

HISTORY OF EXCHANGE RATE REGIMES

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Özet

Döviz kuru rejimleri ekonomi literatüründe tartışmaların sürekli odak noktası olmuştur. Bu tartışmaların temelinde, kur rejimlerinin ekonomik istikrar ve büyüme üzerindeki etkisi bulunmaktadır. Ekonomi teorisi, kur rejiminin, orta vadede, doğrudan ve dolaylı olarak, istikrar ve büyüme üzerinde etkili olabileceğini göstermektedir. Kur rejiminin ekonomi üzerinde etkili olacağı genel olarak kabul görmüşken, hangi kur rejiminin daha iyi olduğu konusunda iktisatçılar arasında görüş birliği söz konusu değildir. Bu çalışmanın amacı ülke ekonomilerinin, 1980 sonrası yaşanan liberalizasyon dalgasıyla beraber, ihracat odaklı yeniden yapılanmaları sonucunda döviz kuru ve belirlenmesinde kullanılan sistemlerin giderek daha fazla önem kazanmasına bağlı olarak, tarihsel açıdan 19. Yy'ın sonundan itibaren uygulanan döviz kuru sistemlerini tarihsel bir bakış açısıyla incelemektir. Çalışma bu amaçla beş ana bölümden oluşmaktadır. Sırasıyla, Altın standardı, savaş arası dengesizlik dönemi, Bretton-Woods sistemi, Bretton-Woods sonrası sistem ve Avrupa para sistemiyle ilgili teorik ve uygulama bilgileri verilmiştir.

Anahtar Kelimeler: Döviz kuru sistemleri, Avrupa para sistemi, Bretton-Woods

Jel Kodları: F31, F33, N10

1. Introduction

The international monetary system refers to framework of rules, regulations and conventions that govern the financial relations between countries. The importance of the international monetary system is implied by Adam Smith's (1776) description of it as the 'Great Wheel' because 'when it does not turn well it adversely affects the welfare of nations'.

Currency regimes, until recently, have relied on a link to a valuable commodity, usually gold or silver, to establish the value of currency. International exchange of currencies was normally based on their bullion value, whatever their value in tale (James et. al. 2012).

The international monetary system and exchange rate arrangements that have been used in practice begins at 1870, which is the year that marks the beginning of the classical gold standard.

1. History of Exchange Rate Regimes

Currency regimes, until recently, have relied on a link to a valuable commodity, usually gold or silver, to establish the value of currency. International exchange of currencies was normally based on their bullion value, whatever their value in tale (James et. al. 2012). Exchange rate determination problem is going to be obvious after removing the restrictions on financial capital movements after 1970's (Ucan et al. 2014, p. 366). The international monetary system and exchange rate arrangements that have been used in practice begins at 1870, which is the year that marks the beginning of the classical gold standard.

1.1. The Gold Standard

While no single date marks the emergence of the modern international monetary system, the widespread shift from bimetallic standards to gold in the 1870s and 1880s provides a convenient starting point.

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England was effectively on the gold standard starting in 1817, with silver coins becoming subsidiary currency whose value established by fiat, not by their bullion value. However during much of the nineteenth century, other European countries, the United States, Japan and India variously have a silver standard or a bimetallic standard whereby both gold and silver coins were supposed to reflect their metallic content. However, the relative market price of the bullion content of gold and silver coins in any given country on a bimetallic standard could differ from exchange rates implied by their nominal values. If the divergence was too great, this led to the operation of Gresham's law, in which the bad money, whose official value was greater than its bullion value, drove out the good money. As a result, countries on a bimetallic standard faced the prospect of either the gold or the silver coins disappearing from circulation. If the price of gold relative to silver differed significantly from the exchange rate implicit in the coinage (James et. al. 2012, p. 135).

The classical gold standard is a system of symmetrical adjustment between surplus and deficit countries where central banks, playing by the rules of the game, would allow gold flows to regulate the money supply.

