

By Kyle Inan

# Evolution of the International Monetary System

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## **Аннотация**

This book purports to examine in-depth the historical evolution of the International Monetary System starting with the “Classical Gold Standard System” that was adopted by various governments around the world between the years of 1880-1914. Following the inception of the “Inter-war Period” which took place between 1918-1939, the Classical Gold Standard System was abandoned. It was only after the post-WWII period that this standard was restored only for a short-period of time until the emergence of the “Bretton Woods System” between 1944-1971 which completely replaced the gold standard system with the U.S. dollar.

# Kyle Inan

## Evolution of the International Monetary System

“A historical analysis of the Classical Gold Standard System, the Inter-War Period, the

Bretton Woods Agreement & the International Monetary Order of the Post-1973 Era”

*It is within the purview of this book to analyze the emerging monetary policy trends following the establishment of the Bretton Woods System that brought about the creation of the International Monetary Fund (the IMF) and the International Bank for Reconstruction and Development (IBRD) to assist member countries with restoring their balance-of-payments equilibrium through the enactment of fixed exchange rates currency regime and through credit lending to poor countries in need. The main purpose for introducing these systems was to concretely establish a “par-value” exchange rate among member countries in which they would peg their respective currencies to the U.S. dollar.*

*Furthermore, the book aims to explain the several important reasons for the failure of the world monetary reform after the collapse of the Bretton Woods System in an era compounded by*

*the problems of shortage of U.S. dollars in the world economy as well as the recurring trade deficits that forced European countries to reconsider their commitment to the fixed exchange rate system. The book explores the reasons that led to the creation of “the European Monetary System (EMS)” as well as the European motives behind creating a single unit of currency, vis-à-vis the “Euro.” It concludes with an overall analysis of the historical evolution of the international monetary system.*

## **The Historical Evolution of the International Monetary System**

Since the inception of the social dynamics crisis caused by the Napoleonic Wars until the wake of the Industrial Revolution in the eighteenth century, there was little room for global interaction among states as there was no stimulus to engage in international trade. The absence of a regulatory system around the globe followed by the exploitation of resources in underdeveloped countries by hegemonic powers, laid the foundations for excess capital mobility giving rise to disruptive shocks to the international system.

The lack of a worldwide commercial network and uncontrolled economic activity pushed countries away from the balance-of-payments equilibrium. The prospects for international trade remained relatively low; especially without the existence of institutions capable of supporting markets both at

the domestic and international levels.

By the end of the nineteenth century, the unilaterally adjusted monetary statutes of many nations around the world had created a set of conditions for the minting and circulation of two distinct metallic mediums of exchange: *gold* and *silver*. Countries that allowed the simultaneous circulation of gold and silver both as acceptable units of currencies in their economies were operating under a system that was known as “bimetallic standards.” At the time, with the exception of Britain and France, almost all of the European countries were operating on silver standards. In essence, Britain had differed from other countries that have previously adopted the silver standard mainly because the British economy had been using gold as the standard currency from the start of the century.

Similarly, France was also an exceptional case in this era since the French monetary laws were representative of bimetallic statutes. However, the privilege of allowing the simultaneous circulation of both gold and silver presented its own challenges.

A significant historical example of this dilemma was during the last years of the nineteenth century when 14.5 ounces of silver were being traded roughly for an ounce of gold in the market place in France.

From time to time, whenever the price of gold in the world market rose more than that of silver's, let us say up to a point

where 15 ounces of silver were being traded in exchange for an ounce of gold, then such a market price of gold would create an incentive for arbitrage. Thus, the arbitrageur would have a window of opportunity to be able to import at the previous quantity of “14.5” ounces of silver and have it coined at the mint price. Then initially, that silver coin would be traded in exchange for an ounce of gold and the gold (i.e. the extra half ounce of silver) that the arbitrageur had earned in the domestic market would be exported at a cheaper rate and be sold for 15 ounces of silver on foreign markets.

