

WEEK 13- ISSUES IN MONETARY ECONOMICS

CONTENT

1.0 INTRODUCTION

2.0 OBJECTIVES

3.0 MAIN CONTENT

3.1 Definition and evolution of Money

3.2 Functions of money

3.3 Characteristics of money

3.4 The role of money in the macroeconomy

4.0 Self-assessment Exercise

5.0 References/suggested readings

1.0 INTRODUCTION

In this topic, we will focus on Money: Functions and Historical Evolution; The Role of Money in the Macroeconomy.

3.1 DEFINITION AND EVOLUTION OF MONEY

What is money?

Money is a system of value that facilitates the exchange of goods. The use of money eliminates the problem of bartering where both parties must have something the other wants or needs. Historically, the first forms of money were agricultural commodities, such as grain or livestock. Today, most money systems are based on standardized currencies that are controlled by central banks. Digital cryptocurrencies also have some of the specific properties of money.

How Money Works

Money is a liquid asset used to facilitate transactions of value. It is used as a medium of exchange between individuals and entities. It's also a store of value and a unit of account that can measure the value of other goods.

Prior to the invention of money, most economies relied on bartering, where individuals would trade the goods they had directly for those that they needed. This raised the problem of the double coincidence of wants: a transaction could only take place if both participants had something that the other needed. Money eliminates this problem by acting as an intermediary good.

The first known forms of money were agricultural commodities, such as grain or cattle. These goods were in high demand and traders knew that they would be able to use or trade these goods again in the future. Cocoa beans, cowrie shells, and agricultural tools have also served as early forms of money.

As economies became more complex, money was standardized into currencies. This reduced transaction costs by making it easier to measure and compare value. Also, the representations of money became increasingly abstract, from precious metals and stamped coins to paper notes, and, in the modern era, electronic records.

Classification of the definition of money

Money is a difficult concept to define in that it fulfills not only one function but several. The definition of money in the literature is grouped into three strands, functional, theoretical or traditional and empirical definitions.

(i) Functional Definition of Money

The functional definition of money is led by Prof. Coulbourn who defines money as a means of valuation and of payment in terms of the unit of account and exchange¹. This is very wide. It includes cheques, gold, coin, etc., so long as it can perform the functions of valuation and payment. Sir John Hides (1967) says that money is defined by its functions. Anything is money which is used as money, implying in simple terms, Money is what money does.

Some have defined money based on the legal terms. Anything backed by law to be accepted by everyone for payment is called money.

Primary Functions of Money

The two primary functions of money are to act as a medium of exchange/payment and as a unit of account.

(i) Money as a Medium of Exchange/Payment.

This function was traditionally called the medium of exchange. By serving as a medium of payment, money revokes the need for double coincidence of wants and the inconveniences and difficulties associated with barter (which we discuss later in this lecture). As a medium of payment, money acts as an intermediary. It makes exchange possible. It helps production indirectly through specialization and division of labour which, in turn, increase efficiency and output.

(ii) Money as Unit of Account

The second primary function of money is to act as a unit of account. Money is the standard for measuring value just as the yard or meter is the standard for measuring length. The monetary unit measures and expresses the values of all goods and services. In fact, the monetary unit expresses the value of each good or service in terms of price. Money is the common denominator which determines the rate of exchange between goods and services which are priced in terms of the monetary unit. There can be no pricing process without a measure of value.

Secondary Functions of Money

Money performs three other secondary functions: as a standard of deferred payments, as a store of value, and a transfer of value.