The gold standard did not encompass the entire world but only a core of major countries led by Britain and including France, the Netherlands, Germany and the United States as well as a number of smaller West European countries. Britain went on the gold standard in 1821, when the Bank of England was legally required to redeem its notes and coins in gold and when the prohibition of the melting of coins and the export of gold was repealed. In doing so, Britain formally met the condition of being on the gold standard. By the mid-1870s, France had abandoned bimetallism in favour of gold. In 1870, Germany was still on the silver standard, but war reparations in the form of gold payments from France enabled it to adopt the gold standard. And in 1879, the United States returned to the gold standard after the suspension of gold convertibility during the Civil War. In general, 1870 is regarded as the year in which the gold standard became operational on a global scale (Moosa, 2005, p. 141).

Ghosh et. al (2002) argue that the gold standard's survival may be attributed to four factors. First, trading nations were discovering the benefits of global standards, whether it was defining the prime meridian or measuring the meter. Setting a standard for trade and payments was a natural complement of those conventions. Second, the fortuitous discovery of the Klondike gold fields in 1896, coupled with advances in mining technology, augmented world gold stocks, easing deflationary pressures. Third, downward flexibility of wages and prices reduced the costs of the deflationary pressures. Finally, there was no serious challenger to the gold standard: Stabilizing output or reducing unemployment were not yet considered proper policy objectives. This consensus gave the regime much greater credibility than any modern exchange rate peg.

Central banks were seldom prepared to accept the full consequences of unfettered gold flows. The three decades of the gold standard were a period of exchange rate stability and rapidly expanding trade and financial linkages. The performance was greatly helped by stabilizing role played by Great Britain. Sterling assumed an increasingly pivotal role in international transactions, both private and between central banks. Monetary policy in Great Britain thus took on a leadership role allowing the Bank of England to function as the "invisible conductor" of the system (Ghosh et.al, 2002, p. 9).

The classical gold standard is based on the following pillars:

- Member countries adhere to gold convertibility of their currencies, a commitment that can be viewed as a mechanism to the pursuit of sound monetary and fiscal policies .
- The monetary authority in each country fixes the price of gold in terms of the domestic currency, standing ready to buy or sell any amount of gold at that price.
- This establishes a fixed exchange rate between any two currencies called the 'mint parity'.
- The actual exchange rate can vary above and below the mint parity only between certain limits called the 'gold points', which are determined by the cost of shipping gold between the two currencies.

The automatic adjustment in the balance of payments is based on the ‘price-specie flow mechanism’ (PSFM) where the word ‘specie’ means precious metal. The system was developed by David Hume. This mechanism hinges on two assumptions. First, the money supply consisting of gold or paper money backed by gold, and second, the quantity theory of money (Moosa, 2005, p. 144).

The most remarkable feature of this model is its durability: developed in eighteenth century, it remains the dominant approach to thinking about the gold standard today (Eichengreen, 2008, p. 24).

According to Moosa (2005) the PSFM process may be described as follows:

- A deficit country loses gold. As soon as the domestic currency dips below the mint parity, people sell it to the central bank for gold and ship the gold overseas, selling it in exchange for the foreign currency. Similarly, a surplus country accumulates gold.
- The movement of gold out of the deficit country causes monetary contraction.
- Given the quantity theory of money, deficit countries experience deflation whereas surplus countries experience inflation, and this leads to a correction in the balance of payments.

