新陆标

"金融专业"英语系列教材

货币银行学

MONEY AND BANKING

(Second edition) (第2版)

徐进前 编著

•Money and Monetary Systems•Credit and Financial Instruments•
•Financial Markets•Interest Rates•Financial Institutions•
•Commercial Banks and Their Businesses•The Central Bank•
•Money Demand and Money Supply•Inflation and Deflation•
•Monetary Policy•Finance and Economic Development•

北京语言大学出版社
BEIJING LANGUAGE AND CULTURE UNIVERSITY PRESS

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前 言

“金融专业”英语系列教材2005年首版推出的四本书包括《货币银行学》（英文版）、《投资银行学》（英文版）、《国际金融：理论与实务》（英文版）和《国际金融》（含英文注释），适用于高校金融专业以及英语专业辅修金融方向的学生使用。本系列教材自2005年首次出版以来，至今已经印刷了多次，受到了使用学校师生的一致好评。本系列教材从首版出版到现在近十年时间里，国内外金融领域都经历了巨大的变化，各种金融信息和数据也有了很大的更新，这在客观上为本系列教材的修订提出了新的要求。同时我们多方听取了使用教材的师生的意见和建议，也为了增强原教材的完整性、实用性和时效性，我们决定对这套教材进行一次全面修订。此次修订在保留原书基本框架的基础上，加入了近几年来国内外金融领域的最新动态，同时对相关领域前沿理论的发展也做了一些介绍。

在本系列教材的“第二版”中，我们重点做了如下修订：

1. 对“第一版”中发现的字词疏漏进行了校订。
2. 更新了首版教材中的数据、表格、图片、文字资料等内容，提高了教材的时效性。
3. 增补了参考书目。
4. 简要勾勒出每章的专业术语和关键词等内容。改版后的教材对每章节出现的专业术语和关键词汇等进行了加粗或设置为斜体字的格式处理。这不仅提高了读者对关键内容的敏感度，而且也便于读者查找、阅读和整理相关的基本概念和基本原理。
5. 统一和更正了专业术语。为了辅助读者更好地学习基本概念，改版后的教材在每单元之后或全书的结尾处以附录的形式增补了中英文对照术语表。
6. 完善了内容设计，删除或更改了部分不太合理的内容，调整了部分章节

的顺序。

7. 为了便于读者学习和讨论，改版后的教材除根据内容调整了一些习题的章节位置外，还适当增补了部分习题。

8. 为了老师们教学需要，我们在“第二版”中提供了新的PPT教学课件，同时对原有的PPT教学课件进行了更新，供老师们在网上免费下载。下载方式：登录我社网站www.blcup.com，在搜索处输入本书名，在“相关资源”处下载。

本套教材的修订得到了原来作者团队成员一如既往的倾力支持和积极参与；此外，还有部分来自教学第一线的青年教师也参与到教材的修订工作中来。其中，刘克教授负责《国际金融：理论与实务（第二版）》（英文版）的修订工作；徐进前教授负责《货币银行学（第二版）》（英文版）一书的修订工作；李莉副教授负责《国际金融（第二版）》（含英文注释）的修订工作；李京晔副教授负责《投资银行学（第二版）》（英文版）的修订工作。其他成员如王新红副教授、勾东宁副教授等从专业教学的角度对本套教材的修订提出了宝贵的建议。

目前，本系列教材仍处于不断探索之中，书中难免有缺陷或错误之处，欢迎广大读者和同仁提出宝贵的意见和批评。最后，我们要特别感谢北京语言大学出版社的责任编辑在教材再版中的辛勤付出。

编　者

2013年6月1日

Preface

This book has been compiled according to the requirement of being international, informational, and strong in basics called for by the modern higher education. To compile such a textbook in English is an innovation in one way or another and reflects such a trend, i.e. the science of finance must keep pace with the times.

After China's WTO accession we are faced with more and more new concepts, new knowledge, new challenges and new opportunities. The teaching of finance involves even richer contents. As we are in the time of the rapid development of financial information and knowledge, the textbooks compiled should surely reflect this new orientation. According to the arrangement of the compiling committee of this finance textbook series, my duty is to work on this textbook for the undergraduates of finance and those who are interested in studying finance in English. This book embraces the development of both the financial theories and practices, with particular emphasis on the basic theories, concepts and skills of finance. I hope that readers will form a basic and comprehensive structure of finance in their professional study after reading this book. In a word, I have tried my best to combine theory with applicability when compiling this book. I also hope my effort will be appreciated by readers.

