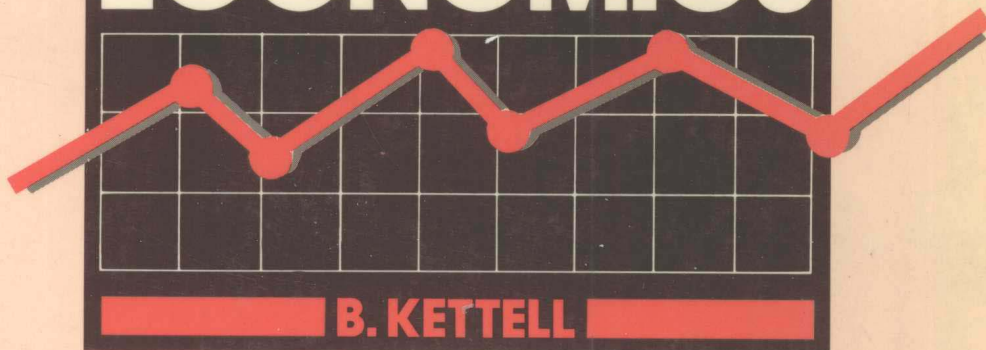


**BANKING & FINANCE SERIES**

# **MONETARY ECONOMICS**



**GRAHAM & TROTMAN**

# Banking and Finance Series

## Monetary Economics

by

*Brian Kettell, M.Sc. (Econ.)*

Senior Lecturer, City of London Polytechnic

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# Series Foreword

The *Banking and Finance Series* has been written for students who are preparing for the Associateship of the Institute of Bankers. The structure of the series follows the syllabus closely. Although the emphasis is on the Institute of Bankers' examinations the series is also relevant to students for other professional examinations such as the different Accountancy Bodies, Chartered Secretaries, Diploma in Public Administration, undergraduate business courses, BTEC, BEC, HND, DMS, Stock Exchange courses, Association of Corporate Treasurers, Institute of Freight Forwarders, Institute of Export.

May 1985

Brian Kettell  
*Series Editor*

# Preface

This book has been written for students who are preparing for the Associate-ship of the Institute of Bankers. The structure of the book follows closely the syllabus for Monetary Economics, but is also relevant for some of the Stage I papers. In addition it is also directly relevant to the Monetary Economics Paper for the Association of Corporate Treasurers.

Although the emphasis has been on the Institute of Bankers examination the book covers the monetary economics courses taught in Advanced Level Economics, and is relevant to students for the finals of other professional examinations such as the different Accountancy Bodies, the Chartered Secretaries, and the Diploma in Public Administration.

Students studying undergraduate monetary economics at universities, polytechnics and colleges of further education will find it gives them a thorough background to many of the key issues currently surrounded with controversy within the profession. Issues such as the views of the "New Classicists" and the debate surrounding "rational expectations" and the role of the Public Sector Borrowing Requirement are introduced. A special section on "overshooting" gives the background to this controversial area. All these issues are treated in a clear, non-technical manner.

The system of monetary control within the United Kingdom has been subject to rapid change. The introduction of the Banking Act, the changing emphasis of monetary targets, the money market intervention system of the Bank of England and many other related issues have completely revolutionised the nature of the banking world (and incidentally have left most of the books on monetary economics completely outdated). In this book, these issues are all treated from the viewpoint of the underlying principles involved. Excessive cluttering up of the underlying themes with detailed discussion of historical developments has been reduced to a minimum, enabling the student to see the wood from the trees.

Particular emphasis is placed on an appreciation of what causes financial markets to change direction. A detailed examination of the factors explaining movements in money market rates and clearing bank base rates is included. The Eurocurrency market tends to be overlooked, or receive a cursory mention in many text books. This text makes it a central theme, in accordance with its keyrole in determining other money market rates. Its importance for recycling the OPEC balance of payments surplus resulting in the current international debt crisis is stressed. The critical relationship between eurocurrency rates spot and forward exchange rates is also emphasised. The determination and importance of foreign exchange rates, including the question of whether the United Kingdom should join the European Monetary System receive a detailed treatment.

