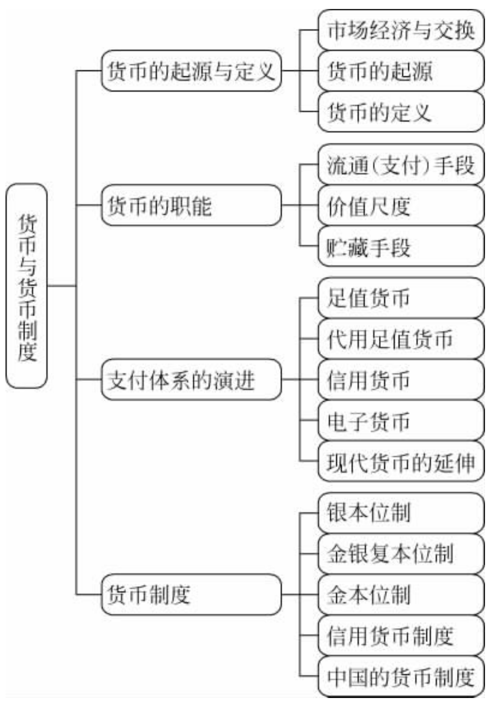
Chapter 1

Money and Monetary System

Structure of Chapter 1



Learning Objectives

1. To learn the origin and definition of money.
2. To understand how the existence of money facilitates the development of an economy.
3. To understand the functions of money.
4. To grasp the evolution of the payment system.
5. To learn about monetary system, including present China's monetary system.

Warming-up Listening

扫描二维码即可开始听力练习。

Directions: Listen to the dialogue carefully and choose the best answer to each question you hear after the dialogue.

1. A. U.S. dollar, pound sterling and Hong Kong dollar.
   B. U.S. dollar, pound sterling and Japanese yen.
   C. Hong Kong dollar, pound sterling and Japanese yen.
   D. U.S. dollar, pound sterling and Deutsche Mark.
2. A. It stands for the European Currency Unit.
   B. It stands for the European Currency Union.
   C. It stands for English Currency Union.
   D. It stands for England Currency Unit.
3. A. 11 B. 13 C. 15 D. 17
4. A. January 1, 1999 B. July 1, 1999
   C. January 1, 2002 D. July 1, 2002
5. A. 11 B. 13 C. 14 D. 15

Pre-reading Discussion

1. Do you want as much money as you can get?
2. Compare money with wealth and income.
3. Imagine what would happen if 10,000 commodities can be produced in a society without money.

Text

1.1 The Origin and Definition of Money

1.1.1 Market Economy and Exchange Activities

The emergence of money is closely linked to the development of exchange system, and market economy is in fact an economy of exchange. So the study of money should be based on the analysis of **market economy**.

Historically, the **division of labor** is prerequisite for the emergence of the market economy. It is because of the natural differences in each person's talent, character and hobby that division of labor occurred. These differences formed each person's feature and determined what one could do, produce or what kind of services one could provide. In the course of social development, people were always not content with the present conditions and often hoped to gain most at the lowest cost, which promoted the social development. So people found in the long time production that they could become most satisfied and the social efficiency could be the largest if people with their own specialty engaged in what fitted them most and exchanged with others the products and services they produced. So specialization of labor first emerged, the foundation of social exchange was laid and the exchange system occurred.

1.1.2 The Origin of Money

Money appeared after the exchange system. That's to say there would be no money without the exchange system. There is no money because of the lack of exchange both in the economy of self-sufficiency and in the communist economy. There are two types of exchange in the history: one is **barter**, in which goods or services are exchanged for other goods or services. It's a kind of exchange without money and may be also called direct exchange. In a simple and small society, exchange was a kind of occasional activities and did not occur very often, so the exchange then didn't need money. As the economy developed, however, greater specialization in the division of labor increased the difficulty of finding goods that each trader wanted to exchange. Barter depends on a **double coincidence of wants**, which occurred only when a trader who had goods or services wanted to find someone else who had goods or services he wanted and who also wanted goods or services he had to offer. What's more, as the number of goods produced in the economy increased, barter became more cumbersome, time-consuming and it also increased the cost and lowered the efficiency. The greater the degree of specialization in the economy, the more difficult it became to discover a double coincidence of wants. So emerged indirect exchange, that is exchange of goods and services with money. Through repeated exchange, traders might have found that there were certain goods for which there was always a ready market and which people would like to accept in exchange. If a trader could not find a desired match or did not need goods for immediate consumption, some goods with a ready market could be accepted instead. So traders began to accept certain goods not for immediate consumption, but because these goods would be acceptable to others and therefore could be traded later. For example, salt might become accepted because traders knew salt was always in demand. As one commodity became generally acceptable in return for all other goods, that commodity began to function as money. So money appeared. The process of the origin of money is described in Figure 1-1.

