International Finance Unit 1 Evolution of International Financial Systems

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Unit Overview

One of the main learning objectives in this unit is to begin to analyse the evolution of today's international monetary system. In Unit 1, you will examine the major operating principles, or 'rules of the game', of alternative international monetary agreements and arrangements. You will see how the rules of the game for the classical gold standard and the Bretton Woods system for pegged exchange rates have operated in practice, whereby the Bretton Woods system evolved into a US dollar standard. You will also study the reasons advanced for the decline of Bretton Woods, and the emergence of the Latin American debt crisis of the 1980s. Later in the module, in Unit 8, you will return to the analysis of the evolution of the international financial system following two major crises - the Asian Financial Crisis of 1997 and the severe global financial crisis beginning in 2007–08. However, this first unit introduces and contextualises basic concepts and issues relevant to the international monetary system and thus sets the scene for your understanding of the models and approaches to analysing its elements and its operation, in subsequent units.

Meantime, the overall question, which is the main learning objective of this unit, may be expressed as follows:

 Under the Bretton Woods system, was international finance regulated by public institutions rather than markets, and did the development of the Eurodollar system reverse the situation to one in which markets operated without regulation?

Learning outcomes

When you have completed your study of this unit and its readings, you will be able to:

- relate how the international economy fared under bimetallism, before 1879
- account for the establishment of the classical gold standard, 1879–1914
- discuss the decline of world trade during the Interwar Period, 1915–44
- detail the creation of the Bretton Woods System, 1945–1972
- outline the decline of Bretton Woods and the rise of the Flexible Exchange Rate Regime, 1973 to the present
- assess the influence of the Floating-Rate Dollar Standard, 1973–1984
- explain and discuss the Plaza-Louvre International Accords and the Floating-Rate Dollar Standard, 1985–1996
- discuss the current exchange rate arrangements
- explain the international response to the Mexican Peso Crisis
- analyse and discuss fixed versus flexible exchange rate regimes.



Keith Pilbeam (2013) *International Finance*. 4th Edition. Basingstoke UK: Palgrave Macmillan. Chapters 11, 12 and 15.

1.1 Introduction

As noted in the introduction to this module, in exploring problems of policy within the international financial system, you need to understand the institutional structure of modern international finance. In Unit 1, you will learn about specific institutional structures and organisations such as the International Monetary Fund (IMF), which is a highly specific executive organisation that has been at the centre of the system.

Reading 1.1

To put Unit 1 in context, please stop now and read quickly pages xxvi—xxviii of the key text by Pilbeam, which gives a brief overview of the subject matter of international finance.

Pilbeam (2013)
'Introduction: The subject matter of international finance' in *International Finance*.
pp. xxvi—xxviii.

Foreign exchange markets and institutions, such as the IMF, are the framework within which most of today's policy problems in international finance have to be considered. However, their present character is not accidental, nor it is unchanging; but it is, instead, the result of historical developments. Consequently, in order to fully understand the system, its problems and policy options, we have to consider how it was formed and how it has developed. This is the subject matter of this unit – the development of the modern system of international finance from 1944 to the present (though we shall return to consider further how crises in the late 20th and early 21st century may have affected international monetary arrangements). Unit 2 then examines the system's universal, basic, market institution – the foreign exchange market – in general terms.

In this unit you will be introduced to the following main concepts:

- the Bretton Woods system
- the Eurodollar system (and other Eurocurrencies)
- the Latin American debt crisis
- fixed exchange rate system
- floating exchange rate system.

At the end of the unit, you should pause to check whether you have understood all of them.

The unit summary page, which appears at the beginning of this text, shows a more complete list of topics and issues that you will be learning during your study of this unit. However, you are not expected to learn only by absorbing information; instead, I expect you to *question* the ideas presented to you and to read the module materials critically. At the start of each unit, I will set out the

main questions posed in it; keep these questions in mind as you read the material and, at the end, consider your own answers to them.

However, let me reiterate the overall question, which is the main learning objective of this unit:

 Under the Bretton Woods system, was international finance regulated by public institutions rather than markets, and did the development of the Eurodollar system reverse the situation to one in which markets operated without regulation?

1.2 Bimetallism: before 1879

The international monetary system prior to the 1870s can be characterised as based on *bimetallism*, in the sense that both gold and silver were used as international means of payment. This does not, however, imply that each individual country was on a bimetallic standard; many countries accepted *either* a gold standard *or* a silver standard. For example, China, India, Germany and Holland were on the silver standard while in the UK, bimetallism was maintained until 1816 when Parliament abolished the free coinage of silver. In the United States, bimetallism was maintained until 1873, when Congress adopted the gold standard only. Similarly, France introduced bimetallism from the French Revolution to 1878, when the franc effectively became a gold currency.