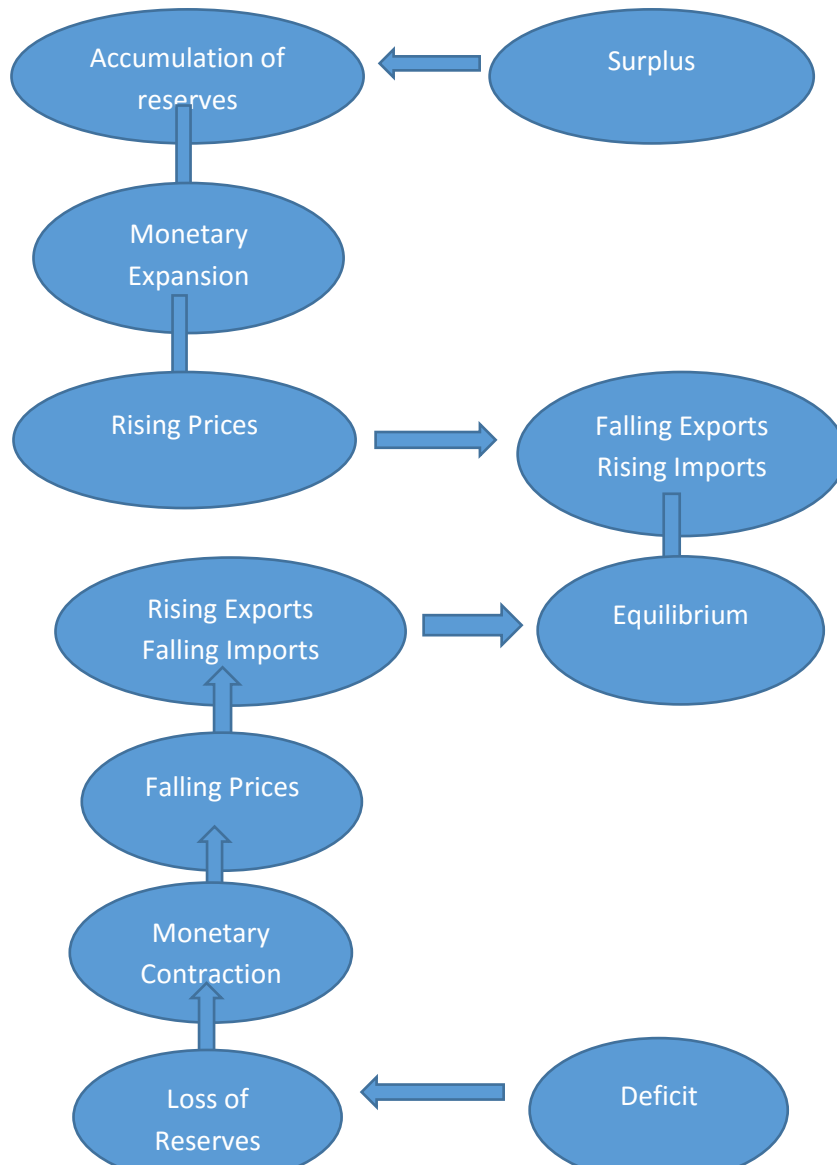


Figure 1: Price-specie flow mechanism

Source: Moosa, 2005

The strength of this formulation was its elegance and simplicity. It was a parsimonious description of the balance of payments adjustment mechanism of the mid eighteenth century. But as time passed and financial markets and institutions continued to develop, Hume's model came to be an increasingly partial characterization of how the gold standard worked. Accuracy required extending Hume's model to incorporate two features of the late nineteenth century world. One was international capital flows. Net capital movements due to foreign lending were larger, often substantially, than the balance of the commodity trade. Hume had said nothing of the determination of these flows. The other future was the absence of international gold shipments on the scale predicted by the model (Eichengreen, 2008, p. 25).

Extending Hume's model to admit a role of capital flows, interest rates and central banks was feasible but The World War I disables this. In addition to World War I, gold discoveries of the 1890s receded, concern resurfaced about the adequacy of gold supplies to meet the needs of the expending world economy. It was not clear that supplementing gold with foreign exchange provided a stable basis for the international monetary order. The growth of exchange reserves would cause the liquidation of the system. The growth of the United States, while still heavily agricultural, was by the end of the nineteenth century the largest economy in the world. The still heavily agricultural orientation of the economy, along with its relatively rudimentary rural banking system, meant that the demand for currency and coin rose sharply each planting and harvest season. Much of this gold was drawn from London (Eichengreen, 2008, p. 42).

