative to changes in the quantity of money (Galbraith & Darity, 1994, 287). Hayek is believed to have been the first to refer to the term neutrality of money, and this concept first appeared during the interwar period, that is, during the thirties of the twentieth century (Sayyid Hassan, 1985, 194). Hayek suggests defining a neutral or negative role for money that would allow it to play a positive or effective role in the economy, meaning that money, from his point of view, should not have any effect on economic activity (Ajina, 1971, 157). and money should not have any inflationary or deflationary effect on economic activity. Its basic function, according to this concept, is limited to facilitating production and consumption only, through its use as a means of payment and a measure of value expressed in prices, as a measure of deferred payments, and a means of accumulating wealth when used as a savings tool. Supporters of neutral money believe that changes in the quantity of money are the main cause of economic disturbances. Accordingly, if money can be kept neutral or negative, then fluctuations in the price level and the volume of economic activity will be minimal or largely eliminated (Sayyid Ali, 1970, 57)(Ajina, 1971, 158) (Sayyid Hassan, 1985, 65). But even in such a neutral role for money, most economists concede that a change in the quantity of money may have some short-term effects on output, and this is true unless there has been a more or less simultaneous proportional increase in all prices with changes in the quantity of money.

Traditional economists believe in their analysis that if an increase in the amount of money leads first to an increase in product prices at a rate higher than the increase in wages, it leads to an increase in the rate of profit, and then it is an incentive for producers to increase production, i.e. production and employment will rise and money will be non-neutral. Conversely, if wages rise at a rate higher than the increase in prices, the rate of profit and production will witness a decline due to the non-neutral role of money. More precisely, supporters of neutral money assert that money is neutral only in the long run, where the price level is determined by its relationship to costs at the initial equilibrium point for the level of production (Galbraith & Darity, 1994, 281-288). The founder of the Scottish school, David Hume, also presented a document in which he presented the hypothesis of the neutrality of money, in which he explained that doubling or halving the quantity of money during the settlement process can lead to effects on the level of employment and productive capacity (Galbraith & Darity, 1994, 238-239).

Keynes was able to add a new and different contribution to his analysis of the role of money, as he confirmed that the neutrality of money is through the effect of changes in the quantity of money on the interest rate, and then its effect is reflected on the prices of all assets in relation to their production costs and thus affects the investment rate and the level of production, as the increase in the quantity of money is likely to reduce the interest rate and raise the price of capital assets, which stimulates an increase in the production of capital assets and thus increases both investment and production in the economy (Keynes, 1964, 137). James Tobin contributed by developing the Keynesian concept in his work entitled "A Dynamic Assemblage Model", where Tobin considered money as one of the many assets of capital, from which individuals choose to keep it in their wealth portfolio, and Tobin considered that all of these assets are alternatives, and then the preference for owning money is an alternative to owning other assets of the capital formed in the economy (real physical assets), and that an increase in the amount of money would affect the relative prices of assets - a decrease in money prices and an increase in the prices of other assets - this leads to a change in the composition of individuals' portfolios, and thus is reflected in investment, which in turn determines the growth rate of the capital stock and then affects the real production rate in the economy, thus confirming the previous Keynesian analysis of the role of money in the real economy (Galbraith & Darity, 1994, 289). To make the role of money neutral in the economic system, monetary authorities should practice a flexible policy towards the money supply in order to confront the fluctuations that occur in the flow of money income and The central bank has complete control over the quantity of money (money issue) and strips commercial banks of their ability to create money through the demand for cash deposits, and does not allow them to lend except through depositors' savings. Thus, achieving economic stability is achieved by setting an equilibrium interest rate that achieves equality between savings and investments to avoid economic turmoil. To achieve equilibrium, the central bank is required to follow a flexible policy in the money supply by controlling the increase or decrease in the money supply to confront changes that may occur in the flow of cash income or in the speed of money circulation, in addition to changes that may occur as a result of hoarding and changes in the size of the population (Ajina, 1970, 159). Wicksell emphasizes the role of banks in achieving monetary equilibrium within the economic system by banks following a regular interest policy and monitoring the price movement to make appropriate and necessary adjustments to the cash interest rate in