This textbook is composed of two parts: the first part includes the first six chapters, mainly dealing with the basic principles of money, credit and financial instruments, banking and financial markets; the second part includes the last five chapters, laying emphasis on central banks and their responsibilities of implementing monetary policy and financial supervision, money supply and money demand, money equilibrium, and the effects of finance on economic development.

To help readers in their comprehension and critical analysis of the complex topics in the money and banking course, I have added some notes on the difficult points and some review questions at the end of each chapter.

Nevertheless, I feel there is still plentiful room for further improvement in the book. Any criticism from users is highly welcomed.

Xu Jinqian

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Chapter One

Money and Monetary Systems

Money is everywhere in modern society. All the economic activities of human beings are linked to money. Money is so important to us just like blood in a body. What is money? How did it occur and develop? What are the functions of money? What are the features of various types of monetary systems? All these will be explored in Chapter One.

1 Money and Economy

1.1 Market economy and exchange activities

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

Historically, the division of labor was a prerequisite for the emergence of the market economy. It was because of the natural differences in each person's talent, character and hobby that the 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 not always content with the present conditions and often hoped to gain the most at the lowest cost, which promoted social development. People found, in the long time of production and labor, 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.

Money appeared after the exchange system occured. That is to say there would be no money without the exchange system. There are two types of exchange in the history: one is **barter**[1], in which goods and services are exchanged for other goods and services. It is a kind of exchange without money and may also be called *direct exchange*. The other is the *indirect exchange*, which is the exchange of goods and services with money. In a simple and small society, exchange was a kind of occasional activity and did not occur very often, hence no money was needed in the exchange then. As 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**[2], which occurred only when traders who had goods or services wanted to find someone who had the goods or services they wanted and who also wanted the goods or services they offered. What is 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. Through repeated exchange, traders may 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. Then traders began to accept certain goods not for immediate consumption, but because these goods would be acceptable to others and could be traded later. For example, salt might become accepted because traders knew salt was always in demand. As one kind of goods became generally acceptable in return for all other goods, it began to function as a means of exchange. So indirect exchange emerged, and money appeared.

1.2 Importance of money of the market economy

Money reduces transaction cost and promotes the efficient growth of the market economy. The emergence of money overcomes the difficulty of barter and makes exchange proceed smoothly and with the highest efficiency. This is because money is a special commodity that has derived from commodities during the long period of barter and has inevitably been accepted by people. With the emergence of money the limit of "double coincidence of wants" exists no more. In order to acquire what he or she needs, a trader can sell his or her goods in the market first and get money; meanwhile, after that the trader can purchase whatever he or she wants. Or if the trader does not want to purchase goods or services, he or she can keep the money until he or she needs to do so. Here money as a medium of exchange has increased the efficiency of exchange. As it is free from the limit of "double coincidence of wants", money helps traders save much time on finding trade partners and obtaining market information. Consequently more goods and services can be turned out with the time saved.

The emergence of money not only makes it possible to reduce transaction cost but also brings about the generalization of the purchasing power, thereby resulting in the provision of efficient means for market-based allocation of resources. The market economy is fundamentally a kind of economy in which resources are allocated on the market base. The allocation of resources on the market base is inseparable from the movement of money. As money serves as a means of exchange, what holders of commodities acquire is the general purchasing power—money—after they sell their own goods. Money is a special commodity accepted generally by people, so it represents the purchasing power of goods or services of any one. The holders of money have the freedom to purchase goods and services, which is very important to the market economy. Whether in the self-sufficient economy or the barter economy or the totally planned economy, no one has the freedom to choose commodities. In the planned economy, not only the economic activities of businesses but also individual consumption are constrained by plans, and money is only a symbol in name in it and used within a certain scope strictly set. It is the planned quote that determines production and consumption. So money does not represent the general purchasing power, but a special or concrete purchasing power in the planned economy. In the market economy, the holding of money means the right of obtaining goods or services because of the general acceptability of money, and this is the main aspect of the essential features of the market-based economic system. Money-holding consumers can promote the reasonable distribution of social resources according to consumers' demand by purchasing goods or services they need. So the use of money becomes the necessary condition for the realization of reasonable allocation of resources in the market, which is also the necessary condition for the market economy to operate smoothly and reasonably. In this sense the market economy in essence is a kind of monetary economy, as money guarantees production, exchange, allocation and consumption of goods and services in an economy.

