

# INTERNATIONAL MONEY

Andrew Crockett

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**ISSUES AND ANALYSIS**

**Andrew Crockett**

International Monetary Fund Washington



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# *Preface*

This book is an attempt to review the theoretical and policy issues involved in the organization of the international monetary system. This is a subject which has to be dealt with on several different levels. First, international monetary economics is an established branch of economic theory, and a proper understanding of international monetary questions requires a prior familiarity with the state of received theory. But more than most branches of economics, international monetary questions have become bound up with political relationships and are greatly influenced by current economic developments.

It is not possible to fully appreciate present controversies unless one sees them against the background of the monetary history of the post-war period. Negotiating positions of countries are influenced by what they see as being in their particular interest; and the preoccupations of monetary officials have been, perhaps excessively, dictated by what seems to be the crisis of the moment.

A book on international monetary economics that aims to provide the reader with a basis for understanding current controversies has to draw heavily on what has come to be called the "reform exercise" of 1971-76. This exercise, which was to fail in most of its more ambitious objectives, succeeded at least in focusing more concentrated attention than had previously been brought to bear on international monetary questions. The debate revealed that many of the issues which it had been hoped could be resolved by collective decision were intractable. The reform of the monetary system was therefore left as an evolutionary process.

To see the present state of the international monetary system as a stage in an evolutionary process is one of the objectives of this book. This evolution is shaped by events and by political forces outside the field of economics, as well as by

economic laws and the deliberate decisions of economic policy-makers.

The most pleasant task in a preface, but the one to which it is least adequate, is that of thanking all those who contributed directly or indirectly to the writing of the book. Although an insider for most of the reform discussion, I was more of a spectator than a participant. However, the influence of all those who were participants in the development of my views will be quite evident. I hope I will be forgiven for not identifying particular sources of influence here or in the text. I do, however, owe a particular debt to those who cheerfully accepted the tedious chore of reading part or all of the book in manuscript form and offering valuable comments. These include Morris Goldstein, Larry Officer, Jacques Polak, and Bill White. Large chunks of Chapters 6 and 11 were the product of collaboration with Saleh Nsouli and Morris Goldstein respectively; they cannot, however, be held responsible for the way in which I have interpreted our joint work in this book. To Florence Manges, Adriana Vohden, and Veronica Samson, thanks are due for patient and efficient typing of successive drafts. To the American University Park babysitting cooperative, I owe many evenings of more-or-less undisturbed peace during which the bulk of the work was carried forward. And to my wife, Marjorie, I owe the deepest debt for her constant encouragement at times when I was more than ready to give up the project.

It goes without saying that the views expressed in the book, and the manner of expressing them, cannot be attributed to my employer, the International Monetary Fund.

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# *I Features of the International Monetary System*

## *Introduction*

International monetary economics has a relatively short history as a distinct branch of economic theory; just as international monetary relations (as opposed to trade relations) have a relatively short history as a central concern of policy makers. The arrangements under which international payments were conducted in the nineteenth century did not seem complex enough to be dignified with the name 'system'; nor were they the subject of more than passing reference (a chapter at most) in economics treatises and textbooks. The balance of trade, as later research has shown, was frequently out of equilibrium; but in the absence of statistics, rarely if ever did this fact attract attention, and no governments fell because of their actions or inactions in this area. Best of all, some might say, newspapers were unpreoccupied with the gloomy science; finance ministers did not have to meet, in crisis or even at leisure, in selected watering spots; central bankers never went to Basle, and there was one fewer index with which to measure the economic and moral condition of the nation.

Despite this apparent tranquility, however, the factors which now cause concern in the international monetary sphere were not absent in the nineteenth century. They appeared in a different guise, and were attributed to different causes, but their underlying nature was much the same. Just as divergent national policies could lead in the post-war period to balance of payments disequilibria that had to be corrected, so

too in the nineteenth century would a country which found its trade cycle out of phase with its trading partners gain or lose reserves, and have to adjust its policies accordingly if it was to keep the value of its currency pegged to gold. The difference was that, before the First World War, the management of reserves was seen as a technical matter of preserving the gold convertibility of domestic currency—something which could normally be achieved by a relatively modest adjustment of interest rates. Larger questions of economic welfare were either not considered or judged subordinate to the primary objective of preserving the gold parity. The cycle of boom and slump was accepted as largely inevitable, and governments did not consider it to be within their power, or their responsibility, to try to prevent it.