Ultimately, the arbitrageur would continue to export gold and double his earnings insofar as the market ratio had stayed considerably above the mint ratio.

Conversely, if the market ratio were to fall below the mint ratio (i.e. after a few discoveries of new gold reserves) then arbitrageurs would import gold and export silver. This window of opportunity was called the “*Gresham’s Law*”, where the bad money with a lower commodity value, vis-à-vis silver, would drive out the one with the higher commodity value, vis-à-vis gold.

In the last quarter of the nineteenth century, the shortcomings of the prevailing bimetallic system had divided the Western countries among themselves. This took place especially between those who were operating solely on silver as the only medium of exchange and those who were solely operating on gold as well as those operating on bimetallic standards; on both gold and silver.

This situation was causing many of the industrializing European economies to experience growing difficulties in international transactions as well problems in creating a smoothly functioning domestic economy.

As Britain and the United States, two countries that were fully committed to gold, emerged as the world's most prominent financial and industrial powers with the advent of the industrial revolution by the end of the century, some of the few countries with silver standards have decided to peg their silver coins to the gold standards of those countries. "By the beginning of the twentieth century, there had finally emerged a truly international system based on gold." (Eichengreen, 2008, pg. 19)

This system was called the "Classical Gold Standard System."

### **The Classical Gold Standard System (1880-1914)**

*"The breakdown of the international gold standard was the link between the disintegration of world economy since the turn of the century and the transformation of a whole civilization in the thirties." (Polanyi, The Great Transformation, pg. 20)*

Historically, the most famous and durable international monetary system was the Gold Standard System largely because several things have served as a medium of exchange in the early days of the nineteenth century. For instance, some of those things were cattle, sheep, wine, jewelry, and diamonds as well as many other precious stones that were being bought and sold in the markets. However, metal coins had some unique characteristics to be more acceptable; (I) First of all, metal coins were easy to

divide (divisibility), (II) Secondly, coins were also very durable (durability), (III) Thirdly, the supply of precious metals such as gold and silver were stable to a great extent, and their final and their most important feature which served in the facilitation of daily transactions (IV) was their recognizability. It is primarily for these reasons that metal coins became the most popular medium of exchange over time driving out others.

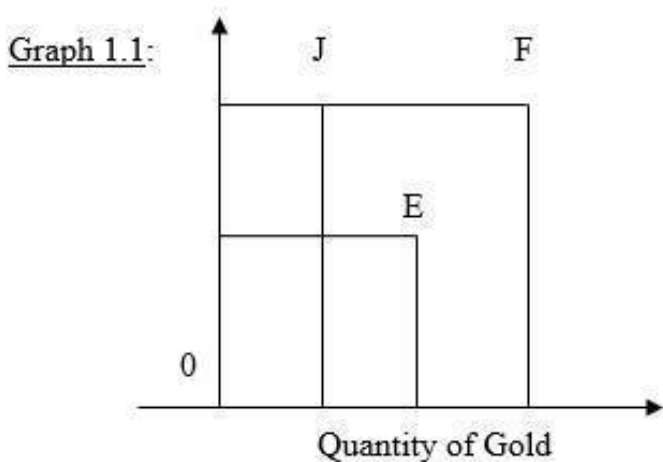
In addition to the gold's ability to serve, as an important medium of exchange, there were also three main rules to the Gold Standard; (i) All countries had to fix the price of gold in terms of their domestic currency. This was called the "mint price of gold." (ii) Governments had to support the mint price for transactions with the public to assure that the mint price equaled to the market price of gold. Because, in the event the market price is higher ( $\text{Market Price} > \text{Mint Price}$ ) than the mint price; then people would buy the gold from the government (i.e. from the Treasury Department of a given country) and the supply of gold in the market would go up while the market price of gold would go down. The opposite of this would happen whenever the market price of gold was lower than the mint price ( $\text{Market Price} < \text{Mint Price}$ ). In that case, people would choose to sell the gold to the government and the supply of gold in the market would go down whereas the market price of gold would eventually go up.