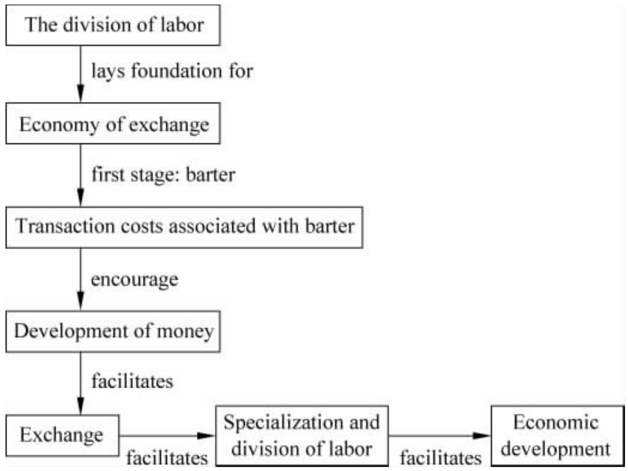


Figure 1-1 The Origin of Money

1.1.3 The Definition of Money

Marx defines money as a special commodity that permanently serves as **general equivalent**. There are prerequisites for Marx's definition of money in three aspects: first, money is a commodity with value and value in use. Only in this case can money play various functions; second, money has the ability to display value of goods with its own value in use, i.e., money can serve as a general equivalent; third, money itself is a commodity with value and value in use representing general purchasing power, so money becomes generally accepted.

Obviously, Marx's theory is based on the system of metallic money. When discussing paper money circulation, Marx explains that paper money is the representative of metallic money and is a symbol of value and functions as money indirectly. But in modern society, money in circulation in most countries has no relation with precious metal, such as gold and silver, so Marx's theory cannot explain this phenomenon wholly.

Western economists define money (or, equivalently, the money supply) as anything that is generally accepted in payment for goods or services or in the repayment of debts. Currency, which is bank notes and coins, clearly fits this definition and is one type of money. However, to define money merely as currency is much too narrow today because besides currency, payments can also be made by the transfer of deposit balance via checks or electronic transfer system.

CHECKPOINT

Do we still need money if there is no exchange activity in the economy? Why or why not?

There are two types of exchange in the history: direct exchange (barter) and indirect exchange (through money). Money appeared after the exchange system. That's to say there would be no money without the exchange system.

1.2 The Function of Money

1.2.1 Medium of Exchange or Means of Payments

Money serves as a medium of exchange, circulating medium, or means of payment when it is passed from hand to hand in exchange for goods and services or in payment of debts. Money as a medium of exchange effectively eliminates the requirement of double coincidence of wants and overcomes the difficulty of barter. The characteristic mode of trade in our economy is the sale of goods for money. The money is accepted not for its own sale but because it can be used to acquire other goods and services. Since money is generally acceptable, it represents "**generalized purchasing power**", thereby affording its possessor wide freedom of choice. Money is therefore essential in an economy: it is a lubricant that allows the economy to run more smoothly by lowering **transaction costs**, thereby encouraging specialization and the division of labor.

1.2.2 Unit of Account or Standard of Value

Just as we measure weight in terms of ponds or distance in terms of miles, we measure the value of goods and services in terms of money. Money is the unit of account that we use to quote prices and record debts. We could also refer to it as a standard of value. Using money as a yardstick and quoting all prices in terms of unit of money certainly make it more convenient for trading transaction.

1.2.3 Store of Value

A store of value is used to save purchasing power from the time when income is received until the time it is spent. That means money is used to defer the time of exchange of goods and services.

The effectiveness of money as a store of value depends on two factors: one is the easiness that people can get goods with money when in need of them; the other is the price level because the value of money is fixed in terms of the price level. Money can function as store of value only when its value is stable as an asset.

CHECKPOINT

Among the functions of money, which one is the most fundamental? Why?

Money is anything that functions as a means of payment (medium of exchange), a unit of account, and a store of value. The unique and primary function of money is that it serves as a generally acceptable means of payment. By necessity, money will also function as a store of value, and its unit of measurement will naturally become the unit of account and measure of value.

1.3 The Evolution of Payment System

1.3.1 Full-bodied or Commodity Money

A commodity that becomes a medium of exchange is called a commodity money or money in kind, when its value in the non-money use is equal to its value as money. It is the oldest money, mainly used in a barter economy.