Money as a Store of Value: Another secondary function of money is to act as a store of value. The commodity chosen as money is always something which can be kept for long periods without deterioration or wastage. It is a form in which wealth can be kept intact from one year to the next. Money is a bridge from the present to the future. It is therefore essential that the money commodity should always be one which can be easily and wisely stored. Obviously, we know money is not the only store of value. This function can be served by any valuable asset. One can store value for the future by holding short-term

promissory notes, bonds, mortgages, preferred stocks, household furniture, houses, land, or any other kind of valuable goods. The principal advantages of these other assets as a store of value are that they, unlike money, ordinarily yield an income in the form of interest, profits, rent or usefulness. And they sometimes rise in value in terms of money. On the other hand, they have certain disadvantages as a store of value, among which are the following: (1) They sometimes involve storage costs; (2) they may depreciate in terms of money; and (3) they are “illiquid” in varying degrees, for they are not generally acceptable as money and it may be possible to convert them into money quickly only by suffering a loss of value.”

Money as a Standard of Deferred Payments. The third function of money is to act as a standard of deferred or postponed payments. All debts are taken in money. It was easy under barter to take loans in goats or grains but difficult to make repayments in such perishable commodities in the future. Money has simplified both the taking and repayment of loans because the unit of account is durable.

Contingent Functions of Money

Also called the incidental functions. The contingent functions are based on traditional functions (primary & secondary), made possible by Prof David Kinsley. He outlined the functions as.

1. Money as the most liquid of all assets.

Wealth can be in the form of bonds, debentures, etc. There is an opposite direction-meaning that money can be turned into the other forms of wealth and the other forms of wealth can also be turned into money. Savings can be kept in securities. Money aids the functions of liquidity.

2. Money is the basis of the credit system.

Behind or underneath every credit is money. Credit creation can expand money supply through money multiplier. Whatever credit one receives, one pays/receives it back in money (Cash).

Money has helped in the formation of capital or money market. These are based on the fact that money performs the function of unit of account.

3. It brings about the equalization of marginal utility and productivity. Within the indifference curve analysis, where $MU_x = \lambda P_x$, given the P_x and λ marginal utility of good x (MU_x) can be estimated. It also helps in estimating the productivity of a firm and how much to pay for wages, W of labour based on marginal productivity of labour (MPL). i.e. $W = MPL$. But MPL determines the productivity of a labour. Therefore, given wages of the individual, the MPL can be measured in the perfect market.

4. Measurement of National Income

The National income (Y) couldn't have been possible to be calculated in the barter system. But with the use of money, it is easy to estimate the total income, Y of a country to determine the country's welfare. It also helps in calculating the GDP.

5. In the distribution of National Income

Rewards to the factors of production in the form of wages, rent, interest and profit are all determined and paid with money.

(ii) Theoretical Definition of Money

In 1962, Prof, Johnson in his book 'Monetary Theory and Policy' gave four different schools of

thought with regards to the definition of money.

The traditional definition of money is also known as the view of the currency school. The traditional definition of money defines money as currency and deposits or cheques. That is money is a medium of exchange. Thus almost 100% liquid. Keynes in his General Theory followed the traditional view and defined money as currency and demand deposits. The Banking School criticized the traditional definition of money as arbitrary. This view sees the meaning of money as very narrow because there are other assets which are equally acceptable as media of exchange. These include time deposits of commercial banks, commercial bills of exchange, etc.

Other schools of thought like the banking school said that the definition is narrow because it includes other things that money can do and that there are other assets which are equally acceptable as medium of exchange. Examples include, time deposits, drafts bonds which are sometimes used as money. By ignoring these assets, the traditional view is not in a position to analyze their influence in increasing their velocity.

According to classical economists money is just a medium of exchange and it cannot influence the income and employment of a country. In other words, the money supply which is in circulation just performs the function of exchange of goods and services. People keep money with themselves so that they could transact goods and services. Thus, according to them money is just a token and it has nothing to do with economic activity of a country. They further say that money is like a veil which wraps the goods and services in itself. Money has been accorded as a veil because it has camouflaged the operation of real economic forces. Classical economists do not rule out the act of savings or borrowing. They think the savings, borrowings and lending take place under the shield of a veil.

Thus, classical economists are of the view, that money facilitates the transaction of goods and services, but it does not influence the quantity of goods and services in any way. It means that money cannot influence the real variables like production, income and employment. It can only influence the monetary variables like monetary wages and prices. In other words, if the supply of money in a country is increased the income and employment will remain unaffected. The increase in supply of money will lead to increase the prices, hence monetary wages. When prices and wages increase in the same proportion real wages will remain the same. As a result, the employment and output will remain the same.