order to achieve equilibrium between it and the real interest rate (Al-Dulaimi, 1990, 432). However, money has other functions – dynamic – as it does not stop at its neutral functions only, but rather affects the economic system through its impact on the general price level and economic activity; the amount of money, the speed of its circulation and spending, and the degree of liquidity of various monetary sources effectively affect the demand for goods and services and thus the general price level, the effect of which is reflected in economic activity, as changes in the amount of money affect consumption and production in particular and thus economic activity in general as a result of the surplus or shortage in the amount of money needed to maintain the stability of the real value of money and thus the level of general activity (Sayyid Ali, 1970, 57 58); thus, it is noted that money has different dynamic functions by using it as a tool for economic policy and a means of government intervention in various economic activities. Modern developments in monetary theory have clarified and emphasized the role of money in the economy through its impact on the general price level, the level of employment and income, the distribution of wealth, and government financing (Sayyid Ali, 1970, 57 58). In summary, modern developments in monetary theory have moved from emphasizing the neutrality of money to emphasizing its dynamic functions. Money is neutral in normal, natural conditions and has no effect on the real balance in the economy, on equilibrium relative prices, the interest rate, and real production according to the traditional hypothesis (M.C. Vaish, 1979, 77). Traditionalists believe that there is a natural economic system that works in harmony and agreement between the real relationships in the economy if left to the forces of nature without the intervention of authorities. Then it is neutral and has no effect on the important determinants of the basic variables in the economy, use and production are real non-monetary factors, and money only performs the function of facilitating the exchange process at the level of comprehensive use and flexibility of prices and wages, but it has become clear that the economy is not always at the level of comprehensive use, nor are prices and wages highly flexible, and thus it has become clear that money is not neutral as was believed, but rather has an impact on economic variables through its functions as a store of value and a means of payment in the future, meaning that it has far-reaching effects on the economy in terms of use and production, in addition to its impact on the price level; This is what the modern monetary theory confirmed through its criticism of the traditional theory and its hypothesis based on the fact that the size of real production depends on natural and human resources without money having an effect,

while modern developments have proven that the economy is exposed to monetary and non-monetary factors that interact with each other to generate important effects on economic relations. (Sayyid Ali, 1970, 58) (Al-Dulaimi, 1990, 388). the real economic variables (Al-Dulaimi, 1990, 392)

Neutral interest rate:

The Swedish economist Knut Wicksell, the founder of the Swedish economic school, was the first to introduce the concept of the natural rate of interest, by distinguishing between the market rate of interest and the natural rate of interest, which is attributed to him through his famous work entitled "Interest and Prices", which was published in German in 1898, and then translated into English and published between 1936 and 1943, which witnessed wide interest from Cambridge University economists (Galbraith & Darity, 1994, 286). The importance of Wicksell's work lies in his emphasis on the two most important factors that contribute to determining the total monetary spending in the market and thus the price level, namely the interest rate and investment spending, and his emphasis on the importance of the interest rate in determining the general price level. Wicksell also succeeded in finding the means that connects monetary theory with economic theory - the theory of value - and considered the interest rate to be the intended means by distinguishing between two types of interest rates (Sayyid Ali, 1970, 178); The first - the natural or real rate of interest, which Wicksell defined in different forms through his writings:

- 1- It is the price at which the demand for capital prepared for lending is equal to the supply of savings
- 2- It is the rate at which the stability of the money supply and the stability of prices are consistent (Jhingan, 1983, 357)
- 3- It is the price that matches the expected return on new capital
- 4- The ratio between the expected net return from new investment and the cost of this investment, i.e. the marginal efficiency of capital in the concept that Keynes later came up with (Sayyid Ali, 1970, 179).
- 5- It is also the rate that matches the zero inflation rate (Galbraith & Darity, 1994, 286))