A third most striking feature of the Gold Standard System was (iii) the fact that the melting of gold coins was legal. This would assure that the value of gold coins was same for monetary and



non-monetary purposes.

At this point, some of us might inquire about the conditions as well as the factors that determine the value of money supply under the Gold Standard. An illustrative graphical example would help us explain the key determinants of the money supply of gold under this system.



Graph 1.1 shows that, the quantity of gold demanded for non-monetary purposes will go down and the quantity supplied of gold is also expected to increase after an increase in the price of gold. Under the Gold Standard System, the government will fix the *mint price* above the  $P_0$  level to assure that there is an

adequate supply of gold to make coins out of. At a mint price of  $P_m$ , the quantity demanded of gold for monetary purposes is the distance between the origin and point Q1, whereas the quantity supplied of gold equals the distance between the origin and point Q2. In this case, the distance between Q1 and Q2 or the range between points E and F will be the gold used in the making of coins. (i.e. excess supply of gold available for gold coins.)

Under the Gold Standard System, the value of money supply can also shrink or expand based on the demand for gold for non-monetary purposes and the supply of gold. Specifically meaning that shifts in demand for gold for non-monetary purposes or the supply of gold curve can create a change in the money supply.

There are three main reasons that would cause a significant shift in the demand curve. These are as follows: (1) if there is an increase in the income of consumers, (2) if there is a change in the expectations of future prices, and if (3) there is a change in the prices of related goods and services. Since an increase in demand for gold for non-monetary purposes can cause the money supply to decline, if the supply of gold increases after a gold rush (i.e. The U.S. California Gold Rush of 1848-1855) then a shift in the supply of gold curve can also be observed.

To summarize, there are primarily three distinct factors that can cause a shift in the supply of gold curve. The three factors are: (a) If there is an increase in the number of producers; for instance, if new gold mines are discovered. (b) If the cost of production changes; for instance, if transportation becomes

cheaper. (c) If there is a considerable change in the technology of production; for instance, it might become easier and less costly to extract gold with newly advanced technology.

Furthermore, a most remarkable feature of the gold standard system was its included benefits at the operational level. For instance, the money supply was independent of any government action mainly because the money supply would grow or expand at the same rate (simultaneously) with the gold supply. If there were no new discoveries of gold, then there would not be an expectation for an increase in the money supply.

Since governments had no control over the money supply under the Gold Standard, due to the aforementioned reasons, they would not be able to arbitrarily print more money and cause inflation. Therefore, there was virtually no possibility of inflation under this system. In other words, this system had promised long-term price stability to its owner, which could be described as its most significant benefit.

A second benefit of the Gold Standard was its unparalleled ability to cure its own disease, even in times of inflation. For instance, under inflationary situations, we would normally experience an increase in the price of goods and services and a decrease in gold prices. As a reaction to the change in the price of gold, producers in the economy would switch their resources to the production of goods and services instead of gold and the supply of gold would go down. As less gold is supplied, the prices

would go down. Therefore, under the Gold Standard System, there was also a *double attack* on inflation.

A third most noticeable benefit of the Gold Standard was the “Law of One Price.” This meant that there would be a tendency for all countries under the gold standard to have the same general price levels. As an example, if we were to assume that there were two countries (A & B) with general price levels being  $P_A$  and  $P_B$  respectively, and if  $P_A > P_B$  then, under free trade conditions, country A would import goods and services from country B and pay for those imports in terms of gold. In the outcome, for country A, goods and services would arrive and gold would be lost from that country. After a while,  $P_A$  would start declining. Concurrently, in country B, goods and services would be lost after gold is gained following the transaction. After a while,  $P_B$  would increase. Eventually, the prices would be equal to each other. ( $P_A = P_B$ )

At this point, we might be inclined to ask ourselves such questions as “What went wrong with the Gold Standard System” or “Why was it dismissed in the first place if it promised such numerous advantageous compared to other international monetary systems?”