According to Keynesian Economists money has another role to play which is as a store of value. However, They stressed upon demand for money while the demand for money rises for two motives: (a) Transactive Demand for Money and (ii) Speculative Demand for Money.

Friedman or Monetarists view which has also being described as the modern definition of Money or the Chicago school of thought, the scope of money is much broader than the traditional definitions. In his book “ Employment, growth and price”, Freidman (1959)

defined money literally as the number of dollars people carry around in their pockets as well as the number of dollars they have to their credit at banks in the form of demand deposits and time deposit. In effect, he defines money as currency plus all adjusted deposits in commercial banks. He extended his definition to time deposits-you notify the bank before one can withdraw. Usually, time deposit is not included when classifying liquid assets.

However, this definition is criticized as being too narrow since in most empirical studies the definition of money goes beyond time and demand deposits because of sophistications in financial transactions.

Based on this criticism, Friedman reframed his definition of money as “Any asset capable of serving as a temporarily abode of purchasing power” or anything that can serve as a purchasing power or a means of buying.

The controversy didn't end there. Many scholars still criticized this definition and Friedman was compelled to restate that the definition of money shouldn't be based on theory but how useful it is. The monetarists which are known as modern friends of classical economists have much more similarity regarding different issues. However, they also differ in certain fields. In connection with money monetarists say: "Money Matters Very Much". This means that according to monetarists money in an economy plays a very vital role. They say that aggregate expenditures of the economy are influenced by the changes in the rate of interest as a result, the level of income and employment can be affected. But it is confined to just short run. In case of long run there is always existing a natural rate of unemployment. It means that whenever through easy fiscal and monetary policies aggregate demand is increased, the level of unemployment will come down. But whenever aggregate demand is controlled, prices will be stabilized, but economy will experience the same level of unemployment which the economy faced before increase in aggregate demand.

There are also other well acceptable definitions in the literature such as The Radcliff Definition and The Gurley –Shaw (1960) Definition. The former is actually the outcome of the committees set up to work on the Money system. The report of the committee defined money as notes plus bank deposits. This includes only those assets that are

commonly used as a medium of exchange. The bank deposits included demand and time deposits. Even though we can use other things as money, their convertibility requires extra cost. There is a quite difference from Radcliff. They regard a substantial volume of liquid assets held by financial intermediaries and the liabilities of non-bank financial intermediaries as close substitutes for money. NBFIs do not perform the functions of bank but rather intermediates.

Evolution of Money

Money dates back several centuries in the era of the Indo-European civilization.

The word “money” is derived from the Latin word “Moneta” which was the surname of the Roman Goddess of Juno in whose temple at Rome, money was coined. The origin of money is seen in ancient times. Even the primitive era man had some sort of money. The type of money in every age depended on the nature of its livelihood, the progress of human civilization at different times and places.

A. Barter System

At the beginning, there was no money. Before the advent of money, the primitive economy was engaged in exchange and trade but more directly without any medium of exchange. This is known as the Barter system. People engaged in barter, the exchange of merchandise for merchandise, without value equivalence.

Difficulties of the Barter System

The barter system as a method of exchange has the following disadvantages:

Lack of Double Coincidence of Wants. For an efficient functioning of the barter system, double coincidence of wants was required on the part of those who wanted to exchange goods or services. To be successful, the barter system involved multilateral transactions which are not possible practically. Consequently, if the double coincidence of wants is not matched exactly, no trade is possible under barter. Thus, a barter system is time-consuming and was a great hindrance to the development and expansion of trade.

Lack of a Common Measure of Value. Another difficulty under the barter system was the lack of a common unit in which the value of goods and services should be measured.

Indivisibility of Certain Goods. The barter system was based on the exchange of goods with other goods. It was difficult to fix exchange rates for certain goods which were indivisible. Such indivisible goods pose a real problem under barter trade.