Note that the exchange rates among currencies were determined by their gold or silver contents, and sometimes by their exchange rates against another currency. For example, the exchange rate between the British pound (gold standard) and German mark (silver standard) was determined by their exchange rates against the French franc (bimetallic standard).

1.3 Classical Gold Standard: 1879–1914

By 1879, all major industrial countries and most smaller countries had adopted the gold standard, which lasted until the First World War in 1914, when European governments ceased convertibility of their currencies either into gold or other currencies. The United States, however, remained on the gold standard until 1933.

In principle, the gold standard was seen as an automatic mechanism linking the financial systems of all countries in a way that ensured stability; the link was based on the principle that all international payments between countries had to be settled in gold and that the domestic money supply was linked to the country's stock of this metal, whose value was internationally agreed. In a simple model, stability was ensured in each country's balance of payments by the automatic mechanism of buying and selling gold.

This idea can easily be illustrated by a simple example. Assume that the domestic money supply in each country is linked only to gold, which is

equal to the country's stock of gold (an assumption which was never exactly valid but does simplify the analysis). Suppose that Britain is in the fortunate position of having full employment, a stable price level and equality between exports and imports. Now imagine that for some reason British imports increase without a change in British exports, and a balance of payment deficit occurs. Under the gold standard, the deficit on the current account of the balance of payments is temporary and self-correcting. The deficit leads to an outflow of gold to pay for the net imports, and hence the domestic money supply is reduced by an equal amount.

The reduction in the supply of money would lead to a fall in the domestic price level according to the Quantity Theory of Money. This theory states that MV = PT so that, with constant V and T (the Velocity of money and Transactions), the reduction in M (the money supply) is matched by the reduction in P (the price level). The fall in the domestic price level makes home produced goods relatively cheap compared to foreign produced goods and, therefore, imports will fall and exports rise. The process will continue until the current account of the balance of payments is restored to balance and the outflow of gold is halted. This adjustment mechanism is usually known as the 'price-specie–flow mechanism', which is attributed to the 18th century Scottish philosopher, David Hume.

In reality, the gold standard did not operate with such simple consistency, and during the 19th century and early 20th century, politicians and economists were confronted by major difficulties over how to operate it and, in the 20th century, even over whether to adhere to the gold standard at all.

The debate of the early 19th century focused on the way the domestic money supply worked if the currency was 'inconvertible', or separated from the stock of gold, and upon the operation of the banking system. Those debates, which became known as the 'debate between the banking and currency schools', were among the most important debates of all time in monetary theory, and have many modern parallels in theories of banking and financial innovations, which you will probably meet in your later studies. Here, however, I shall concentrate on the *practical* problems of the gold standard in the 20th century, which are more relevant to your study of the evolution of the modern system of international finance.

In the 19th century, the gold standard took a form best known as the 'gold exchange standard'. The stock of money in the country was not equal to the stock of gold, and gold was not the only or main form of money used in international transactions. In particular, the pound sterling developed into a 'key currency' as it was used to finance international trade, and it was held as an international asset in the portfolios of foreign banks, central banks and investors. Pounds were used for these purposes instead of gold, but the pound was able to operate in this way because it was convertible into gold at a fixed price. The system whereby sterling as a key currency was linked to gold and exchangeable for the metal was known as the *gold exchange standard*. Its operation was more complex than the mechanism described by

Hume, but its underlying principle, the link between domestic price and holdings of gold-backed money, was supposed to be the same.

In summary, the 'rules of the game' for the international gold exchange standard were as follows:

- the establishment of an official gold price or 'mint parity' for example, the United States defined one US\$ as 23.22 fine grains of gold, equivalent to US\$ 20.67 for one ounce of gold, when adopted as the gold standard in 1879
- no restrictions could be placed on the imports or exports of gold
- only gold-backed national currency and coins were to be issued
- thus, price levels will be determined endogenously, based on the world demand for gold.

1.4 The Interwar Period: 1914–1944

The First World War ended the classical gold exchange standard in August 1914 when Britain, France, Germany and Russia suspended the convertibility of their currencies into gold and imposed embargoes on gold exports. After the war there was considerable debate over how to reactivate the gold exchange standard and, in 1925, the British government restored the convertibility of the pound. Switzerland, France and the Scandinavian countries restored the gold standard in 1928. However, Britain restored convertibility at a price that implied high exchange rates, and for that and other reasons Britain could not sustain the arrangement. Sterling was forced to leave the gold standard in September 1931, and the pound was allowed to float. Other countries abandoned it subsequently: Canada, Sweden, Austria and Japan followed suit by the end of 1931, the United States in April 1933 after experiencing bank failures and serious outflows of gold, and France left the gold standard in 1936.