In essence, a deeper examination into the intricacies of what is called the “price-specie-flow” mechanism will provide insights into this question and help us clearly understand the actual causes in explaining the deficiencies of the Gold Standard System leading up to its collapse after its abandonment by the United

States and Britain in 1931.

### **Price-Specie-Flow Mechanism under the Gold Standard**

During the last half of the nineteenth century, the persistent outflow of capital, along with the simultaneous rise in interest rates around the world has necessitated the establishment of a price-specie-flow mechanism. This system, founded by David Hume, intended to coordinate capital flows and help central banks restore their balance-of-payments equilibrium.

By proposing this mechanism, Hume argued against the idea of having countries strive constantly to maintain a positive balance of trade. The following logic behind this approach was whenever a country had a balance of trade surplus; it would attract a certain quantity of gold in the same amount that the value of exports exceeded the value of imports. Similarly, the opposite of this situation would happen in countries running a trade deficit. This would mean that there would be a gold outflow in the same amount that the value of imports exceeded the value of exports.

In the absence of a monetary authority to regulate the quantity of gold in circulation, the money supply in the country running a positive balance of trade would increase while the money supply would decrease in the country running a trade deficit. Then, based on the principles of quantity theory of money, the country with the money surplus would experience inflation as well as a simultaneous increase in the prices of goods and services, whereas the country with the money shortage would go through

a period of deflation after devaluation of goods and services. In essence, the emergence and the implementation of the price-specie-flow mechanism came with the idea of allowing *gold* to be the only currency in the world (or any other paper currency convertible into gold that would circulate in lieu of other metals.

The most dynamic and remarkable characteristic of this system was its “durability” which was concretely based on the premise of completely abolishing the imposition of import controls and thereby purporting to effectively facilitate the cross-border of goods and services around the world.

For instance, in countries where this system was adopted, each time a commodity was exported, the exporter of that good would receive payment in gold and the importer purchasing certain merchandise abroad, would make payment by exporting gold. For a country with a trade deficit, the number of imports would exceed the number of exports. The deficit country would then experience a significant gold outflow. “With less money (gold coin) circulating internally, prices would fall in the deficit country. With more money circulating abroad, prices rose in the surplus country. The specie flow thereby produced a change in relative prices (hence the name “price-specie-flow model”). (Eichengreen, 2008, pg. 24)

In return, domestic residents would decrease their purchase of goods and services since imports would become more expensive whereas the foreign residents would increase their purchase of goods and services since imported goods would become less

expensive for them. While the country running a balance of payments deficit would experience a rise in its exports and a decline in its imports until up to a point where the balance of trade is restored. This formulation of the balance of payments equilibrium created by Hume proves us the multiple benefits as well as the way in which the gold standard system has operated.

In addition to its ability to restore the balance of payments equilibrium in countries with a trade deficit, the high level of openness granted by the gold standard system had also served to expedite the process of economic integration which mostly benefited the world's leading exporters. Even though this system supremely favored Britain as the vanguard of this system. "Because, London was the center for the world's principal gold, commodities, and capital markets, because of the extensive outstanding sterling-denominated assets, and because many countries used sterling as an international reserve currency (as a substitute for gold), it is argued that the Bank of England, by manipulating its bank rate, could attract whatever gold it needed and, furthermore, that other central banks would adjust their discount rates accordingly." (Braga de Macedo & Eichengreen & Reis, 1996, pg. 17)

Therefore, it could just as easily be argued that the Bank of England had the financial prowess and the capacity to exert a powerful pressure on the price levels as much as on the money supplies of other countries that were adhering to the rules of the gold-standard.