Shortcomings: some of them were large in size and indivisible; others were not stable in value, which hinders them from functioning as standard of value and store of value.

In practice, over the past 4,000 years, the predominant commodity money has been precious metals, mostly silver and gold, also called full-bodied money.

1.3.2 Representative Full-bodied Money

Societies have become more affluent and more dependent on exchange with increasing specialization and division of labor. As the trends accelerated during the industrial revolution, which began in the eighteenth century, the exclusive use of coins as media of exchange became increasingly inconvenient. The weight and size of coins made them cumbersome to transport, store, and use in transactions involving large amount of money. For convenience, coins were supplemented with paper currencies, initially backed 100 percent by valuable metals. Paper money that attests to an ownership claim on a commodity such as gold or silver is referred to as representative full-bodied money.

The general acceptance of paper money as a means of exchange, with no intention of redeeming it for the precious metals behind it, made it possible for the issuance of paper money with no such backing. What's more, the downfall of the gold standard or the silver standard in western countries in the 1930s because of economic and financial crises stopped the exchange of paper money for metals. The major western countries had to break away from the metal standard, and paper money could be converted into gold no more. Hence representative money exited circulation and credit money emerged.

1.3.3 Credit or Fiat Money

Credit money is a kind of credit certificate that serves as means of exchange and means of payment in circulation and does not consist of or represent a specific valuable commodity.

Credit money is created through credit process. The value of credit money depends on its general acceptance based on the credit of its issuer. Credit money has two features: first, it has no relation with precious metals; second, it is based on the credit of national governments and banks.

It does not mean that modern credit money has not any reserves to back its issuance. In fact, most countries in the world that adopt the system of credit money have a fairly big amount of reserves, such as gold, foreign exchange, etc. for issuance of credit money.

From time to time, money issued was based only on the general credit of a government and on the provision that such money was **legal tender**. Since this money is proclaimed to be money by law or a decree known as a fiat, it is sometimes called fiat money.

1.3.4 Electronic Money

It refers to depository money that is stored and processed through computer system or electronic payment system.

Electronic money takes many different forms. One is various stored value cards that contain a magnetic strip recording currency value of the card, such as credit cards, smart cards and cards used for taking buses or subways. Another is funds held in online accounts that can be transferred over the internet through electronic funds transfer system (EFTS).

Advantages: It's faster and more convenient than traditional one and has greatly enhanced the efficiency of payment mechanism in economy.

Disadvantages: firstly, security and privacy are two obvious issues; secondly, electronic money is not legal tender, not all merchants accept all forms of electronic money; finally, the counterparty's credibility needn't verifying when using cash, but this is not the case in using electronic money.

Anyhow electronic money is still credit money.

1.3.5 The Extension of Modern Money

In an economy various kinds of money exist, not only currencies. Money supply refers to the collection of all kinds of money in an economy.

Each country employs fairly standard measures of money that include the volume of currencies in circulation and the volume of deposits at any point of time.

Typically, several measures of money are reported, differentiated by the types of deposits (and close substitutes for including currencies and demand deposits used for everyday expenditures). It is liquidity of money that is the most helpful in dividing our measures of the money supply.

1. The general measures of money supply

1) The narrow measure of money supply: M_0 and M_1

M_0 is the currency or cash in circulation including bank notes and coins.

M_1 comprises those assets which are themselves acceptable in exchange and normally held with the intention of spending them in the immediate future. $M_1 = M_0 + D_d$, M_1 measures transaction balances, and D_d stands for demand deposits.

2) The broader measure of money supply: M_2 and M_3

If one is inclined to emphasize the store-of-value function of money rather than the medium-of-exchange function, broader measures are appropriate.

$$M_2 = M_1 + D_s + D_t$$

It includes all of M_1 plus savings deposits and time deposits at banks. They are highly liquid financial assets. Most components of M_2 are assets that provide their owners with a higher rate of return than M_1 components would.

$M_3 = M_2$ + short-term government securities + commercial papers + life insurance policies

M_3 here is the broadest measure of money that is available to the public. It contains a variety of liquid assets based on M_2, all of which represent stored purchasing power of their owners and are thus potentially related to economic activities.

2. The measure of money supply in China

At present, money is measured in a more concise way according to the bank survey of the PBC:

M_0 = currency in circulation including bank notes and coins

$M_1 = M_0$ + demand deposit

$M_2 = M_1$ + quasi-money

Quasi-money includes savings deposits from urban and rural areas, time deposits and other deposits.

Although money is defined as M_1, M_2, M_3 worldwide, the IMF only calls M_1 money, the other part in M_2 beyond M_1 quasi-money or near money.