The end of the gold exchange standard was associated with great monetary instability. Under the gold exchange standard, each country had a fixed exchange rate with each other since they all fixed the value of their currency in terms of gold. But when the gold exchange standard ended, foreign exchange dealers had greater freedom to influence exchange rates and governments had greater freedom to alter the exchange rates they would support. During the 1930s, exchange rate variations became a prominent instrument of policy. With the world in serious depression and countries facing weak markets for their exports, the major industrial countries engaged in a process of competitive devaluation. Each reduced the exchange rate of its currency in attempts to increase exports and reduce imports; this was a measure to increase its own share of the world market at the expense of the other countries, but it was self-defeating since each country's action was offset by the others' devaluation.

The instability of foreign exchange markets in the 1930s was accompanied by further government measures, in addition to competitive devaluation, to

solve their balance of payments problems. For example, tariffs were raised to reduce imports. Thus, the end of the gold standard was an element in a period of shrinking world trade, with declining world markets for industrial and agricultural products and rising unemployment in the major economies.

In 1939, at the outbreak of the Second World War, the existing system of international finance and international trade broke down and was replaced by one which could not really be called an *international* system. During the following years, when each industrialised country was concentrating mainly on fighting the war, the small amount of trade and remuneration that existed was organised on the basis of bilateral deals organised by governments. These deals, in turn, reflected the balance of political power between countries instead of being on equal or purely economic terms. In other words, during the war the system of international finance broke down, and arrangements constructed at the end of the war provided the beginning of the modern system.

1.5 The Bretton Woods System: 1945–1972

In the sphere of international finance, the system agreed at Bretton Woods was set up without major changes and its main features lasted almost unchanged until 1971. It started operating in 1946, so the arrangements in force from then until 1971 are known as the Bretton Woods System.

Pilbeam provides a good background to the Bretton Woods system. You should read those pages before studying the system's key elements.



Please read pages 257–59, from Chapter 11 'The international monetary system' of Pilbeam now.

Two new institutions agreed at Bretton Woods were at the heart of the Bretton Woods System – the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (IBRD, or World Bank). We shall look at these institutions themselves in more detail later in the module. In this section, I concentrate upon the international financial arrangements supervised by the IMF, for they were the core of the Bretton Woods system. These arrangements can be divided into three elements:

- exchange rates
- the financing of balance of payments deficits
- international liquidity.

I will briefly outline each of those elements and then ask you to read the pages in Pilbeam where they are examined more fully.

Pilbeam (2013) Sections 11.1 'Introduction' and 11.2 'The Bretton Woods system' from Chapter 11 'The international monetary system' in *International Finance*. pp. 257–59.

1.5.1 Exchange rates: dollar-based gold exchange standard

Under the Bretton Woods System, exchange rates between the currencies of all countries belonging to the IMF were fixed. The US dollar was the key currency and all currencies had a fixed exchange rate with respect to the dollar. Moreover, the value of the dollar in terms of gold was fixed at US\$35 per ounce of gold; therefore, the value of each currency was fixed in terms of gold. In other words, each country established a par value in relation to the US dollar, which was pegged to gold at US\$35 per ounce.

The main rules of the game of international finance were now:

- to fix an official par value for domestic currency in terms of the dollar, and keep the exchange rate within 1% of this par value
- to permit free convertibility of currencies for current account transactions.

Reading 1.3

For his account of the Bretton Woods exchange rate system, please stop and read pages 259-60 of Pilbeam now.

The attempt to commit countries to these rules does pose the following serious questions:

- How can states fix their exchange rates?
- How could they have agreed to keep their exchange rates with respect to the dollar fixed, and how could the US government agree to fix the value of the dollar at US\$35 per ounce?
- What mechanism could be used to ensure that they kept their agreement?

I would like you to pause for a moment to consider those questions, and write down brief answers.

The way I would answer those questions is first to identify what the problem is: why are they serious questions? Why don't governments simply give an order that each exchange rate and the gold value of the US dollar should be at a certain level? Then there would be no serious question to answer. The reason the problem is serious can be seen by imagining what would happen if, starting from a position of equilibrium on foreign exchange markets, there is a fall in firms' and banks' demand for a currency or an increase in the numbers of people wishing to sell it. The exchange rate of that currency would fall as foreign exchange dealers mark it down on foreign exchange markets. Similarly, if there is an increase in the demand for gold without an increase in its supply, its price on the gold market will rise.