Contrary to its financial comparative advantages, the gold standard system also had three distinct shortcomings. Costs of this system included the *tricky* position that governments had to deal with, which forced countries to obey a set of stringent rules and surrender the control of their money supply. For instance, under this system, (I) countries were expected to fix the mint price at a par value and legalize melting of gold coins which were basically unfavorable requests for countries that were short of gold reserves at the time. Another pitfall of this system was the fact that (II) one metal was given too much importance which essentially favored countries with gold mines than those without, which also turned it into a biased system.

Nevertheless, the greatest deficiency of this system was (III) whenever a member country would decide to break the rule, it was set to gain from it. For instance, if we were to suppose that the general price levels are greater in country A than in country B (if  $P_A > P_B$ ) and if country A was to quietly break the gold standard rule and increase its money supply (even if it does not have enough gold), then it would still keep on importing goods and services from country B and continue to pay in gold while maintaining higher price levels. Thus, according to the rules, if a country was running a trade deficit, it had to allow a certain amount of gold outflow until its price level was restored to the par value exchange rate of other countries. Some countries in Europe, such as France and Belgium that were operating on the gold standard system, chose not to follow this rule.



An example of a case where this rule was strictly observed was the case of the Central Bank of England, also known as the Bank of England. During the gold standard era, the Bank of England engaged in a leadership position as the most influential mechanism that would enforce the gold-standard regime. It has done so by strategically utilizing its monetary policies to maintain a certain level of gold convertibility.

In response to the demands of the Bank of England, other central banks in Europe acceded to the new policies it imposed by and assumed a passive stance. This was largely because of the benefits that they were able to accrue by clinging onto the *sterling* as the reserve asset. “Britain financed exports and imports in sterling bills, other countries their third-country trade also in sterling bills. Other countries thus had to hold balances in sterling.” (Kindleberger, 1993, pg. 71)

In addition, the Bank of England’s persistent agenda to uphold its dominant status as the central monetary authority during the era of the classical gold standard was further advanced by its extensive monetary operations that encouraged global trends such as; increasing short-term capital mobility and motivating central banks to push domestic rates downwards with the inflow of gold into these banks. Despite the Bank of England’s relatively scarce gold reserve, central banks had to continue to yield to the pressures exerted by it as they had a limited ability to effectively change their own monetary conditions, much less the international order itself. “On this showing, the Bank of

England set the level of world interest rates, which accounts for the fact that national interest rates moved up and down together, while other countries had power only over a narrow differential between the domestic level and the world rate.” (Kindleberger, 1993, pg. 73)

In response to the policies enforced by the Bank of England, insolvent central banks that suffered a significant loss in their gold reserves resorted to their domestic asset holdings so that they could push interest rates upwards, which would then attract short-term capital and limit the outflow of fresh capital. In turn, this reactionary policy would strengthen their domestic economies.

In addition, under the gold standard regime, sterling bills were the only worldwide-accepted currencies that also simultaneously retained the privilege of substituting for real money in other European countries.

While the Bank of England, as the central decision-making monetary authority of the classical gold standard era, had unlimited access to international markets. This allowed it to arbitrarily determine national interest rates of other countries as well. Therefore, it would not be a far-fetched argument to claim that the classical gold standard was after all a system based completely on the British *sterling*.

With the outbreak of WWI, governments and central banks around the world were forcefully confronted with a need to finance high levels of military expenditures with an extremely

limited source of tax revenue. Driven by the need to out compete each other in the race for war, many belligerent countries have gradually started abandoning the gold standard to issue un-backed paper currencies (which then would cause massive hyperinflation levels in these countries) while the Bank of England had temporarily suspended gold convertibility which meant that it had abolished the gold standard until after the war.

### **The Inter-war Period (1918-1939)**

At the onset of WWI, most industrialized nations of Europe have started issuing *fiat currencies* (un-backed paper) in an effort to fuel the war machine. This was a period in which precious metals such as “gold” and “silver” had become a critical resource for the procurement of war material. As a consequence of the rising value of gold and silver, governments have pursued protectionist policies to prohibit the export of such precious metals while continuing to issue fiat currencies without any value.