2 Functions of Money

As for the functions of money, economists have different viewpoints. It was Marx who had revealed the nature of money correctly. According to Marx's theory on money, the functions of money can be put in the order of importance as follows: *standard of value*, *means of exchange*, *means of payment*, *store of value* and *world money*. And the unification of standard of value and means of exchange is money. In Western economic theory, money has three functions: *medium of exchange* or *means of exchange*, *standard of value* or *unit of account*, and *store of value*.

2.1 Marx's exposition of functions of money

Marx's theory on money is based on the theory of labor value. According to Marx's theory, money is a kind of special commodity that serves as a **general equivalent**[3]. As a commodity, money has **value and value of use**[4], so it has the same nature as that of ordinary commodities. Otherwise it would have no foundation for exchange with other commodities. As a special commodity, money is different from other ordinary ones in two aspects: first, money can manifest the value of all other commodities; second, money can be used to exchange with all other commodities. Whoever else has money holds value and can become satisfied with what he or she needs. Therefore, the above nature of money decides the following functions of money.

2.1.1 Standard of value

When money displays and measures the value of other commodities, it functions as the standard of value. That is, money is used as a measuring yardstick to assess the value of goods and services in the economy. Just as we measure weight in terms of pounds or distance in terms of miles, we measure the values of goods and services in terms of money.

The reason why money can function as the standard of value is that money itself is a commodity and has value. Just like other commodities, money condenses the general labor of human beings. Money is the same as any commodity in essence and they can be compared with each other in quantity. So all other commodities can be measured by the special commodity—money that serves as a general equivalent and manifests their own value. Therefore, the commodity—money that serves as a general equivalent becomes the common standard of value that measures all other commodities. The value of any commodity is decided by the time of necessary labor in society condensed in the commodity. The time of necessary labor in society is the intrinsic standard of value of commodities, but it can not express itself. It can only be shown through money. As money functions as the standard of value, the form of the value of money is changed into the form of prices. Price is the expression of value of commodities in units of money. Only conceptual notion of money as the standard of value is needed, and that is to attach price tags to commodities.

In modern society each country or area adopts a certain unit of currency as the common standard to measure and express the value of goods. For example, Renminbi is the name of currency used in China, US dollar in the United States, and so on. Though the names of currencies in the countries of the world are different and the value they represent is also different, they all bear the same obligation, which is to measure the value of various goods and services in each country's monetary system. When a country has a certain currency as a standard of value, the exchanges between goods and services are much easier and more convenient because the prices of all the goods and services are expressed in the same currency unit. The producers can find out and compare the prices of their goods and services.

2.1.2 Means of exchange

In almost all market transactions money functions as a means of exchange when it is used to pay for goods and services. As mentioned above, in a primitive society, such as a self-sufficient economy, barter depends on a double coincidence of wants. But this double coincidence of wants is really hard to find because there are thousands of types of producers with their products. The introduction of money as a means of exchange solves the problem. A shoemaker can exchange with anyone who is willing to pay for his shoes. He can then go to any farmer and buy whatever food he needs with the money he has been paid. As a means of exchange money is generally accepted in the process of continuous purchase and sale of goods, which is called *goods circulation*.

In the exchange of goods, money, as a means of exchange, is not a conceptual one—a standard of value, but a physical one. The reason is that goods producers want their labor to be acknowledged by society and want to exchange their goods for money. Hence the money they get when they sell their goods should be an actual one. To a producer money in his hand is only an element in a flash and the money will be replaced by other goods soon. From the role as a means of exchange played by money, money in goods circulation can be replaced by the symbol of value, including paper money. If there is too much supply of symbol of value in circulation, money will depreciate and the price level will rise, which is an objective law.

2.1.3 Means of store

Money also functions as a means of store and is a repository of purchasing power over a long time. Money functions as a store of value when it exits from circulation and is kept and stored by people. It is because of the fact that money is a general equivalent and represents social wealth that money can function as a store of value. People store money and can change it into goods at any time. So money is a good means of store. If people want money to be an ideal, satisfying and stable means of store, the **purchasing power of money**[5] should be stable.