May 1985

*Brian Kettell*

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*This book is dedicated by Brian Kettell to his parents.*



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# **Chapter 1**

## **The Concept of Money**

### **MONEY – EVOLUTION AND FUNCTIONS**

Many of the features of any financial system, irrespective of its stage of development, are taken for granted. We accept them without really thinking about them. Yet if we are to understand their importance we need to analyse precisely what the financial system does, how it works, and then possibly be in a position to say how it will change. Clearly there is nothing more important in the development of any complex financial system than the emergence of money. This is a very *slow* process and the forms of money have changed over time and indeed will change again in the future.

The early stages of commercial exchange consisted of barter, where a farmer of corn might exchange ten bushels of corn for an ox to grind his corn to make bread. Villagers would develop market places, where farmers and craftsmen could come to exchange their produce and gradually “rates of exchange” between various products would become established. The barter system farmer would have to maintain a huge list of exchange rates between his product and many others.

However, this system can be extremely inefficient and protracted. Generally, an individual has first to find the person who can produce the item he wishes to acquire and who must be prepared to swap it at that time after haggling for a mutually agreeable price. How long one may ask does the person who is individually gifted in the construction of artificial wooden legs have to search for a one-legged baker who will supply him with bread in exchange for one of his fine wooden legs? This problem is known as the “double coincidence of wants”.

Deterioration, indivisibility and differences in quality of various bartered items make comparison and the setting of common exchange rates between

goods, very difficult. The difficulties and inefficiency of the barter system led to the rather radical invention of money, to oil the wheels of the primitive system.

The value of all commodities which enter the sphere of influence of the new common unit of exchange, can now be converted into a price in terms of that unit. We can be justified in an economic sense to call this common unit, whether it be a cow, a shell, or a stone with a hole in it, money because it serves one of the basic functions of money, that of a "*medium of exchange*". It allows the producer of wooden legs to exchange his produce for money from the limbless and use that money to buy bread from the baker. This in turn provides the means for division of labour and specialisation within society thereby conferring enormous benefits.

As it is a standard by which other commodities may be judged and valued, money acts as a "*unit of account*", i.e. a yardstick in which the value of other commodities and services is measured. Consider the complexities and time involved in evaluating purchases of various types of materials for car manufacture and subsequent sales of cars other than in monetary terms. Thus, with a widely accepted "*unit of account*" markets can develop. Along with markets come prices which in turn provide the "*signals*" indicating either prices being too high or too low and thereby encouraging resources to move around accordingly. Indeed without true prices markets become singularly inefficient, e.g. as in Eastern Europe.

The units of money received for one's produce or services can be immediately exchanged for goods or they may be held in reserve. In this latter sense, money acts as a "*store of value*" or more accurately "*liquid*" store of value allowing an individual to overcome the problem of timing differences between receiving payment for goods or services and spending the money.

Thus money allows independence between the timing of receipts and the making of payments. An individual could buy some other assets such as antiques, but if the owner then wished to sell them he would be faced with the trouble of selling and the attendant risk in the amount he received for the antiques. Of course money is just one form in which wealth can be held (building society deposits are another), and this introduces a complexity for a government wishing to measure and control the money supply.

Finally money serves as a *standard for deferred payments and receipts*. Often goods are purchased now with a promise to pay at a later date. An example of this is the case of house purchase via a mortgage. The use of money facilitates this type of transaction. Indeed the ability to pay interest (and earn interest) on money enables units in society with surplus funds (surplus units) to lend money to units who need funds (deficit units). (The way this occurs is developed in Chapter 2.) Thus the development of borrowing and lending with contracts that involved the payment or the receipt of a stated sum of money would not be possible without money. And without borrowing and lending the whole manufacturing and distribution industries would not have evolved as we know them today.