The arbitrary creation of these currencies to support war efforts at different rates has caused wide variations in the exchange rates among European countries to the extent that some had faced severe hyperinflation in their national economies. Some of the countries like; Germany, Hungary, Austria, and Poland of which hyperinflation had taken a very heavy toll on, have made several attempts to re-establish gold convertibility to fix the fundamental disequilibria in their balance of payments. However, the British Sterling, which had been providing the

strongest foundation for the harmonization of economic policies prior to the outbreak of WWI, was no longer enjoying its hey day.

Especially after the decline of the British industrial and commercial hegemony, countries that were previously renowned as international creditors have started losing their elevated positions after becoming heavily dependent on capital imports from the United States in exchange for maintaining a stable balance of payments equilibrium. After a while, it became evident that pre-war exchange rates could not be restored.

During the inter-war period, national price levels and interest rates rose to unprecedented proportions as each developing country, including the ones in the “most-industrialized” periphery (i.e. Germany, Japan), experienced both inflation and deflation in their domestic economies. The dissolution of Europe in the aftermath of WWI disrupted the orderly process of the gold standard and led to a period of persistent economic uncertainty. The Bank of England ceased issuing loans, as governments around the world, particularly in Europe, defaulted on their loans and their debt repayments for war reparations. Each country in Europe gradually started abandoning the gold standard. In the aftermath of WWI, strategic economic alliances that were made prior to the war all broke down with the possible advent of an even more destructive war.

As a result of this scenario, most of the belligerent countries have found their remedy in the procurement of arms and weapons by printing out of massive amounts of money to finance

their military expenditures and to support war causes, even though almost all of them have declared moratorium on their payments post-WWI. One example of such a case was Germany, as the industrial heartland of Europe suffered one of the most severe hyperinflations in world history with highest military spending.

In the ensuing political conflict after WWI, the structure of the world economy, including those of financial centers were also profoundly devastated. Countries that engaged in war started to yearn increasingly for the pre-war parities (as goods and services had become overvalued and undervalued) and for the restoration of the gold standard.

The decline in the Bank of England's wealth as the world's leading financial center followed by persistent stagflation in Britain failed to inspire confidence in the world markets. As a result of the British Central Bank's ineffectiveness in carrying out its obligations and because of her failure of commitment to maintain a stable currency value, foreign holders of British pounds converted their pound holdings into U.S. dollars. However, between the 1939-1942 period, Britain had already depleted more than half of its gold reserves after purchasing ammunitions from the U.S. In short, there was not enough money supply to resume the gold-standard system as the war had led to the complete depletion of gold stocks in Britain.

On the other hand, the U.S. economy was also suffering from a similar predicament during the inter-war period. Governments around world that were operating on the gold standard were being limited from expanding their money supplies and thereby from lowering their interest rates. The imposition of this rule had pushed some countries to break the rule and secretly print out more money to tackle deflation in their economies. However, to show its commitment to the gold standard, the U.S. Federal Reserve did not pursue an expansionary monetary policy and kept interest rates at relatively high levels during the war periods. But the gold stocks of the Federal Reserve were also rapidly contracting and were causing a sudden devaluation of the U.S. dollar “In the U.S., the Federal Reserve was required by law to have 40% gold backing of its Federal Reserve demand notes, and thus, could not expand the money supply beyond what was allowed by the gold reserves held in their vaults.”

(Edward C. Simmons, *Elasticity of the Federal Reserve Note*, <http://www.jstor.org/stable/1807996>)

The maintaining of high interest rates would translate directly into a deflationary pressure on the dollar, which then had caused a significant reduction in investment in U.S. banks overtime. Because of this scenario, both investors and depositors have started withdrawing their funds from U.S. banks after the emergence of a widespread speculative fear that the value of the U.S. dollar would decline.