Difficulty in Storing Value. Under the barter system it was difficult to store value. If someone wanted to save real capital over a long period, he/she would be faced with the difficulty that during the period of storage, the commodity may become obsolete or deteriorate in value.

Difficulty in Making Deferred Payments. In a barter economy, it was difficult to make future payments. As payments were made in goods and services, debt contracts were not possible due to disagreements on the part of the two parties.

Lack of Specialization. Another difficulty of the barter system was that it was associated with a production system where each person was a jack-of-all -trades. In other words, a high degree of specialization was difficult to achieve under the barter system. Specialization and interdependence in production was only possible in an expanded market system based on the money economy. In this case no economic progress is possible in a barter economy due to lack of specialization.

B. Commodity Money

Under commodity money, many goods served as money, however the nature of goods varied from time to time and place to place for example agricultural goods, birds, slaves and animals etc. Some commodities, for their utility, came to be more sought than others are. To facilitate the exchange of goods, the commodity money also lost its popularity. This was due to lack of storability, divisibility, durability, transportability, homogeneity, general acceptability.

C. Metal

The commodity money due to the above drawbacks was replaced by metallic money. As metals were available from early times and were durable, portable, and easily divisible therefore it got rapid popularity. This was the era of un-coined metals wherein gold, silver, copper and other metals were used as money. The popularity of metallic money is due to lack of homogeneity, scarcity, to secure metals etc.

For its advantages, as the possibility of treasuring, divisibility, easy of transportation and beauty, metal became the main standard of value. It was exchanged under different forms. At the beginning, metal was used in its natural state, and later under the form of ingots and, still, transformed into objects, from rings to bracelets.

Minting of gold and silver coins was common for many centuries, and pieces were guaranteed by their intrinsic value, that is to say, by the trade value of the metal used in their production. Then, a coin made with twenty grams of gold was exchanged for goods of even value.

For many centuries, countries minted their most highly valued coins in gold, using silver and copper for lesser value coins. This system was kept up to the end of the last century, when cupronickel, and later other metallic alloys, became used, and coins came to circulate for their extrinsic value, that is to say, for their face value, which is independent from their metal content.

With the appearance of paper money, minting of metal coins was restricted to lower values, necessary as change. In this new role, durability became the most requested quality for coins. Large quantities of modern alloys appeared, produced to support the high circulation of change money.

To make the process of exchange easier, the concept of standard coinage was adopted. Government took control over all the coins. Coins were stamped with a logo, with uniform weight and the value was guaranteed. These coins were standard as both their face and intrinsic (value in themselves) were equal. Standardized coinage was unable to catch the

minds due to too much time in extraction of metals from mines, scarcity of metals and mobility

D Paper Money

The emergence of paper money is a significant milestone in the evolution of money.

With time, in the same form it happened with coins, the government came to conduct the issue of notes, controlling counterfeits and securing the power to pay.

Currently, all countries have their central bank in charge of issuing coins and notes.

Although today the circular form is used in almost the whole world, there had been oval, square, polygonal, and other shapes for coins. They were also minted in different non-metallic materials, such as wood, leather and even porcelain.

E. Monetary System

The set of coins and bank notes used by a country form its monetary system. The system is regulated by appropriate legislation and organized from a monetary unit, its base value.

Currently almost all countries use a monetary system of centesimal basis, in which the coinage dividing the unit represents one hundredth of its value.

F. Near Money: Cheques

As coins and notes ceased to be convertible into precious metal, money became more dematerialized and assumed abstract forms.

One of these forms is the cheque that, for simplicity of use and security offered, is being adopted by an increasing number of people in their day-by-day activities.

The next stage in the evolution of money has been the use of bills of exchange, treasury bills, bonds, debentures, savings certificates, etc. They are known as “near money.” They are close substitutes for money and are liquid assets. Thus, in the final stage of its evolution money has become intangible. Its ownership is now transferable simply by book entry.