The reason why so many measures of money are defined is that economists have different opinions on which measure is most consistently related to spending and other economic activities and that central banks can monitor the operations of macro-economy and conduct monetary policies.

Since the middle-1970s when the quantity of money supply instead of interest rates is seen as intermediate policy target in some countries, the measuring of different levels of money supply has had special meaning for policy operation, for example, when monetary authorities discuss how to control the target of money supply, they should be clear about controlling which level of money supply and the difference between this level and other levels of money supply. What is more, they should answer such a question on to what extent the control of money supply can work. Otherwise, the formulation of policy would be out of the question.

CHECKPOINT

Rank the following assets in terms of their liquidity, from least to most liquid: cash, savings deposits, a checkable deposit. Explain your rank order.

1) Savings deposits—Although new innovations have made it possible to use savings

deposits as means of payment, in many cases, savings deposits still need to be converted into currencies or checkable deposits before being accepted as a means of payment.

2) Checkable deposits—Checkable deposits are generally accepted as a means of payment in their original state.

3) Cash—Accepted everywhere as a means of payment, it does not have to be converted to a means of payment.

1.4 Monetary System

Monetary system is the structure, system and organization in money circulation set by law of a country. According to the money materials after which the monetary system is named, the monetary system in most countries have passed the stages of the silver system, the bimetallic system, the gold system and the credit money system. The relationship between different monetary systems may be substitutionary, or two monetary systems may exist concurrently for some time.

1.4.1 The Silver Standard (the 16th century)

Under the silver system, the standard money was minted with silver. Silver coins had unlimited power of legal tender, and could be minted, exported and imported freely. But as an independent monetary system, the silver system existed neither widely nor for a long time. With the development of productivity, the defects of the silver system, i.e., the value of silver was low and silver as money material was in short supply, became more and more apparent. The silver system could be suited to the economic development no more. So many countries gave up the silver system and adopted the bimetallic standard or the gold standard directly one after another.

1.4.2 The Bimetallic Standard (the 16th—18th centuries)

The bimetallic standard was the typical monetary system during the early period of development of the capitalism. Under this system, both gold and silver were recognized by law as monetary metals.

Gresham's Law that bad money drove out good money acted. According to this law, the money called bad money was abundant in the market when its nominal value was higher than its real value; the money called good money disappeared from circulation, but stored, melted or exported when its real value was higher than its nominal value. The reason is that money is monopolistic and exclusive, but government decrees stipulate coexistence of gold coins and silver coins, which is contradictory to the money's nature. So **Gresham's Law** acted. The bimetallic standard was fit no more for the economic development, then it was replaced by the gold standard internationally.

1.4.3 The Gold Standard (1813—1914 the beginning of World War Ⅰ)

From the 19th century, the U.K. took the lead in transforming its monetary system from the bimetallic standard to the gold standard which was a system based on gold. The U.S. followed suit in 1830s, then did other major capitalist countries in the 1870s. From then on, the world had entered an age of the gold standard system. The gold standard had three forms which were the gold coin standard, the gold bullion standard and the gold exchange standard.

1. The features of the gold coin standard

1) Gold coins circulated freely and had unlimited power of legal tender. Gold coins could be minted and melted freely.

2) Gold and gold coins could be imported or exported freely (this guaranteed the stable ratio of gold coins to foreign currencies).

3) Bank notes could be converted into gold or gold coins freely.

During the transition of monetary system from the bimetallic standard to the gold standard, the issuance system of bank notes (the representative full-bodied money fully backed by precious metals) was increasingly perfect. Compared with the previous monetary standards, the gold standard was more stable and was regarded as an ideal one. When World War Ⅰ broke out, all countries stopped the conversion of bank notes into gold. Thus the gold coin standard collapsed.

2. The gold bullion standard and the gold exchange standard

After World War Ⅰ, no countries were able to restore the gold coin standard. The gold bullion standard and the gold exchange standard appeared instead. Some economists call them imperfect gold standards.

The basic features of gold bullion were: bank notes that had certain gold content set by law circulated; only a certain amount of bank notes could be converted into gold. The central bank could keep only a certain percentage of gold as reserves for issuance of bank notes. So the monetary function of gold began to decline.

The basic features of gold exchange standard were: the bank notes of the country under the gold exchange standard system were in circulation and fixed relative to the currency of a country that adopted the gold coin system or the gold bullion system. The country under the gold exchange system kept gold and foreign exchange as reserves for issuance of its bank notes which only could be changed into foreign currencies that could be converted into gold. This was a system that was indirectly related to gold through foreign exchanges.

Even these two standards didn't last long, after the 1930s' Great Depression, the gold