The second step is to identify how governments can prevent these changes in exchange rates or the price of gold. The mechanism is to commit them to buy or sell each currency at the fixed exchange rate; if there is an excess private supply of pounds and an excess private demand for dollars, governments must buy pounds and sell dollars at the fixed exchange rate to equilibrate the market at that rate. Similarly, the US government had to be willing always to sell (or buy) gold at the price of US\$35 per ounce.

Pilbeam (2013) Section 11.3 'Features of the system: Fixed but adjustable exchange rates' from Chapter 11 'The international monetary system' in International Finance. pp. 259-60.

As mentioned earlier, under the Bretton Woods System, exchange rates were not absolutely fixed. One reason was that their 'par value' was fixed, but they were permitted to fluctuate within a narrow band around that par value. Governments had to intervene to prevent the exchange rate of a currency falling below the minimum of its band or, in principle, rising above its maximum. The second important reason why exchange rates were not absolutely fixed was that countries could devalue their currency under certain circumstances and by agreement with the IMF. I shall explain the permitted circumstances of a devaluation in later paragraphs; for the moment, note that the possibility of such adjustments means that the Bretton Woods System is sometimes referred to as an 'Adjustable Peg System' instead of a 'Fixed Exchange Rate System'.

However, although, for those two reasons, the exchange rates of currencies against the dollar and against each other were other not fixed, the price of the dollar in terms of gold was invariable.

1.5.2 Financing balance of payments deficits

There are several ways to define a balance of payments deficit, but the simplest one for the present is that:

• a country has a deficit if it has to use official reserves of gold and foreign exchange to purchase its own currency in order to meet the excess supply on the foreign exchange market.

Therefore, in order to maintain the fixed exchange rate where there are net sales of its currency, a typical country has to use its foreign exchange reserves to buy its own currency. Since those reserves are finite, there may then be a need to borrow additional foreign exchange.

The second element of the Bretton Woods System was that, in principle, members of the IMF had a right to borrow foreign exchange from it in such circumstances. Thus, the right to borrow was never absolute, but was subject to conditions and qualifications depending on the circumstances.

Reading 1.4

I would like you to read pages 259–68 of Pilbeam now. In those pages you will study:

- the main features of the Bretton Woods System
- the problems that some have identified as the cause of its breakdown
- the mixture of floating exchange rates and managed exchange rates that followed the fixed exchange rate system of Bretton Woods.

Please now make notes on those topics and answer the question implied by the discussion above:

What was the main source of IMF funds, and what qualifications and conditions constrained the right to borrow under the IMF? Pilbeam (2013) Sections 11.3 'Features of the system', 11.4 'A brief history of the Bretton Woods system' and 11.5 'Why did the Bretton Woods system break down?' from Chapter 11 'The international monetary system' in *International Finance*. pp. 259–68.

As you read in Pilbeam, the basic source of the IMF's funds was the 'quota', which each country subscribed to the Fund when it joined. The amount of a country's quota was calculated by a general formula agreed at Bretton Woods. When a country joined the IMF it had to deposit 25% of its quota in the form of gold and foreign exchange and 75% in the form of its own currency. The country with the largest quota was the United States, which remained the largest single source of the IMF's funds throughout the duration of the Bretton Woods System. The quota system makes clear that the IMF is not a bank; it cannot increase its resources by borrowing on capital markets or money markets as a bank could (and as the World Bank can). In principle, it is a club, for its basic resources come from the subscriptions (quotas) of its members. As I have already indicated, those quotas also determine the countries' borrowing rights; the total amounts a country can borrow under various headings are expressed as percentages of its quota (and are more than 100% in total).

In answer to the second half of the question, two types of qualifications and conditions on the right to borrow have been relevant.

The first, embodied in the initial principles of the Bretton Woods System, was the distinction between a deficit considered to be a *temporary disequilib-rium* and one that was judged to be a *fundamental disequilibrium*. In the case of a temporary disequilibrium, it was expected that the country would maintain its exchange rate and borrow foreign exchange from the IMF to finance that intervention. But in the case of a fundamental disequilibrium, the country would have to agree a realignment of exchange rates with the IMF and accept a lower exchange rate that could overcome the deficit, and borrowing would be subordinate to that policy.