The classical gold standard came to an end with the outbreak of war in 1914; countries establish limits on the convertibility of their paper currencies into gold as well as restrictions on gold movement abroad. Although most of the major countries resumed a link to gold during the 1920s, the system collapsed a few years later as a result of the economic downturn and banking crisis of the Great Depression (James et. al, 2012, p. 136).

1.2. Interwar Instability

In the period between the end of the First World War and 1926, a system of flexible exchange rates was adopted. During that period many countries experienced hyperinflation. There was a desire to go back to the gold standard, but there was an obvious shortage of gold at the prewar levels of the fixed exchange rates. In 1922, the Genoa Conference recommended worldwide adoption of a gold exchange standard, whereby the pound would be convertible into the pound. In 1925, Britain reestablished the convertibility of the pound into gold. Soon after, other countries restored convertibility at the prewar parities. The gold exchange standard was born (Moosa, 2005, p. 152).

The development of the international monetary system between the wars can be understood in terms of three interrelated political and economic changes. The first one was growing tension between competing economic policy objectives. Currency stability and gold convertibility were the unquestioned priorities of central banks and treasuries up to the outbreak of World War I. In the 1920s and 1930s things were different. A range of domestic economic objectives that might be attained through the active use of monetary policy acquired a priority they had not possessed in the nineteenth century. The tradeoff between internal and external objectives began to bind. Second one is changed international capital flows. Capital flows were part of the glue that bound national economies together. They financed the trade and foreign investment through which those economies were linked. When monetary policies enjoyed credibility, those capital flows relieved the pressure on central banks to defend temporarily weak exchange rates. But the new priority attached to internal objectives meant that credibility was not to be taken for granted. In the new circumstances of the interwar period, international capital movements could aggravate rather than relieve the pressure on central banks. The third development that distinguished the prewar and interwar periods was the changing center of gravity of international system; its weight shifted away from the United Kingdom and toward the United States (Eichengreen, 2008, p. 89).

The interwar gold standard was characterized by rivalry among key currencies, in particular, the pound, sterling and US dollar, in their roles as vehicles for international trade and finance. Many smaller countries pegged to these currencies, rather than to gold directly. This regime is better characterized as a gold exchange standard since these currencies, which could be exchanged into gold, nevertheless carried out most of the functions of international money and other countries often held their reserves not in gold, but in key currencies (James et. al., 2012, p. 136).

When it broke down, exchange rates fluctuated in ways that were viewed as inhibiting adjustment, at times reflecting deliberate attempts to gain competitive advantage by overdepreciating one's currency. This period gave flexible exchange rates a bad name (Nurkse, 1944).

By the mid twentieth century the international monetary system had splintered into three blocs: the residual gold standard countries; the sterling area and the Central and Eastern European countries. And this tripolar international monetary system was not stable.

Things were fine until France and other countries decided not to accept any more pounds and to convert foreign exchange holdings into gold at a time when the Great Depression had given rise to serious balance of payments difficulties for Britain. Beginning with Britain in 1931, one country after another left the gold exchange standard. The immediate reason was the breakdown of confidence following the world economic crisis, but more fundamentally, the reason was the rejection of the international consequences of the gold standard adjustment mechanism. Price and income deflation is an effective method of eliminating the balance of payments deficit but in the presence of price and wage inflexibility, unemployment is bound to rise, And unless there is a slack in the economy the adjustment mechanism tends to cause inflation in surplus countries (Moosa, 2005, p. 153).

Obstfeld et al. (2005) explain what happened in the interwar period in terms of the trilemma. At the most general level, policy makers in open economies face a macroeconomic trilemma. Typically they are confronted with three typical desirable, yet jointly unattainable objectives:

- To stabilize the exchange rate;
- To enjoy free international capital mobility;
- To engage in a monetary policy oriented toward domestic goals (Obstfeld et al., 2005, p. 423).

Because only two out of three objectives can be mutually consistent, policy makers must decide which one to give up. This is trilemma. Obstfeld et al. (2004) argue that during the interwar period the trilemma forcefully made its presence felt for the first time in the great debate over the political economy of macroeconomics.