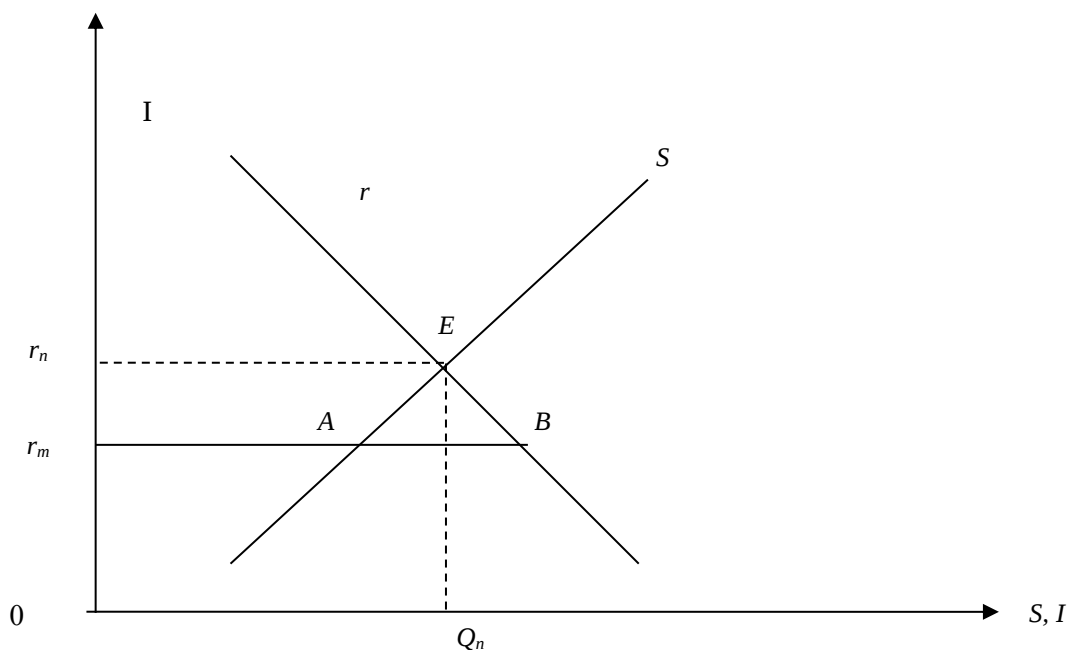
Second - Market Rate of Interest: Unlike the natural interest rate that balances the expected flows of savings and investments in advance, the market interest rate balances the demand for money and the supply of bonds and securities (Tanner, 1975, 173)

Wicksell built his theory on a number of assumptions: the economy operates at full employment, investment is a decreasing function of the interest rate, and saving

is an increasing function of the interest rate. Within the framework of Wicksell's concept in analyzing monetary theory, when the natural rate of interest equals the market interest rate, monetary policy is neutral, meaning that monetary policy does not lead to expansion or contraction in aggregate demand. On the other hand, if the market interest rate is not equal to the natural rate, monetary policy is not neutral, and will lead to a difference in the output from the equilibrium level in the long run (Jhingan, 1983, 357-358) (Tanner, 1975, 173). The difference between the two rates has a different effect in the short run than in the long run; the difference between the two rates in the short run leads to a change in the price level, and the market interest

rate is more flexible and responsive to changes in the demand for monetary lending. On the other hand, the difference between the two rates in the long run will automatically generate a large force that achieves the state of equality (Jhingan, 1983, 358) (monetary policy (interest rate) is neutral only when the natural interest rate is equal to the market interest rate, but the actual reality indicates that the chances of the possibility of equality occurring are slim, due to the cumulative processes of capital that generate a state of disequilibrium on the condition of positive investment, which increases at constant rates over time, which occurs when the market interest rate is lower than the natural interest rate.