The second type of condition for borrowing from the IMF is the requirement that the country must adopt a *stabilisation programme* or, in other words, a number of measures to improve the balance of payments and achieve macroeconomic stability. A stabilisation programme includes more measures than devaluation alone, for within such programmes states agree to implement a number of restrictive monetary, fiscal and other policies. This 'conditionality' applies when a country borrows more than a certain amount. The *gold tranche* is an amount of credit, equal to 25% of the country's quota, which could be borrowed without conditionality; the next 25% of the quota, *first credit tranche*, could be borrowed with light conditions, but higher amounts of credit, the *upper credit tranches*, could only be drawn upon if the country agreed a stabilisation programme.

Conditionality in the form of stabilisation programmes is operated through agreements to 'stand-by arrangements'. The structure and operation of this conditionality now follows almost standardised procedures which are an integral part of the modern International Monetary Fund, but it was not always so. Conditionality of this type was not established at Bretton Woods but evolved gradually in the 1950s and 1960s. In Unit 2, you will study in greater detail how stand-by arrangements and stabilisation programmes work.

1.5.3 International liquidity

For world trade to operate smoothly and to grow, countries must have access to internationally acceptable forms of money or credit to pay for the imbalances that inevitably arise in any system that is not confined to bilateral barter. Under a pure gold standard, the world's stock of liquidity would consist of gold. Under the Bretton Woods System, the main form of international liquidity was the US dollar, which – with gold and a residual amount of pounds sterling – was the basis of countries' international reserves and payments. The dollar, in turn, was linked to gold in the sense that the United States guaranteed to convert dollars to gold at US\$35 per ounce.

The British delegate to Bretton Woods, John Maynard Keynes, had proposed that neither gold nor national currencies such as the dollar should be the medium of international liquidity. Instead, he suggested that the Fund should create and manage its own paper currency, the *bancor*, as the world's international money. But that proposal was defeated.

Initially, under the Bretton Woods System, the only contribution the IMF could make to international liquidity was its ability to give credit to finance countries' balance of payments deficits. Although that was marginal compared to the total stock of US dollars, it could be of great significance, so an important question concerned the size and source of IMF credit facilities.

Because of the quota system, there was no automatic or simple mechanism by which the stock of international liquidity at the disposal of the IMF could be increased with any growth in world needs. Instead, member countries could only raise the total of quota resources by agreeing a general increase in quotas; this occurs after special negotiations, which are usually difficult and have operated infrequently.

However, the United States began to experience trade deficit in the late 1950s, which persisted into the 1960s when the total value of the US gold stock, valued at US\$35 per ounce, fell short of the foreign dollars holdings. President John Kennedy's efforts in 1963 to support the dollar were not successful. Moreover, the expansionary monetary policy and rising inflation in the US resulting from the Vietnam War made the dollar overvalued, especially with respect to the mark and the yen. In August 1971, President Nixon suspended the convertibility of the dollar into gold; hence the foundation of the Bretton Woods System cracked. The efforts of 10 major countries (Group of Ten), who met at the Smithsonian Institution in Washington in December 1971 to save the Bretton Woods System, were not successful. In February 1973, the dollar experienced a heavy selling pressure, and the price of gold was raised from US\$38 (the Smithsonian Agreement) to US\$42 per ounce. In March 1973, European and Japanese currencies were allowed to float, which completed the fall of the Bretton Woods System.

Following the demise of Bretton Woods, the IMF devised some additional means to supplement its resources, such as special borrowings from particular members over and above their quotas. But the quota system remains the main basis of the IMF's financial resources.

A major innovation, agreed in 1967 but only implemented as the Bretton Woods System ended, was the creation of a new form of international money under the control of the IMF, which had some similarities with the *bancor* Keynes had proposed. This new source of international liquidity is called 'Special Drawing Rights' (SDRs). Member countries' international liquidity was increased by the creation of SDR accounts for them at the IMF. In addition, SDRs became the unit of account for all transactions involving the IMF and World Bank. Transactions are denominated in SDRs and official measures of countries' international reserves and debt are recorded in SDRs. Nevertheless, SDRs have not replaced the US dollar as the main form of international money.

Reading 1.5

Now read on in Chapter 11 'The international monetary system', pages 268–96 of Pilbeam, which looks at the aftermath of Bretton Woods.

Bearing in mind that a major concern under the Bretton Woods System was whether the stock of US dollars was a sound basis for an adequate growth of world liquidity, make notes on the various alternatives proposed.

Pilbeam (2013) Sections 11.6–11.21 from Chapter 11 'The international monetary system' in *International Finance*. pp. 268–96.