1.3. Bretton-Woods System

The Bretton Woods system was born in 1944 in Bretton Woods and endorsed by the delegates of 44 countries. The creation of this system was accompanied by the birth of national institutions, including the World Bank and the International Monetary Fund (IMF). The IMF was entrusted with the supervision of the new international monetary system as well as the function of granting loans to deal with the balance of payments difficulties, whereas the World Bank specialized in granting loans for the reconstruction of Europe and for development purposes. Negotiators at Bretton Woods sought an exchange rate system that would combine the advantages of both fixed and flexible exchange rates. The choice was a system of fixed but adjustable exchange rates, the adjustable peg. Therefore, the dollar was pegged to gold at the fixed parity of 35 \$/ounce, and the USA was prepared to buy and sell unlimited amounts of the metal at this price. Other countries were required to declare the par values or parities of their currencies in terms of gold or dollars and to defend the declared the parity rate in the foreign exchange market by buying and selling the dollar. Hence, the dollar became the key and intervention currency. The IMF was given the responsibility of supervising the system and making sure that member countries adhered to the agreement (Moosa, 2005, p. 154).

The main monetary institution created at Bretton Woods was the IMF. IMF sets out the objectives of a new international monetary system:

- To promote exchange rate stability;
- To give confidence to member countries by making available the IMF's resources with adequate safeguards;
- To promote international monetary cooperation by consultation and collaboration on international monetary problems;
- To facilitate the balanced growth of international trade and high levels of unemployment and real income;
- To establish a multilateral system of payments for current account transactions;
- To shorten the duration and lessen the degree of disequilibrium in the balance of payments (Hallwood, MacDonald, 2000, p. 354).

The architects of the Bretton Woods system wanted a set of monetary arrangements that would combine the advantage of the classical gold standard with the advantage of floating rates. They sought to avoid the defects of floating rates and the defects of the fixed exchange rate gold standard (Bordo, Eichengreen, 1993, p. 5).

All members were urged to declare a par value and maintain it within a $\pm 1\%$ margin of parity. Parity could be changed in the event of fundamental payments disequilibrium at the decision of the member, after consultation with the IMF. About multilateral payments members were supposed to make their currencies convertible for current account transactions but capital controls were permitted. They were also to avoid discriminatory currency and multiple currency arrangements. As under the White Plan, members could obtain resources from the IMF to help finance short or medium term payments disequilibria. The Fund set a number of conditions on the use of its resources by deficit countries to prevent it from accumulating soft currencies and from depleting its holdings of harder currencies (Bordo, Eichengreen, 1993, p. 35-36).

The main conditions necessary for the operation of the Bretton Woods system lasted only from about 1959 to 1971. Moreover, the U.S dollar came to play such a predominant role as a reserve asset, that some authorities have described the international monetary system at this time as being a 'dollar standard' (Hallwood, MacDonald, 2000, p. 355).

By 1968, the international monetary system had evolved very far indeed from the model of the architects of the Bretton Woods. In reaction to both the development of financial markets and the confidence problem, the system had evolved into a de facto dollar standard. However, gold convertibility still played a role. Although the major industrial countries tacitly agreed not to convert their outstanding dollar liabilities into US monetary gold. At the same time, as Japan and the countries of continental Europe gained in economic strength relative to the US, they became more reluctant to absorb outstanding dollars. They were also reluctant to adjust their surpluses by revaluing their currencies. They increasingly came to believe that adjustment should be undertaken by the US. The system had also developed into a de facto fixed exchange rate system. However, unlike the classical gold standard, where the fixed exchange rate was the voluntary focal point for both internal and external equilibrium, in the Bretton Woods system exchange rates became fixed out of the fear of the consequences of members allowing them to change. Nevertheless, because of increased capital mobility, the pressure for altering the parities of countries with persistent deficits and surpluses became harder to stop through the use of domestic policy tools and the aid of international rescue packages. Pressure increased from both academic and official sources for greater exchange rate flexibility (Bordo, Eichengreen, 1993, p. 73).