When storing value, money must be both an actual one and one with full value. The money stored has different forms at different stages of history. Under the gold standard system the money stored took the form of gold. With the development of social productivity the scale of capitalist production expanded. So the function of money as a store of value further advanced. The money stored then took two forms: one is the reserves as a means of purchase and payment; the other is the idle capital in the form of money, including the capital that was newly accumulated and had not been put into production. The former entered and exited from circulation continuously; the latter stayed out of circulation for a longer time and waited for a chance to enter the cycling and turning-over of capital. In this case the money stored was just like a tank of water reserve, and automatically adjusted money circulation and made the quantity of money in circulation meet the demand of goods circulation. When the demand for money in circulation increased, the money stored would enter circulation as a means of exchange; when the demand for money in circulation decreased, a certain part of money would exit circulation and became the money stored. In modern economy the function of money as a store of value takes a new form. Under the credit money standard people deposit their money in banks, which means deferment of the present purchasing power for individuals. The automatic function of money as a means of store in gold coins exists no more in the modern credit system.

Money is not unique as a means of store; any asset, be it money, stocks, bonds, land, houses, art, or jewelry, can be used to store wealth. Many such assets have advantages over money as a means of store of value: they often pay the owner a higher interest rate than money, experiencing price appreciation. The reason why people often hold money as a means of store of value instead of other more desirable assets is the **liquidity**[6] of money. Liquidity is highly desirable. Money is the most liquid asset of all because it is ready to be spent at a moment's notice. It does not have to be converted into anything else in order to make payment. That is to say, money is spendable at face value virtually anywhere at any time. But other assets involve various inconveniences, transaction costs, and risks when they are converted into money.

2.1.4 Means of payment

When it is universally accepted as a standard of value and means of exchange, money necessarily becomes a means of payment. Therefore, money is used in discharge of debts under the condition of deferred payment for purchase and sale of commodities. The function of means of payment of money arises from the exchange of goods on credit and is linked with commercial credit. Because the segregation in areas and seasons of production of goods leads to the time separation of the sale of goods from the accomplishment of value of goods, purchase and sale on credit emerge. Hence commercial credit is the prerequisite for the emergence of the function of means of payment.

As a means of payment money at the early stage was only used to discharge debts between producers. When the production of goods reached a certain level, money also functioned as a means of payment in repayment of credit, payment of taxes, interests, wages and other payment for labor.

2.1.5 World money

Money functions as world money when it strides across a national boundary and serves as a general equivalent in the world market, and functions as a general means of purchase and payment in the world. When money functions as the world money, it should be in its original appearance of gold or silver without any national mark. In fact this function of money was meaningful only under the gold standard. After the gold standard it is hard to find an international currency that can be mentioned in the same breath as gold and generally accepted. Here it should be pointed out that in the present Western society some national currencies under the new international monetary system, especially US dollar, can function as the world money to substitute precious metals under certain circumstances.

As a matter of fact the function of world money is not a single function of money. It is only the extension of the functions of money beyond a national boundary, thus it is used as a general means of payment, a general means of purchase or exchange, and manifestation of social wealth. As a general means of payment, the world money is used to discharge international debts and pay balance of international payment; as a general means of purchase or exchange, it is used to purchase foreign goods and services; as the manifestation of social wealth, it is used to transfer social wealth, such as capital flow, aids to foreign countries, and war indemnity. Among these three aspects the first is the most important.

2.2 Western theory on money and banking concerning functions of money

Western theory on money and banking concerning functions of money is similar to that of Marx's exposition. But the two have slight differences. Western theory on functions of money is as follows.

2.2.1 Medium of exchange

Western economists hold the view that medium of exchange is the primary function of money. But Marx regarded standard of value or unit of account as the primary function of money. This is because Marx based the theory of money on the theory of labor value and the function of money reflected the nature of money. As money is a special type of goods that functions as a general equivalent, the primary function of money is to manifest and measure the value of other goods. Western theory on money is based on the theory of utility and it emphasizes first the importance of exchange. Thus medium of exchange is regarded as the primary function of money.

Money as a medium of exchange effectively eliminates the requirement of double coincidence of wants and overcomes the difficulty of barter. Money also promotes production efficiency by allowing people to specialize in what they do best. Money is therefore essential in an economy: it is a lubricant that allows the economy to run more smoothly by lowering transaction costs of exchange, thereby encouraging specialization and division of labor. In history money first facilitated exchange, which made it possible for people to engage in what fit them most, and then there appeared division of labor in each trade which brought about a great growth of production. In the 19th century Western countries adopted the method of specialization and division of labor in their production on a large scale. As a result there was increasingly ample goods people could choose and price level dropped greatly. The impact of money on economy was enormous.