The relationship between saving and investment

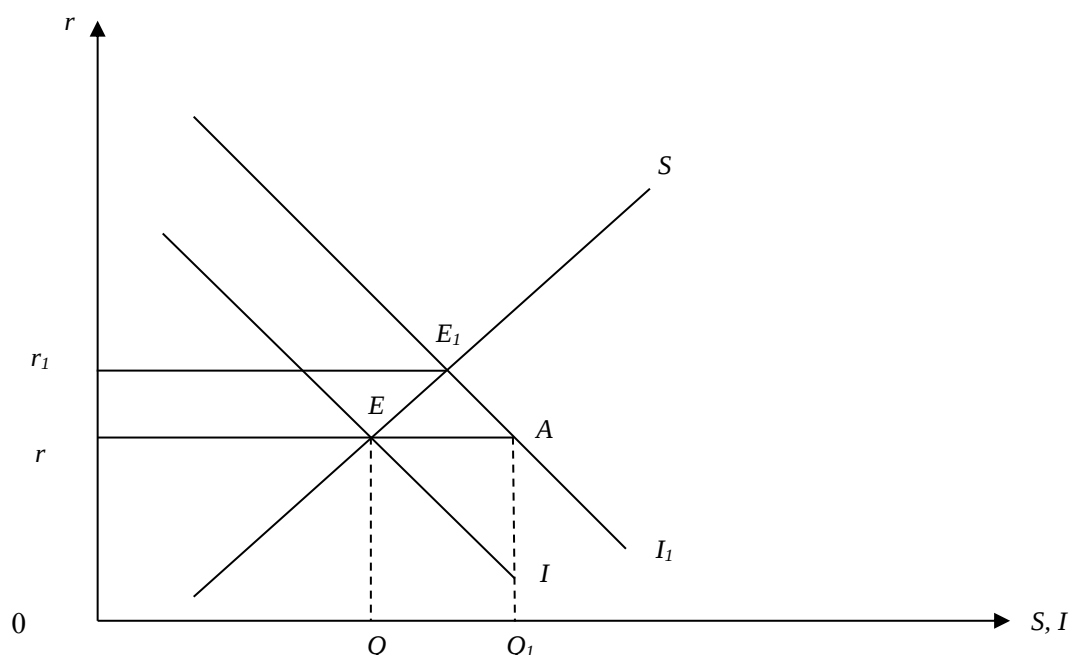


The curve I represents the investment demand curve or the lending demand curve and S represents the savings supply curve. At the market interest rate r_m , the investment demand (demand for loans) is greater than the supply of savings by distance (AB). This leads to banks expanding lending to meet the increasing demand for investment goods. Thus, the aggregate demand for money exceeds the available money supply. If the economy is operating at full employment, the increase in demand for goods and services leads to an increase in prices. As a result, the increase in demand for money leads to an increase in the market interest rate. As this rate increases, money incomes expand, and the demand for money for transactions increases over the available money offered for lending. Assuming that there is no increase in the money supply,

the market interest rate increases to become equal to the natural interest rate at point E, as shown in (Jhingan, 1983, 358-359). Conversely, if the natural rate of interest is lower than the market rate, then the supply of money is greater than the demand, i.e. the demand for lending money is less than the supply, leading to a decrease in the market rate to be equal to the natural rate (Jhingan, 1983, 358-359); but here it must be noted that the natural rate of interest is not fixed, as it depends on the efficiency of production of the available quantities of fixed and variable capital, and this is consistent with what Keynes came after him through his emphasis on the concept of marginal efficiency of capital, as both of them - Keynes and Wicksell - confirmed that the expansion of investment depends on increasing the percentage of expected profits from new capital goods over costs (Hansen, 1949, 89-90) (Keynes, 1964, 135-14), in other words -

the state of imbalance resulting from the cumulative processes of capital resulted from the increasing demand resulting from innovation and technological

progress processes that raised the level of expected profits for new investments



Point E represents the initial monetary equilibrium point, where the savings and investment curves are equal at that point, and the natural interest rate and the market rate are equal at the interest rate r . An increase in the demand for borrowing leads to a shift in the investment demand curve upward to the right from I to I_1 , which in turn leads to an increase in the natural interest rate to r_1 at point E_1 (the intersection of I_1 and S). If the monetary authorities do not intervene to raise the market rate (given that the market rate may be determined by an administrative decision from the monetary authority) (Sayyid Hassan, 1985, 200 201), banks will expand their lending at that rate. As a result of the increase in demand, the increase in demand for money leads to an increase in prices and then the aggregate demand increases along the horizontal axis at the market interest rate r , which is determined by the banks' supply curve by distance, and with the increase in demand resulting from the increase in investment to I_1 , the banks increase their money supply by distance, and the horizontal line represents a perfectly elastic supply function which is equal to the new investment demand curve I_1 at point A; the increase in investment demand is compensated by the increase in the quantity offered for lending by the banks, and with the increase in the money supply, the demand for capital goods increases, and then leads to an increase in the demand for goods and services, and as a result leads to an increase in prices, and the processes of monetary expansion and the increase in

inflation rates in prices lead to an increase in the market interest rate r to the level of the natural interest rate r_1 (Jhingan, 1983, 359 360). However, the continued demand for borrowing gradually leads to a reduction in the amount of surplus balances prepared for lending in banks, due to double withdrawal, whether due to the rise in prices resulting from the rise in costs or as a result of the decline in the real value of these balances, both of which lead to raising the interest rate in the money market above the natural interest rate, and then the economy is in an upward phase due to inflation resulting from attracting demand, as the interest rate increases to a greater degree than the rate of increase in the prices of goods and services, which leads to an increase in production costs, the effect of which is reflected in a decrease in profits and the investment rate, which causes abstention from borrowing (Sayyid Hassan, 1985, 201); on the other hand, if inflation is driven by expenditure the supply side then the natural interest rate that generates the equality of savings and investment may not achieve price stability, and on the contrary, the interest rate that gives price stability may be very high (Galbraith & Darity, 1994, 286).