The present preoccupation with international monetary problems arises, in large measure, because it is now realized that the nature of the international monetary system, and how it is managed, has a great deal to do with international prosperity. It is also recognized that governments have considerable scope for good or ill in the way they manage arrangements governing international trade and payments. It is the purpose of this book to investigate how this management has been conducted; to set forth what the relevant policy choices are, and to suggest ways in which the system might most fruitfully develop.

## *The Balance of Payments*

As a starting point, it is worth asking why the exchange of goods across national frontiers should pose problems which are different in nature from those caused by exchanges taking place within a domestic economy. In each case, a payment has to be made because a buyer has purchased goods or services from a seller or because a lender has lent money to a borrower. In each case, purchasing power has to be transferred from the purchaser or lender to the seller or borrower. Why then should we regard a sale of English goods to a Frenchman as creating a different kind of problem from the sale of English goods to a Scotsman?

One answer, only partly relevant, lies in the fact that international transactions affect the balance of payments. This

presents the need first to finance the deficits or surpluses which may occur, and second to take action to eliminate the imbalance.

But while the balance of payments is a concept which is usually applied to transactions between countries, problems of financing and adjustment can also arise between regions, and indeed between individual economic units. When the spending of an individual, or a region, exceeds income, the deficit must first be financed, and ultimately closed by increasing income or lowering spending.

Within an economy, however, the monetary authorities do not feel that they need to have a *policy* with regard to the balance of payments problems of individuals. This is because, in the normal course of events, financing of such internal disequilibria will be automatic, and will give rise to its own adjustment incentives. An individual cannot spend in excess of his income unless he has acceptable financial assets, or credit, to transfer to sellers. And as his stock of assets, or his creditworthiness declines, he will become unable or unwilling to continue the deficit, and will be forced to tailor his coat according to his cloth.

For regions within a country, the mechanism of financing and adjustment is similar. A deficit will result in the transfer of financial claims to residents in other parts of the country. So long as the rest of the country is prepared to accumulate claims on the deficit region, the deficit may continue. But eventually a point will be reached where individuals and firms within the deficit area are forced, by the decline in their net worth, to bring their spending in line with their resources. One way of making that adjustment is the physical movement of workers from the region in which funds are no longer being spent to the region for whose output expenditures have been increased. Regional balance of payments adjustment can pose economic and social problems that require government policies to alleviate the hardships involved (as witness the regional development programmes in many countries). There is no *monetary* problem of adjustment, however, because different regions within a country use the same currency, issued and backed by the same government.

The difference in the case of international transactions lies in the fact that different currencies are involved. When an Englishman sells goods to a Scotsman, settlement can be simply made by the transfer of money balances from one

account to another. When he sells goods to a Frenchman, he will expect to be paid in pounds, while the French buyer will expect to pay in francs. It is evident that an additional transaction is needed to complete the sale. There must be a market where the Frenchman can sell his francs for pounds in order to pay the Englishman.

Since the supply of pounds is, in the last analysis, determined by the policies of the Bank of England, and the supply of francs by the policies of the Bank of France, governments inevitably influence developments in the foreign exchange market, whether deliberately or as a by-product of their other actions. And since the mobility of labour, noted above as one means of securing *regional* adjustment, is more limited across national frontiers, a greater part of the burden of adjustment to disequilibrium has to be borne by changes in relative prices—i.e., in the real purchasing power of one currency in terms of another. These facts make international payments different from domestic payments, and explain the concern of economists and policy makers with international monetary questions. International monetary economics, therefore, is the study of the network of institutions, rules and conventions which govern the conditions under which currencies are exchanged, and international payments disequilibria are eliminated.

### *Features of the International Monetary System*

For a long time it was customary to describe the international monetary system in terms of the reserve asset which was at its base. Thus, the system which prevailed in the period before the First World War, and which was revived for a time in the inter-war period, was normally referred to as the gold standard. By analogy, the system established at the Bretton Woods Conference in 1944, and lasting until 1971, was sometimes referred to as the gold-exchange standard, reflecting the fact that the basic reserve asset was gold, but that foreign exchange, whose price was fixed in terms of gold, was also used as a medium of settlement of international imbalances.