1.6 The Flexible Exchange Rate Regime: 1973 Onwards

Within the floating-rate system that developed after the fall of Bretton Woods, the US dollar remained the main currency in international transactions, and all major exchange rates continued to be quoted in terms of the US dollar. The term 'floating-rate' does not imply a freely floating or *laissez-faire* system in which market forces are the only determinant of exchange rates. In 1974, the IMF guidelines specified that member countries should intervene to prevent 'disorderly conditions' in the foreign exchange market. This was followed by another IMF meeting in January 1976 in Jamaica (*Jamaica Agreement*) in which:

- central banks were allowed to intervene in exchange markets to iron out unwarranted volatilities
- gold was demonetised as an international reserve asset.

During the period 1973–84, industrial countries did their best to smooth short-term variability in the dollar exchange rate while not committing to an official par value or to long-term exchange rate stability. The United States, however, remained passive in the foreign exchange market.

Following the US expansionary fiscal policy and tight monetary control in 1981, and the large-scale inflows of foreign capital caused by unusually high real interest rates, the US dollar experienced a prolonged appreciation (50% in 1985 relative to 1980 in real terms). This resulted in a loss of international competitiveness of US exports while Americans enjoyed cheap imports. In 1985, the Group of Five (G5: Britain, France, West Germany, Japan and the United States) met at the Plaza Hotel in New York City to intervene in the

market. This *coordinated intervention* was a clear signal of a new era influencing foreign exchange markets. In anticipation of the dollar's falling too far, the G-5 plus Canada and Italy (the G-7) made another attempt, in a meeting held at the Louvre in Paris in 1987, to foster stability of exchange rates around their target zones, although the zonal boundaries remained secret. However, the *Louvre Accord* created what is known as the *managed-float* system.

Since June 2009, 69 countries, including the United States, the UK, Japan and Canada, have independently adopted floating systems without pegging; a majority of countries, including China, have accepted some form of 'managed-floating' system, which combines market forces and government controls. EMU members have adopted the Euro as a currency which floats against other currencies externally. For details of individual countries' exchange arrangements, study Pilbeam's Table 11.9, on pages 286–87.

Reading 1.6

Turn now to Pilbeam's conclusions on the Bretton Woods era, the final section of Chapter 11 'The international monetary system' on pages 296–97.

Pilbeam (2013) Section 11.22 'Conclusions' from Chapter 11 'The international monetary system' in *International Finance*. pp. 296–97.

1.7 The Rise of the Eurodollar

As you saw in your reading of Pilbeam, the breakdown of the Bretton Woods System was followed by a system of floating exchange rates, although it included a number of important arrangements for fixing or regulating the exchange rates of several countries. Those exchange rate arrangements were an important feature of the new landscape. However, I think the outstanding feature that really defines the second stage of the modern evolution of international finance was a new institutional development, the rise of Eurodollar markets and Eurodollar banking.

Before going any further, however, let me confess that I am making two simplifications that involve some distortion of the truth. First, 'Eurodollar' is, strictly speaking, an inaccurate term for these developments because the characteristics of Eurodollars are shared with other currencies – there are Euroyen, Eurosterling and other Eurocurrencies – but the new stage originated with Eurodollars and they remain the most important Eurocurrency. I shall continue, therefore, to use the term *Eurodollar* for all the Eurocurrency markets. Second, the Eurodollar existed before the breakdown of the Bretton Woods System in 1971, but its dramatic growth and rapid evolution occurred from 1973 and imposed its mark on all subsequent developments in international finance.

The essential and distinguishing feature of Eurodollar markets is that they are outside the control of any state or national regulation. The banks which are the institutions at the base of the Eurodollar system developed because Eurodollar business was not subject to reserve requirements, requirements for deposit insurance, interest rate controls or other controls that governments and central banks impose on banks operating within their national

financial system. Eurodollar deposits and loans are truly international forms of money and finance in a way that previous monetary and financial instruments were not.

That international character of Eurodollars can be seen from the definition of a Eurodollar bank deposit. *It is a deposit of US dollars held in a bank outside the United States*. Today, it may be physically in the United States, but held in an 'international banking facility', which is effectively outside that country because it is exempt from the controls over 'normal' dollar accounts in the US.

The rapid growth of Eurodollar deposits held in banks in London and elsewhere from 1973 was accompanied by new forms of bank lending by the Eurobanks. From 1973 to 1982, they greatly expanded their loans of Eurodollars to a group of third world countries, most prominently Brazil and Mexico. These loans were sovereign loans (general credits to states rather than to companies) and their growth was based on the development of new lending techniques. These new techniques were crystallised in syndicated loans with variable interest rates linked to *LIBOR*, the London InterBank Offer Rate.