G. Electronic Money

Until now it is the last stage of evolution of money, this is the age of computer, now-a-days people avoid using cash and even cheques in their financial matters. E-money is the form of money that exists in electronic form. All kinds of debt cards, credit cards, ATM cards and smart cards are the examples of electronic money. Electronic money is not legal tender money.

Other forms of e-money that have emerged in recent times are money are mobile money and digital currency.

Mobile money is an electronic wallet service or a movement of value that is made from a mobile wallet, accrues to a mobile wallet, and/or is initiated using a mobile phone.

Digital currency (digital money, electronic money or electronic currency) is a balance or a record stored in a distributed database on the Internet, in an electronic computer database, within digital files or within a stored-value card.[1] Examples of digital currencies include cryptocurrencies, virtual currencies, central bank digital currencies and e-Cash.

Digital currencies exhibit properties similar to other currencies, but do not have a physical form of banknotes and coins. Not having a physical form, they allow for nearly instantaneous transactions. Usually not issued by a governmental body, virtual currencies are not considered a legal tender and they enable ownership transfer across governmental borders.

There are two major forms of digital currency.

Virtual currency is digital currency that is used within a specific community. Cryptocurrency, on the other hand, is digital currency that does have real world value, like Bitcoin. This type of digital currency is based on mathematical algorithms with tokens being transferred electronically over the internet via peer-to-peer networking.

A benefit to cryptocurrency is that it is not tied into the economy of any one country. This form is decentralized and does not rely on any one regulatory agency. This means that if the economy of one country crashes, your digital currency will remain the same.

With no regulatory agencies to go through, cryptocurrency makes it easier to conduct international transactions. It can also be exchanged for any type of physical currency. And it is completely private. Though transactions are digitally confirmed, they are anonymous. Personal details are never attached to your transactions, so there is no money trail as there is with some physical currency.

3.3 Characteristics of money

Money has the following qualities which include:

1. Acceptable: Money is acceptable to all economic agencies in the country, both individuals and businesses, in exchange for goods and services. and in the settlement of debts and obligations.

If the money is acceptable, then sellers can sell their goods or services and people can buy what they need. Thereby making it easier for businesses to process transactions. Societies accept money because it has value. Countries nowadays accept cheques to conduct business transactions.

2. Divisible: Money is divisible means that money can be divided into small units and exchanged for goods and services. Divisibility is a crucial feature of money as it enables people to store value in silver and gold. Since money is divisible, it can be used to purchase all sorts of goods of different values.

3. Portable: Money needs to be easily transported and exchanged for other currencies. Money needs to be convenient to carry to facilitate transfer to other people during transactions.

Portability also means consumers can effortlessly carry money with them to use for goods transactions without must labor to transport them from one place to another at great expense.

4. Scarce: The more money people possess, the less valuable it becomes. In other words, money only becomes valuable when there is limited supply. The money should be unique, not something easy to find anywhere. Money must be scarce enough to be of some value, but not so scarce that it is not available. The scarcity of money can be regulated by curbing the amount of money in circulation.

5. Stable: Money is stable means that it must have the same value over a long period of time and must therefore remain stable. Stability is arguably the most significant characteristic of good money. If the value of money continues to change, it will lose its function as a measure of value and a standard for deferral payment. Stability makes it easier for people to exchange goods or services at reasonable prices.

6. Durable: The money must be strong enough to keep its usefulness in future exchanges and to be reused several times. For this reason, high-quality papers are used for printing paper money while precious metals are used for making coins. Longevity is critical for money to function as a medium of exchange and as a store of value.

3.4 The Role of Money in Macroeconomy

Money plays a vital role in macroeconomic management. It is crucial for growth and development. Money and for that matter finance is said to be a lubricant that oils the engine of economic growth; too little of it inside the engine will slow the pace of growth; too much of it will have the same effect. Money has implication for inflation, interest rate, exchange rate and economic growth and so if it is not properly controlled the management of these key macroeconomic variables will be a herculean task.