Such a shorthand description is deficient in that it describes only one feature of the monetary system. This need not be a

particularly important analytical shortcoming if the feature described is the only one with respect to which monetary authorities have any choice. Under the gold standard, for example, the choice which countries faced was to adhere to the gold standard by fixing the value of their currencies in terms of gold, or not to adhere to it.<sup>1</sup> Once on the gold standard, questions of how to manage a currency did not arise, since policies were largely determined by the decision to peg to gold.

Nowadays, it is recognized that a given monetary system actually involves a number of features, and that these features can be combined in different ways to achieve different objectives. For this reason it is not very illuminating to categorize alternative systems in terms only of the reserve asset which is used. This is, perhaps, the reason why it has become common to refer to the monetary system that existed from the end of World War II until the early 1970s by the rather less specific term: 'the Bretton Woods system'. This designation is not particularly descriptive, however, and some further analysis is needed of what the characteristics of the Bretton Woods system were, and how they differed from those of alternative systems.

There are, perhaps, four major features of international monetary arrangements which deserve separate analysis. The two most important are:

(1) the nature of the mechanism by which the imbalances in international payments are eliminated;

(2) the nature of the asset in terms of which currency values are expressed, and in which settlement of payments imbalances takes place.

In addition two other features also deserve attention:

(3) the degree to which the monetary system promotes an integrated 'one world' economy through multilateral payments arrangements, and

(4) the degree to which the monetary system is centrally managed, rather than being the consequence of individual national decisions.

## *The Adjustment Mechanism*

Perhaps the most important aspect of the international monetary system is the mechanism which is employed to adjust payments deficits and surpluses.

The amount of goods and financial assets which residents of a country can acquire from abroad is limited by the amount of goods and financial assets they are able to sell abroad. The balance between the two, as in any other market where supply and demand have to be equilibrated, is achieved by an appropriate structure of relative prices. But whereas, in the long run, only one set of relative prices and interest rates will produce lasting balance of payments equilibrium, deviations from such a pattern are quite possible in the short run. An overall balance of payments deficit can be financed by running down reserves or a deficit on goods and services can be covered by raising interest rates so as to enable more financial assets to be sold to foreigners.

The choice of adjustment mechanism involves the method employed to restore an equilibrium pattern of relative prices, when disturbances which inevitably affect the balance of payments cause a departure from such a pattern. Choice is introduced by the fact that relative prices among countries can change for two reasons: because of a change in the price of goods in domestic currency, and because of a change in the price of domestic currency in terms of foreign currency (the exchange rate). Under the gold standard, primary emphasis was placed on the adjustment of domestic prices, while under pure gold standard was reflected in an export of gold coinage. adjustment. Intermediate systems involve some sharing of the means of relative price adjustment.

### *The Gold Standard*

Under the pure gold standard, individual countries were, as far as their money was concerned, no more free to have an independent policy, than regions of a country are today. When gold coinage circulated freely as the principal medium of exchange, the fact that coins might be given different names, and bear the imprint of different crowned heads was basically unimportant. Since coinage was 'full-bodied' (i.e., its value as money corresponded to its value as metal), the exchange rate between coinage issued by different countries depended solely on weight.

As a result of this, a balance of payments deficit under the pure gold standard was reflected in an export of gold coinage. Now it is a law of economics, which is as old as serious study of the subject itself, that the nominal value of output in an economy will tend to adjust, by one means or another, to the volume of monetary assets available for the finance of trade. Thus, the resulting shortage of gold in the deficit country caused a contraction of internal trade, downward pressure on prices, and ultimately an improvement in the balance of payments. (None of this was recorded in statistical form, of course, but the mechanism is quite easy to see.) The pure gold standard was, therefore, an example of rigidly fixed exchange rates, under which adjustment to balance of payments disequilibria could take place only through the adjustment of domestic spending in money terms.<sup>2</sup>

The pure gold standard, under which gold was the principal medium of exchange for domestic as well as international transactions, was more of a theoretical construct than an actual historical experience. Almost as soon as gold became generally accepted in the Western world as a means of payment, mechanisms were sought to economize on the transportation and exchange of actual gold. By the mid-nineteenth century, gold had been superseded in importance by bank money as a means of domestic payment. Gold remained the ultimate store of value, however, and central banks retained reserves of gold to preserve the convertibility of their currencies into gold. Since the gold backing was invariably less than the total of liabilities issued, however, the guarantee could not be absolute. Even in the heyday of the gold standard (the period from the Franco-Prussian War of 1870 until the First World War) only three countries—Britain, Germany and the United States—maintained full convertibility of their currencies into gold on demand. Conversion of other currencies into gold had to take place through prior acquisition of one of these major currencies.