## FROM PAPER MONEY TO BANK DEPOSITS

The movement from barter to money in the United Kingdom was greatly facilitated by the introduction of paper money which essentially developed through the intervention of goldsmiths. Goldsmiths – craftsmen who worked with gold – naturally kept very secure safes in which to store their gold. The practice grew up among the public of storing their gold with the goldsmith for safe-keeping. In return, the goldsmith would give the depositor a receipt promising to hand over the gold on demand. If the depositor wished to make a large purchase, he could go to the goldsmith, reclaim his gold, and hand it over to the seller of the goods. The probabilities were that the seller would not require the gold, but would carry it back to the goldsmith for safe-keeping. Clearly, if people knew the goldsmith to be reliable, there was no need to go through the cumbersome and risky business of physically transferring the gold. The buyer need only transfer the goldsmith's receipt to the seller, who could accept it secure in the knowledge that the goldsmith would pay over the gold whenever it was needed. If the seller wished to buy a good from a third party who also knew the goldsmith to be reliable, this transaction too could be effected by passing the goldsmith's receipt from the buyer to the seller. The convenience of using these bits of paper instead of gold is obvious. So the first paper money was a promise to pay on demand so much gold, the promise being made first by goldsmiths and later by banks: As long as these institutions were known to be reliable, such pieces of paper would be "as good as gold". Such paper money was backed by precious metal and was convertible on demand into the metal.

For most transactions, individuals were content to use paper currency: It was soon discovered, therefore, by the goldsmiths that it was not necessary to keep an ounce of gold in the vaults for every claim to an ounce circulating as paper money. It was necessary to keep some gold on hand, because, for some transactions, paper would not do and in addition it was necessary to guard against withdrawals. If an individual wished to make a purchase from a distant place where the goldsmith was not known, he might have to convert his paper into gold and ship the gold. Further, if he was going to save up money for use in the distant future, he might not have perfect confidence in the goldsmith's ability to honour its pledge to redeem the notes in gold at that time. His alternative was to exchange his notes for gold and store the gold until he needed it. For these and other reasons at any one point in time, some holders of notes would be demanding gold in return for their notes. On the other hand, some of the customers would be receiving gold in various transactions and would be wanting to store this gold in the bank for safe-keeping. They would accept promises to pay (i.e. notes) in return. At any one time, therefore, some of the goldsmith's customers would be withdrawing gold, others would be depositing it, and the great majority would be carrying out their transactions using the goldsmith's paper notes without any need or desire to convert them into gold. Thus the goldsmith would be able to issue more money redeemable in gold than he actually had in gold in his vaults.



This would be a profitable thing to do, because the money can be used either to purchase securities that yield a return, or make interest-earning loans to households and firms. Eventually goldsmiths evolved into what we now know of as commercial banks.

The major problem of a fractionally backed currency (i.e. a currency not fully backed by gold) is that of maintaining its convertibility into the precious metal with which it is backed. In the past, the imprudent bank that issued too much paper money found itself unable to redeem its currency in gold when the demand for gold was even slightly higher than usual. This bank would then have to suspend payments, and all holders of its notes would suddenly find them worthless. The prudent bank, which kept a reasonable relation between its note issue and its gold reserve, found that it could meet the normal everyday demand for gold without any trouble. It was always the case with fractionally backed currency, however, that, if all note-holders demanded gold at once, they could not be satisfied. Thus, if ever the public lost confidence and en masse demanded redemption of their currency, the banks would be unable to honour their pledges, and the holders of their notes would lose everything. The history of nineteenth and early twentieth century banking is replete with examples of banks ruined by momentary runs on their cash and gold reserves. When this happened, the bank's depositors and the holders of its notes would find themselves holding worthless pieces of paper.

As time went on, note issue by commercial banks became less common and central banks took over a steadily increasing share of this responsibility. The gold standard was also abolished (this is discussed in detail in Chapter 9). The commercial banks retained the power to create money, but this was no longer done by printing paper money; instead deposit money was created (see Chapter 4). The modern bank deposit is the equivalent of the old bank note: a promise on the bank's behalf to pay out on demand the money of the time. The passing of the bank's note from hand to hand transferred ownership of the claim against the bank: this is now done by means of a cheque, which is merely an order to the bank telling it to transfer from one individual to another its obligation to pay cash. In the modern world the greater proportion of the money supply is the deposit money that is created by commercial banks. The cheque clearing system is described below.

## THE CHEQUE CLEARING SYSTEM

One of the basic functions of the clearing banks is the provision of the country's main payments mechanism. Each year hundreds of millions of cheques are handled by the Bankers' Clearing House which also operates the Bank Giro by which payment can be made to any bank account in the United Kingdom. Through a separate limited company, Bankers' Automated Clearing Services, facilities are provided for the transfer of magnetic tapes containing details of customers' transactions. In addition each bank's clearing department handles a considerable volume of items passing between its own branches.