In spite of some burgeoning international economic

corporation in the period preceding 1930's, there was much considerable turbulence in the world markets. Trade barriers were mainly imposed and the widespread repudiations of domestic and international debts were accompanied by uncertainty in economic policies. Governments' efforts to improve the effects of foreign exchange markets proved problematic and incessant deflation led to increased rates of unemployment as the stock markets around the world have crashed. This period in history was called the "Great Depression."

During the world-wide depression, many countries that were agitated by the suspicious arrangements made for the exchange of unreliable currencies assumed an uncooperative behavior. It was precisely during this period when the need for the creation of a monetary order that would govern international monetary relations among independent states became evident. This new international monetary order was called the "Bretton Woods System."

### **The Bretton Woods System (1944-1971)**

*"To suppose that there exists some smoothly functioning automatic mechanism of adjustment which preserves equilibrium if we only trust methods of laissez-faire is a doctrinaire delusion which disregards the lessons of historical experience without having behind it the support of sound theory." (J.M. Keynes, 1980)*

The quarter-century following WWII, has clearly demonstrated the fundamental disadvantages of the fully-

flexible exchange rates. By 1944, many countries have extracted important lessons from the tragic experiences of the Great Depression and made important strides to avoid repeating the same mistakes of the past.

One of these intended critical measures was to put into practice an international monetary order that would regulate and oversee the international transactions of independent states. Although many countries had divergent views on the macro-economic management of their national policies, almost all of them agreed upon the idea of establishing an international monetary system that would regulate the international economy primarily through the two main principles of capitalism; “through private ownership” and “through adjustable market mechanisms.” (Two examples of this particular case were France and the U.S., where the French government sought greater planning and intervention in the markets, whereas the American government favored a relatively limited level of intervention.)

The era following the Great Depression was one in which many countries implemented “*beggar-thy-neighbor*” policies by shifting away the demand for imported goods to domestically produced goods by imposing tariffs and quotas. This was done with the objective of fighting against domestic unemployment and trade deficits. At the same time, most of the debtor nations were also seeking to reduce their balance-of-payments deficits by implementing monetary policies that would devalue their



currencies and increase the competitiveness of their exports around the world. In the end, these frivolously managed currency devaluations and beggar thy neighbor policies have backfired and led to the following to occur: 1-) plummeting of national incomes, 2-) a sharp increase in unemployment rates, 3-) contracting demand for goods and services, 4-) and eventually to the overall decline of global international trade.

Therefore, in an attempt to reverse this situation and to rebuild the international economic order with a stronger foundation, “730 delegates from 44 Allied nations gathered in Bretton Woods, New Hampshire, U.S. to sign the Bretton Woods Agreements in the first three weeks of July 1944.”

[http://en.wikipedia.org/wiki/Bretton\\_Woods\\_system](http://en.wikipedia.org/wiki/Bretton_Woods_system)

The Bretton Woods Agreement, in essence, fundamentally departed from the direction of the gold exchange standard in many distinct paths. The first striking feature of this agreement that differed from the gold standard was the establishment of two international credit lending institutions:

In July 1944, representatives from 45 countries convened at the Mount Washington Hotel in New Hampshire, United States to sign an agreement that would lead to the creation of the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (IBRD).

In hopes of devising a constructive international monetary system, the purpose of creation of the IMF was (i) to regulate

the macroeconomic policies of its member countries, (ii) help countries that were having a fundamental disequilibrium in their balance of payments by receiving deposit from surplus countries and giving out those loans to deficit countries (mainly poor countries) with varying degrees conditionality, and (iii) to ensure price stability in financial markets without imposing any tariffs or restrictions on trade and (iiii) to contribute to the overall development of emerging economies through its lending policies. On the other hand, the purpose of creation for the IBRD was to have a focus on the reconstruction of nations devastated by WWII.