Fundamentally, there are 2 main forms in which the role of money can be classified- Static role and Dynamic role.

Static role: This role emerges from the traditional functions of money, which we have discussed previously.

Dynamic role: In its dynamic role, Money plays an important part in the lives of people and in the economic system.

a) Role of money to the consumer. It makes the consumer sovereign because the consumer has the power to choose. It also ensures effective demand. It brings about postponement of consumption. The consumer's income is in the form of money.

b) To the producer. It helps in calculating revenue, cost, and profit. It also aids in planning, forecasting and budgeting. It brought about specialization and division of labour and how much to pay each skills according to the marginal product (MP).

c) It brought about capital formation by transferring saving into investment. Money has made it possible for people to save usually for a long time and earn interest on their savings. Investment is also linked closely with the growth of the economy. Increasing investment increases the income base of the economy just because money goes around in the economy.

d) As an index of economic growth, National income, income per capita and GDP are all measured in terms of money. When the value of money falls, prices increase, and this may arise from too much money in the economy. Money is the index of an economy. If the value of money increases, it means the economy is getting well the general price levels.

e) It has helped in solving the central problems in economic system- what to produce, how to produce and to whom to produce. When the producer knows the MC, supply which is positively linked with prices (money) gives incentive to the producer to produce where the prices are high

$(P > MC)$.

f) Facilitates the collection of taxes and subsidies as well as fostering income distribution.

It facilitates exchange of goods and services and helps in carrying on trade smoothly. The present highly complicated economic system will not exist without money.

g) Money helps in maximizing consumers' satisfaction and producers' profit. It helps and promotes saving.

Defects of Money

The classical regard money as a veil or wrapper without performing any function. It is simply a tool of convenience to facilitate the exchange of goods and services, but it is not a determinant of the quantities produced. It does not bring any increase in output. Here are some of the defects of money.

1. Money brings about instability in the value of money. E.g., excess supply of money wouldn't be too much of importance to the economy. Too much of it reduces its value.

When the value of money falls, it means the general price level of the economy increases. This is what is called inflation. When inflation increases, money is less effective to perform its function as a store of value. Investment also falls because inflation distorts the price level. An investor will hold on with the investment because of the instable nature of the value of money.

The real value of goods and services might be falling because of inflation. If investors are uncertain about the economy and the price level, they will not invest. These brings about unequal distribution of income. Inflation or fall in the value of money causes direct and immediate damage to creditors and consumers. On the contrary deflation or rise in the value of money brings down the level of output, employment and income. If prices fall, production also falls (depression). The effect of it is laying off some workers who lose their labour income, employment rate increases, effective demand falls and price also falls. However, production actually increases in the stable economy, but the two extreme ends (inflation and deflation) are not good for the economy.

2. Money spreads monopoly.

Too much money leads to concentrating of capital in the hands of few capitalists who practice monopoly and exploits both consumers and workers.

3. Wastage of resources

Because money is the basis of credit, too much credit to the individuals who might give to a productive sector will create over capitalization, over production and this wastes output in the system. If the individual decides not to give it to the production sector but to the

unproductive sector, it is wastage of resources. Especially, where there is political patronage without easily assessing the use of money.

4. Black Money

Money being the store of value usually causes people to hoard it. This happens when people conceal money in order to evade tax. This works through money laundry where money does not perform any activity. It creates an underground economy or black marketing where tax evasion is rife. When you conceal money and refuse to pay tax on that money for a long time, it creates black money. Transferring the black money is called money laundering and this leads to underground or parallel economy.

5. Money creates a class economy which brings about conflict and distinguishes the rich from the poor.

6. Cyclical fluctuation in money brings about over production where the economic activities increase. This increases demand.

4.0 Self-assessment exercise

1. Define money from a functional perspective.
2. Evaluate the theoretical definitions of money
3. Examine the characteristics of money.
4. In its dynamic role, Money plays an important part in the lives of people and in the economic system. Discuss.
5. Money is not without defects. Discuss.

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