Because the major part of the money supply of most countries was backed not by gold but by financial securities and loans to domestic residents, the link between the balance of payments and the domestic money supply under the nineteenth century gold standard was not an automatic one. A balance of payments deficit could lead to an outflow of gold, but the effect of this on the domestic money stock could be offset by the creation of more bank credit.

By and large, however, this did not happen. This was because most countries observed what later came to be called the gold standard 'rules of the game'. Under this set of conventions, countries which experienced a loss of reserves raised their internal interest rates, which both attracted foreign liquid funds in the short term and served to damp down domestic demand, thus improving competitiveness in the longer run. Because of the importance of having a fixed gold value in determining access to both international short term credit, and the London capital market, most major countries adhered to the 'rules of the game' set out above. But it was recognized that currencies *were* different, and their relative values could change in the wake of important disturbances such as wars and revolutions.

### *Floating*

At the opposite extreme from fixed exchange rates (or almost fixed rates, as under the gold standard) is free floating. Free floating is a situation in which the monetary authority does not intervene in the market for its own currency against others; and is not influenced in its economic policies by considerations related to the exchange value of its currency. Balance of payments equilibrium is ensured automatically by the interaction of supply and demand forces in the foreign exchange market causing a change in the exchange rate. If the balance of payments of a country has a tendency to move into deficit at a given rate of exchange, more of its currency would be offered than demanded at that rate. Consequently, as in the case of any other market, the price (exchange rate) would have to adjust in order to ensure a continued equilibrium between demand and supply. For a country with a weak balance of payments a lowering of its exchange rate would discourage imports and other payments abroad; by making foreign purchases more expensive in terms of domestic currency; conversely it would encourage exports and inward investment by making its domestic currency cheaper for foreigners to acquire. So long as the demand for and supply of foreign exchange respond in the usual way to changes in its price, equilibrium can be continuously maintained without any government interference or regulation in the market.

Thus defined, there have been very few cases of free floating. Floating had been resorted to under the gold standard when countries had found themselves unable to



maintain the convertibility of paper money into gold. This happened in both France and Britain during the Napoleonic Wars, although in both countries gold and paper continued to circulate, with the latter at a discount. And there are many other examples in the nineteenth century of paper currencies circulating at a varying discount on their official gold value. Rarely under the gold standard, however, was floating free. Countries were usually motivated by a desire to restore eventually the value of their paper currency to its gold parity.

During the First World War, most countries left the gold standard, but again, not to float freely. They invariably attempted to control the extent to which their currencies depreciated; and after the war many, most notably the United Kingdom, made considerable sacrifices to restore the pre-war gold parity. The floating which was resorted to in the 1930s was even further away from the textbook case of non-intervention. Most countries attempted to manipulate their exchange rates to secure advantage over their foreign competitors through large depreciations which would stimulate exports and thereby promote domestic employment.

The most pure examples of floating, in the sense of being the ones that come closest to the textbook case of non-intervention, were some of the floats in the 1970s, though even here most have been subject to some degree of management. And it must be remembered that even where a country does not intervene directly in the exchange market, it can manage other instruments of economic policy (e.g., interest rates) in such a way as to have a strong indirect effect on exchange rates.

### *Controlled Flexibility*

Between the two extremes of rigidly fixed and freely flexible rates is a more or less continuous spectrum of greater or lesser degrees of official intervention in the exchange market. The Bretton Woods system, as it operated during most of the period of its existence, placed a high premium on fixed exchange rates (though it was frequently emphasized that such fixity need not be permanent).<sup>3</sup> The reasons why it was designed in this way can be fairly briefly recapitulated. The experience of the 1930s seemed to show that to allow individual countries a substantial measure of discretion in the determination of exchange rates for their currencies could