Within the framework of Wexley analysis, measuring the gap between the natural interest rate and the market interest rate is the best indicator of the degree of impact of non-neutral monetary policy. The analysis depends on the degree of flexibility of monetary policy; if monetary policy is inflexible, the market interest rate

is higher than the natural rate, which leads to savings exceeding the required level of investment and thus a decrease in the level of output (income); conversely, when monetary policy is flexible, the market interest rate falls below the natural rate, which leads to investment exceeding the level of savings, and as a result an increase in the level of output. To clarify the previous analysis in a more precise form)Tanner, 1975, 173-174)

Classical understanding of monetary neutrality:

Say's views were taken as a basis for formulating many economic views in both England and France until the beginning of the current century. Walras followed the same line taken by the French Economist Say, who tried to prove that every supply always creates demand for it, meaning that the total supply of all goods and services must equal the total demand for all goods and services, because every seller is a buyer at the same time (Johnson, 1976, 108) (Sayed Hassan, 1985, 194),

Monetary equilibrium is achieved according to Say's principle when the total demand for money is equal to the amount of money available, and achieving this monetary equilibrium requires the presence of forces or factors that achieve balance between the total supply and the total demand for goods and services in the national economy (Siegel, 1987, 329). Say's principle represents the basic idea that links monetary equilibrium or imbalance with equilibrium or imbalance in the markets for goods and services; thus, it helps to clarify the path taken by flowsMoney in the economy to cause changes in money prices and the level of production and employment. According to Say's law, the net value of exchange transactions for all market participants must equal zero, and accordingly, the sum of the market values of all surplus demand for non-monetary goods and money must equal zero, when the total demand (D) for the good (or money) equals the total supply (S), and equilibrium occurs only when the planned and actual operations of buyers and sellers are equal (Siegel, 1987, 337-338). This means that monetary imbalance is a source of economic fluctuations in the economy as a whole, as the economy tends to contract when there is a surplus supply, and tends to boom when there is a surplus demand for goods and services. If it represents the demand for money i , which is the actual money supply, then:

When the demand is greater than the cash balances, it is positive, and when the demand is less than the existing cash balances, it is negative, while it is zero at equilibrium (Siegel, 1987, 342-343).

One of the basic assumptions of monetary equilibrium according to Say's law is that monetary equilibrium is

accompanied by a special equilibrium in the market for non-monetary goods and services, which can be proven through the following equations)

Where equation shows supply and demand in both the money market and the goods market. From the goods market:

By substituting equation, the last equation shows Say's principle, which indicates that the existence of a surplus in demand for non-monetary goods and services requires the existence of a surplus in the total supply of money. Conversely, an excess of the aggregate supply of non-monetary goods and services must be accompanied by

Excess aggregate demand for money (Siegel, 1987, 345-346) (Johnson, 1976, 110-111).

More clearly, the overall changes in the commodity market from excess demand to excess supply of goods and services are due to monetary factors, taking the form of changes in the money supply resulting from monetary policies adopted by the monetary administration, or resulting from changes in the demand for money determined initially by the behavior of individuals. This equation also shows that the equality of planned and actual holdings of money leads to the total net value of planned exchange being zero, and as a result this means that achieving general equilibrium is where money is neutral. (Siegel, 1987, 346) (mises, www.mises.org/mmmp, 2).

According to the Valras analysis, it was stated that as long as we have the data on the total goods demanded at a certain price as well as the total value of the output of these goods, then it is easy to determine the total demand during a certain period of time (t), where:

The price of the good at which the quantity demanded is determined:

The level of demand for these goods:

In the same way, the total value of these goods can be calculated by displaying these goods, which can be expressed as follows:

Where S is the quantity offered, and from here we find that the Valras-Say law assumes complete equality between supply and demand, and that the total of what is purchased of goods equals the total of what is sold of these goods, and this situation is represented by complete identity, as this identity means, more clearly, that the total aggregate demand at a certain price for these goods (p) and at a specific interest rate (r) and during a certain period of time (t) equals the total aggregate supply at a certain level of these goods and at a specific interest rate and during a specific period of time, and therefore this identity was expressed in three conditions arranged on top of each other as follows),

and thus the value spent on the purchase must match and equal the value Proceeds from the sale, i.e.: Here we note that both Valras and Say were interested in the supply side as one of the determinants of price (Sayed Hassan, 1985, 194 196) (Johnson, 1976, 108 109). Both Valras and Say worked on applying their new approach to money, as money was considered a unique commodity that is demanded for itself and offered for its own sake. If this logic is applied to money, and we assume that the quantity of money is (M), then it is possible to give the material character to the result of the demand for money, let it be (Dr), by using the price of money, let it be (pt), and according to the Valrasian analysis approach, the demand for money will include both (Dr) and (pt), and since the quantity of money is represented to us by (M), and point (O) is the highest standard number for the quantity of money (Sayed Hassan, 1985, 195 196). That is, the demand function for money can be expressed as follows:

And the money supply function takes the following form

And if we use money as a common denominator, then the price of money is equal to unity. That is:)

Here we find that Valras applied to money the same concepts applied to goods and services, and by using the idea of equivalence assumed by Say's law on the product and the quantities demanded of goods and services, it can also be achieved on money (Mr. Hassan, 1985, 196 197) and here it is:

Since the last identity means that the highest level of total aggregate demand for money MO is at a certain level of prices and at a specific interest rate during a certain period of time equal to the highest rate of total aggregate supply of money MH.

In the case of two types of demand BO and MO (demand for money and demand for goods and services) and two types of supply (BH and MH) (money supply and goods and services supply), and using the idea of equilibrium assumed by Say's law on the product and the quantities demanded of goods and services and applying it to the complex sum of goods and money, equilibrium can also be achieved:

Economic theorists have criticized the classical theory. Economists Hume and Mill are among the theorists who tried to build a hypothetical theory, where changes in the money supply would affect all individuals, so that the prices of all goods would rise and fall at the same time and at the same rate. However, Hume and Mill's attempts provided a negative proof, as the price changes of different goods are not affected at the same rate and at the same time. Accordingly, Hume and Mill provided proof that the quantity theory of money, which includes that all prices

rise and fall in the same proportion to the increase or decrease in the quantity of money, is not correct.

CONCLUSIONS

1-The conclusion of Wicksell's analysis focuses on the relative price mechanism of the tripartite relationship between money - interest rate - investment, and accordingly, changes in the interest rate are the basis for other changes, so that the equilibrium between the two interest rates (monetary and natural) leads to business stability, which in turn is consistent with the idea of monetary equilibrium, i.e. money is neutral, meaning that money is neutral and balanced only at the point where both the natural interest rate and the monetary interest rate are equal..

2-The difference between the two rates leads to disequilibrium; Wicksell identified in his theory three basic conditions for achieving equilibrium; the first: the natural interest rate is equal to the market interest rate, the second: the expected savings are equal to investments.

, and the third: the price level is stable. Hence, the three conditions became known as monetary equilibrium in the modern analysis of monetary theory.

3-The volume of production is determined according to the classical hypothesis by real factors, represented by the amount of real means of production available in the economy, whether natural or human, and the volume of production is always at the level of comprehensive use, and any level below that does not exist. They based their hypothesis on Say's law, where the supply of goods and services creates demand for them, meaning that the volume of goods and services is constant at the level of comprehensive use and only in the long run.

4-The only function of money is to facilitate the exchange process between real goods and services. Thus, money is neutral and has no effect on the level of use and production. Its only effect is on the general level of prices.

5-The essence of the quantity theory is that the role of money is limited to influencing the general price level without affecting other economic variables, i.e. doubling the quantity of money leads to doubling prices only, i.e. it has a double effect on prices.

RECOMMENDATIONS

1-The researcher recommends relying on solid theoretical foundations that clarify the importance of following sound economic steps that would clarify the importance of monetary neutrality, which could lead the economy according to the prevailing interest rates to important levels.

2-The equilibrium price of a commodity in a free market economy is determined by the intersection of the real

supply and demand curves in the market, and the elasticity of these curves affects prices to a significant degree; while the general price level is determined by the quantity of money and the speed of its circulation in the real economy.

The researcher recommends that the performance of the central bank should be in line with the size of the market and in accordance with the overall changes in the commodity market from excess demand and excess supply of goods and services due to monetary factors, taking the form of changes in the money supply resulting from the monetary policies adopted by the monetary administration.

4-Monetary equilibrium is achieved according to Say's principle when the total demand for money equals the amount of money available. Achieving this monetary equilibrium requires the existence of forces or factors that achieve a balance between the total supply and the total demand for goods and services in the national economy.

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