In addition, high capital mobility under Bretton Woods system, suffered countries from speculative attacks when their par values came to look vulnerable instead of being able to pursue unsustainable policies for years while building up a vast mountain of foreign debt (Williamson, 1985, p. 76).

The Bretton Woods system collapsed with the declaration of the legal inconvertibility into gold of the U.S dollar on August 15, 1971. It was *de jure*, but the dollar had actually been convertible (*de facto inconvertibility*) for several years. The amount of dollars officially held by non U.S central banks was, much greater than the official U.S gold reserve, and the system was able to keep going only because these central banks did not actually demand the conversion of dollars into gold (Gandolfo, 2002, p.35).

After the collapse, Bretton Woods system was replaced by a situation in which many countries adopt a regime of managed or dirty float, where no officially declared parities exist and the exchange rates float.

1.4. The Post Bretton Woods System

The Jamaica Accord of 1987 allowed countries the freedom of choice of the exchange rate arrangement they deemed appropriate for their economies, encouraging them not to resort to competitive devaluation. Finally, the official price of gold was abolished and replaced with a market determined price. Currently, major industrial countries adopt a system of floating exchange rates, whereas major European countries are members of the European Monetary Union (Moosa, 2005, p. 160).

Stripped of the insulation, governments and central banks found the operation of pegged but adjustable exchange rates increasingly problematic. The alternatives to peg but adjustable rates were polar extremes: floating and attempting peg once and for all. Large countries like the US and Japan opted to float. For smaller, more open economies, especially developing countries with thin financial markets, floating exchange rates were even more volatile and disruptive. They opted for the other alternative: attempting to establish a fixed currency peg. The countries of Western Europe, for whom intra-European trade was exceptionally important and whose Common Agricultural Policy (CAP) could be seriously disrupted by exchange rate swings, sought to peg their currencies to one another (Eichengreen, 2008, p. 135).

This term is called by Williamson (1976) “The non-system”. The non-system inherited some of the perceived defects of the Bretton Woods system (as no control over international liquidity and asymmetry in the need for adjustment of deficit and surplus countries) supplemented with much greater volatility of exchange rates and at times, large misalignment. At the same time, it allowed much more freedom in the use of monetary policies and no longer obliged countries to defend parities. The flexibility of exchange rates, which facilitated balance of payment adjustment, and the relative absence of rules of the game made the regime relatively robust. Assessment of whether the current regime is better or worse than the Bretton Woods system requires addressing two basic issues. First exchange rate volatility, second context of increasing global financial integration (James et al., 2012, p. 138).

Despite the fears that exchange rate variability would limit trade and foreign direct investment the post 1973 period has been characterized by an intensification of economic globalization. As a result, there has been an increase in trade relative to gross domestic product (GDP) and an even larger increase in cross border capital flows. Increased economic integration has had a number of causes:

- Technological innovations that have lowered communication and transportation costs;
- Successive rounds of trade liberalization;
- The inclusion of former communist countries into the world trading and financial system.
- Increasing capital market integration has also benefited from the introduction of new financial instruments and a reduction in the official barriers to capital flows (James et al., 2012, p. 139).

This increased economic integration has had at least three influences on the global economy. First, it has increased market discipline over government policies, making policy makers more conscious of the need to put their houses in order. Financial integration has made the discipline of the market much more strength. With increased cross border capital movements, the government cannot rely on a captive market to sell