However, sovereign loans from banks to Third World countries are not the only form of Eurodollar credits. Eurodollar loans from banks to large United States and British companies to finance take-over activity became especially important after 1982. And Eurodollar finance in the form of marketable bonds instead of bank loans also grew in relative importance in the 1980s. These provide some indication of the permanent change in international finance created by the development of Eurodollars, but have Eurodollars had wider effects on methods of banking and credit?

From the point of view of bank liabilities, the Eurodollar deposit in a bank is at the base of the system and this has raised the question of whether these deposits represent a net creation of new money. To what extent do Eurodollars increase the stock of international money?



I would like you now to read the whole of Chapter 12, pages 298–316, of Pilbeam.

While you read it, I would like you to keep in mind those two questions and write brief answers to them as you complete the reading:

- what effects has the Eurodollar system had on the development of banks and credit?
- what is the relationship between Eurodollar banking and the stock of money?

Pilbeam (2013) Chapter 12 'The Eurocurrency and Eurobond markets' in *International Finance*. pp. 298–316.

1.8 The Latin American Debt Crisis

The growth of sovereign lending by Eurobanks in the 1970s came to an end –for the time being – in 1982, when it became clear that many heavy borrowers were unable to repay their debts on schedule. The signs of that international debt crisis, now known as the Latin American debt crisis, were

apparent from early 1982, but the real signal of its beginning was Mexico's declaration on 12 August 1982 that it could not meet its debt repayments.

Pilbeam discusses this international debt crisis in his Chapter 15. A good discussion of the background to the debt crisis, including its origins and emergence and the Mexican moratorium, is introduced in Sections 15.7 to 15.10. A good account of the definition of low- and middle-income developing countries, their typical financial characteristics and the measures of indebtedness is also provided in the first sections of that chapter, which you may read if you are interested in economic development.



Please be sure to read now Sections 15.7 to 15.10 of Chapter 15 'The Latin American debt crisis', pages 377–82, of Pilbeam.

Pilbeam (2013) Sections 15.7–15.10 from Chapter 15 'The Latin American debt crisis' in *International Finance*. pp. 377–82; 370–77.



If you are particularly interested in the characteristics of developing countries, you should also read the first sections of Pilbeam's Chapter 15, pages 370–77, but those pages are optional.

I think the problems created by the outbreak of the debt crisis and the way the international financial community dealt with the problems and overcame them represent a new, third, stage in the evolution of the modern system of international finance. To understand the system of international finance from the 1990s it is necessary, I think, to examine how the debt crisis evolved in the previous decade. Let me identify two aspects that I think were key.

One is that, as it faced the 1982 debt crisis of Mexico, the International Monetary Fund linked its willingness to lend to Mexico with the willingness of private banks to extend their lending to Mexico. Since that time, private bank lending to less developed countries and lending by the International Monetary Fund (and World Bank) have been explicitly linked. That is in contrast to the earlier stages of the modern international system. Under the arrangements established at Bretton Woods, it was envisaged that the International Monetary Fund, as an official body of member states, would stand above the banking system and, in the view of some, counteract its operations on international money markets; but in the 1980s a partnership was explicitly recognised.

On their part, before 1982, the banks generally preferred borrowers to have an IMF stabilisation programme in place, but in those early days there were major examples, such as Brazil, where the banks loaned money without an IMF programme. After 1982, the precondition for all new or rescheduled sovereign lending was an IMF programme. The new connection between private banks and the IMF (and the World Bank) reached its peak with the Baker Plan – a plan for solving the Latin American debt crisis, which was promulgated by the US Secretary of the Treasury in October 1985.

A second key effect of that debt crisis on the international financial system was that the banking system developed a different approach to risky loans. In the popular view, and the view of bankers and economists in earlier periods, the risk of lending to a state had previously been seen in terms of the probabilities of two alternative extreme outcomes. It was seen as an 'either/or' risk – either the debtor pays the interest and repays the principal without problems, or the debtor defaults. In fact, the third world debtors did not formally default on their loans; instead, bad loans were treated by the banks as 'non-performing' but still recoverable, and a number of different arrangements such as rescheduling through negotiations were set in motion. In the process, the debt crisis of the 1980s led to the development of new types of markets, and new regulations and forms of calculating and accounting for risk.

One such development was the creation of a market for the banks' bad loans to countries; banks could sell their bad debts at a substantial discount, which reflected estimates of the probability of servicing and repayment. In other words, a market assessment of the riskiness of bank loans to sovereign borrowers became available, in contrast to previous times when the only assessment was internal bank evaluation, and the market assessment, as reflected in the price, covered a full range of probabilities.