2.2.2 Unit of account

In a barter economy money does not perform the function of unit of account. In a barter economy not only is double coincidence of wants hard to find, but also it is difficult for two traders to agree upon an exchange ratio. For example, how many pounds of apples should be exchanged for a bag of wheat? When only two goods are traded, only one exchange ratio must be determined, but as the number of goods produced in the economy increases, the number of exchange ratios grows greatly. Negotiating the exchange ratios for goods exchange is complicated in a barter economy because there is no common measure of value. People have to determine and keep in mind numerous exchange ratios of goods. Here is a formula to calculate the number of exchange ratios:

$$\frac{N(N-1)}{2} = \frac{10(10-1)}{2} = \frac{90}{2} = 45$$

N is the number of goods traded, when there are ten goods, we need 45 exchange ratios in order to exchange one good for another; with 100 goods, we would need 4,950 exchange ratios; and with 1,000 goods, 499,500 exchange ratios. The counting of exchange ratios would be very time-consuming and cumbersome.

The introduction of money into the economy has solved the problem and the value of all goods is expressed in terms of unit of account, enabling people to quote the prices of wheat, apples and movies in terms of unit of money, say, *yuan*. Ratios of exchange of goods and services become prices of goods and services. The number of prices or ratios of exchange is reduced from $\frac{N(N-1)}{2}$ to $(N-1)$, now with 1,000 goods we only need 999 prices instead of 499,500 exchange ratios.

We can see that using money as a unit of account reduces transaction costs of exchange in an economy by reducing the number of prices that needs to be considered. The benefits of this function of money grow as the economy becomes more complex.

2.2.3 Store of value

A store of value is used to save purchasing power from the time when income is received until the time when it is spent. That means money is used to defer the time of exchange of goods and services. This function of money is useful because most of us do not want to spend our income immediately upon receiving it but rather to wait until we have the time or the desire to shop.

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. A doubling of all prices implies that the value of money has dropped by half; conversely, a halving of all prices implies that the value of money has doubled. In an inflation, when the price level is increasing rapidly, money does not serve the store-of-value function well because money loses value rapidly, the purchasing power of money declines and people will not be willing to hold their wealth in this form. So money can function as a store of value only when its value is stable as an asset.

The essential defects of Western monetary theories concerning functions of money as a store of value are that they can not reveal well the basic reason that money functions as a store of value. According to Marx's analysis of emergence of money and exposition of the functions of money, the root cause for money to function as a store of value is that money is the social representative of wealth and serves as a general equivalent, which is not comprehensible in Western monetary theories.

3 The Meaning and Types of Money

3.1 The meaning of money

Marx defines money as a special commodity that permanently serves as a general equivalent. There are prerequisites for Marx's definition of money in three aspects: first, money is a commodity with value and value of use, and only in this case can money play various functions; second, money has the ability to display value of goods with its own value of use, i.e. money can serve as a general equivalent; third, money itself is a commodity with value and value of use representing the general purchasing power, so money become generally accepted. Obviously Marx's theory is based on the system of metal money. When discussing paper money circulation, Marx explains that paper money is the representative of metal money and is a symbol of value and plays the functions of money indirectly. But in modern society money in circulation in most countries has no relation to precious metals, such as gold and silver, so Marx's theory cannot explain this phenomenon wholly.

Western economists define money as anything that is generally accepted in the payment for goods and services or in the repayment of debts. Currency, which is in forms of banknotes and coins, clearly fits this definition and is one type of money. When most people talk about "money" today, they are talking about currency. To define money merely as currency is too narrow today because practically, all payments are made not only by the exchange of currency but also by the transfer of deposit balance via checks or electronic transfer wire. So checks are also accepted as the payments for purchases and checking account deposits are considered money as well. Therefore, an even broader definition of money is often needed because other items such as savings deposits can in effect function as money if they can be quickly and easily converted into currency. This is also true with time deposits. They are all items that are "generally acceptable" in making payments.

3.2 Types of money

Since the primitive economy money changed from commodity money to metal money, from metal money to representative money, from representative money to credit money and finally electronic money, and the electronic funds transfer system (**EFTS**[7]). In the economic life the need for money is so strong that almost every society, except the most primitive one, invents it. The diversity of the forms of money that has been developed over the years takes a long time and is a gradual process. Since there is no absolute separation in time, various forms of money might coexist at the same time.

3.2.1 Commodity money or money in kind

A commodity that becomes a medium of exchange is called a **commodity money or money in kind**[8] when its value in the non-money use is equal to its value as money. The commodity