its debt. Flexible exchange rates move quickly to reflect concerns about monetary policy credibility. Second, it has at times stimulated the perceived need for policy coordination across countries to mitigate unfavorable spillovers. Greater coordination of monetary policies has also taken the form of regional agreements. Third, it has helped bring the richer developing countries into world financial affairs, while making them more vulnerable to currency crises. Financial integration of developing countries has gone through three phases since 1973. The first phase involved the recycling of petrodollars to developing countries by banks, but which inadequate safeguards to ensure that the recipient countries were investing the funds wisely and would be able to repay their debts. The second phase, following the replacement of most of the remaining bank debt by Brady bonds, ushered in a period of major expansion of market based sovereign bond issues by emerging market countries. This phase was also accompanied by a series of crises, starting with Mexico in 1994, followed by Asia in 1997-1998, Brazil in 1999 and so forth. The third phase was in part a response to currency crisis and was accompanied by major reforms to reduce emerging market countries vulnerability. These reforms helped align their policies with those of the advanced countries and involved accumulation of foreign exchange reserves, strengthened financial regulation and improved macro-economic policies. For instance, a number of countries ranging from Mexico, Brazil and Turkey were led to adopt exchange rate flexibility and inflation targeting. (James et al., 2012, p. 139-141). Today the advanced countries are either float or part of Monetary Union. But in emerging markets are different from advanced (Yanar, 2008, p. 161).

1.5. European Monetary System

The agreement to establish the European Monetary System (EMS) as a 'zone for monetary stability in Europe' was reached in the European Council meeting held in Bremen, Germany, on 6-7 July 1978. All members of the European Economic Community (EEC) agreed to participate in all aspects of the EMS, except the UK, which chose not to join the exchange rate mechanism (ERM).

The core of the EMS is a system of fixed but adjustable exchange rates whereby each currency has a central rate expressed in terms of the European Currency Unit (ECU). This created a grid of bilateral central rates around a band of ± 2.25 per cent, except of the Italian lira (6 per cent). If the exchange rates moved above or below these limits, central bank intervention was obligatory. The second feature of the EMS pertains to the role of the ECU played in the system. The ECU performed the following functions:

- The numeraire for the exchange rate mechanism,
- The denominator for intervention and credit operations,
- A reference point for the divergence indicator,
- A means of settlement,
- And lastly a reserve asset (Moosa, 2005, p.162).

EMS, during the early life period, experiences some troubles that typically produced exchange rate realignment. The first realignment took place on 24 September 1979, when the mark was revalued while the Danish kroner was devalued. The first realignment that involved all of the currencies took place on 21 March 1983, when the French franc, Italian lira and Irish punt were devalued while other currencies were revalued. During this period, the pound joined the ERM at a central rate of 2.95 against the mark. The trouble started in September 1992, which was the beginning of the end of the EMS as a fixed but adjustable exchange rate system. Trouble coincided with the removal of capital controls in member countries in the spirit of the 1992 programme to unify financial markets within the European Community. Other relevant factors are the following:

- The fact that the pound became an ERM currency at an artificially high central rate,
- German reunification,
- The recession of 1992.

There is some evidence on the effect of the EMS on economic performance in EMS countries. These are summarized as follows (Giavazzi et al, 1988):

- The empirical assessment of the impact of the ERM on exchange rate variability has generally pointed to a reduction in the volatility of intra ERM nominal and real exchange rates.
- Available evidence also points to significant progress in the coordination of monetary policies among member countries.
- Convergence of economic indicators was achieved.

The EMS ceased to exist in 1999 when the European Monetary Union (EMU) was put in place. In December 1991, members of the European Community signed the Maastricht Treaty that specified a timetable for the move towards the EMU.

In January 1999, the common European currency, the euro, was introduced for trading but not in a hard form. Then in January 2002, the euro notes and coins were introduced, replacing twelve national currencies.

Conclusion

Certainly, the present international monetary system has its loopholes and weaknesses. The future of the system is a hot topic, both in professional and academic circles. But there seems to be no consensus view on the issue and where to go from here.

International Monetary Fund (IMF) and other organizations produce reports about international monetary system. There are obviously problems implementing the propositions, which are in the IMF reports, not least their adequacy for solving the world's financial problems and for preventing financial crises. Moreover, these views are not universally acceptable. Overall, there is no magic solution to the problems encountered by the international monetary system, simply because of the complexity of the issues under consideration.

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