Another development was that banks were forced to reappraise the adequacy of their own capital base, the value of the equity capital shareholders had put into the bank, relative to both the volume and riskiness of the loans they made (and also relative to the variance of their deposit and debt liabilities). The bad debts or 'non performing loans' resulting from the international debt crisis caused banks to show losses which reduced their equity capital, and in rebuilding their capital base they had to judge its adequacy in relation to those risk assessments in a more rigorous and explicit manner than previously.

Reading 1.9

To examine the Latin American debt crisis in more detail, now read pages 382–400 of Pilbeam now, concentrating particularly on the role and viewpoints of the actors in the debt crisis (Section 15.13) and the management of the debt crisis (Section 15.14).

As you read it, try to answer these three questions:

- why did the less developed countries not default on their debts?
- what were the main mechanisms and arrangements through which the debt crisis was managed and ameliorated from the banks' point of view?
- what were the main effects on the international financial system of this debt crisis?

I would like you to bear in mind another point. The international debt crisis that broke in 1982 was not the only modern crisis for the international banking system. It led the Euro banks to reduce to almost nothing their sovereign lending to less developed countries. Instead, they made large scale loans available for real estate and property development in the major industrialised countries, and for stock market take-over bids in the US and

Pilbeam (2013) Sections 15.11–15.17 from Chapter 15 'The Latin American debt crisis' in *International Finance*. pp. 382–400.

UK. The growth of these types of lending in the 1980s led to a new crisis of bad loans by the end of the decade as they proved to have been based on faulty risk assessments.

The 1990s saw the globalisation of capital markets and with it a resurgence of lending to developing countries. However, this time around it was not only governments and banks that resumed lending to developing countries. Private sector financial flows shot up as lenders sought to invest in emerging market assets. But the financial systems in many emerging economies were poorly supervised, inadequately regulated and weak. In 1997, another crisis broke and investors pulled out of Thailand, Indonesia, South Korea and Mexico.

With the globalisation of financial markets, panic set in as investors everywhere sought to sell their riskier holdings and cover their losses. The turbulence on world markets continued in 1998 and people began to raise questions about whether or not there was a need for some type of international financial regulation or supervision. While capital markets may be international in scope, supervision and regulation remained mainly a national matter throughout the 1990s.

In the first decade of the 21st century, globalisation of financial markets expanded further and with that, innovation in financial products and in the business models of financial institutions. One outcome of this development as well as of various nations' economic policy choices, was a further inflation of property and other asset prices in many developed economies. The end of that boom saw another, deep and wide, global financial crisis which arose in 2007–08 and whose seriousness reflected the size and the interconnectedness of international financial institutions, reached through market innovation and expansion.

The global crisis has provoked much urgent debate on the appropriate national and international policy responses, as well as much reflection on the balance of market mechanisms and regulation. International coordination of crisis management, of policy formation, and of regulating international financial institutions, has very much put the international financial system centre stage.

We shall return to debates about both the 1997 Asian financial crisis and the 2008 global crisis at the end of the module, considering financial innovation and also returning to the questions posed in this unit including the merits of fixed and floating exchange rates and of currency union arrangements, particularly that of the Eurozone.

Meantime, the concepts and issues introduced here, have prepared you for the study in the following units, of how international finance has been understood, analysed and modelled – turning next to the foreign exchange markets.

1.9 Conclusion

In this unit, we have surveyed the development of the modern system of international finance. Can you now write a brief statement defining each of the concepts I listed previously?

- Bretton Woods system
- Eurodollar system (and other Eurocurrencies)
- Latin American Debt Crisis
- Fixed Exchange Rate system
- Floating Exchange Rate system?

Exercise 1.1

Pause now and write two or three paragraphs on each.

Now that you have a clear understanding of each of those concepts, you should be able to answer the question I posed at the beginning of the unit:

 Under the Bretton Woods system, was international finance regulated by public institutions instead of markets, and did the development of the Eurodollar system reverse the situation to one in which markets operated without regulation?

Exercise 1.2

Please pause here and write a few paragraphs in answer to that question.

This unit provides a foundation for your further work on international finance. It shows how the present world of international finance developed and makes clear that, instead of being a fixed system or the only possible system, it is the product of previous developments; it, too, is developing and will be followed by other arrangements.

At each stage in the development of the international financial system, politicians and their advisers have had to grapple with difficult problems of economic or financial policy. In the following units you will study the principles and models that enable us to analyse those problems. But it is important to bear in mind that models reflect their time; theories of international finance that were developed in the era of the Bretton Woods System used different assumptions from theories that were developed in the context of the floating exchange rates of the 1980s.

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