The price stability component of the IMF's responsibilities was to be ensured by what is called "the fixed exchange rate system" (also known as the pegged exchange rate system or the adjustable peg). This system offered multiple benefits; (I) first, maintaining of fixed exchange rates would facilitate the cross border transaction of goods and services, (II) second, it would ease political tensions and would bring about economic stability, (III) and third, it would also aid in the removal of tariffs and barriers and help governments ensure equilibrium in their balance of payments. In a sense, the newly established rules of the Bretton Woods system resembled those of the pre-war gold standard era only with the exception of the U.S. dollar, which was accepted as the worldwide currency in lieu of gold with the consent of the member countries.

The pegged exchange rate was a system whereby countries

would first and foremost peg their national currencies to the key currency, vis-à-vis to the U.S. dollar. Each country was obligated to declare a “par value” rate for their national currency by intervening in their foreign exchange markets while the exchange rate for each currency was allowed to move by 1% above or below parity. While nations that were willing to convert their gold reserves or assets into paper currency would do so through this anchor currency. After the U.S. dollar became the only currency convertible to gold, then the price of gold was also decided to be fixed at \$35 per an ounce of gold. This was because of the following reason: “For the Bretton Woods system to remain workable, it would either have to alter the peg of the dollar to gold, or it would have to maintain the free market price for gold near the \$35 per ounce official price.”

[http://en.wikipedia.org/wiki/Bretton\\_Woods\\_system](http://en.wikipedia.org/wiki/Bretton_Woods_system)

The application of this rule meant that the U.S. dollar would take over the role of gold and assume the responsibilities of that which it had played during the gold standard system. Once the U.S. dollar had become the only currency exchangeable in terms of gold with the greatest purchasing power, all the indebted European countries who had been involved in WWII decided to transfer massive amounts of their gold reserves to the U.S. contributing to the appreciation of the dollar and to the economic leadership of the U.S. in the world.

Furthermore, in accordance with the conditions listed in the agreement, poor countries also had the right to alter their par

value rate to correct the fundamental disequilibrium in their balance of payments. But this decision was contingent upon the IMF which would first have to determine if the country's balance of payments was in a serious fundamental disequilibrium.

The IMF was also provided support with a special fund that largely comprised of each member country's contributions of gold and their own national currencies to the fund. A member country experiencing a trade deficit in its current account would be able to borrow foreign currency from the Fund in amounts that would be determined by the size of its contribution (also known as quota). Meaning, the greater the contribution was, the higher the amount of funds that a member could borrow from the IMF. Once the money was borrowed, the member state was required to repay its debts within a time limit of 18 months to 5 years depending on the magnitude of the balance of payments disequilibrium in that country.

Even though there was a belief that as long as the Bretton Woods agreements were strictly observed and adhered to by the member countries, the balance of payments issue would resolve itself with the support of the national monetary reserves backed by loans and credits given by the IMF. However, it turned out over time that the IMF's credits would prove unworkable in tackling Western Europe's enormous balance of payments deficits. This was because in the era following WWII, there was a huge dollar shortage as countries were imposing tariffs and barriers to each other which caused a heavy demand for the U.S.

dollar.

Under the Bretton Woods System, no other currency was convertible to gold other than the U.S. dollar which also added greater emphasis on the demand for the U.S. dollar. In order to satisfy this demand, the U.S. Federal Reserve started increasing the dollar supply. However, as the dollar supply increased on other currencies (i.e. the exchange rates of other currencies), the value of dollar started depreciating as other country's currencies started appreciating. As a result, other countries were forced to gradually increase their money supply.

By the 1960s, many European countries did not want to increase their domestic money supplies but the system compelled them to do so. Among those countries that reluctantly increased their money supply were Germany, Switzerland, and France. These countries have faced the most severe hyperinflation rates in their economies in the periods preceding the Great Depression. By 1971, the European countries wanted to form the "European Common Market" and decided to abandon the Bretton Woods System.

From 1971-1973, the Bretton Woods System became inoperable. In 1973, President Nixon cut the dollar system which allowed for the collapse and the disappearance of the link between the U.S. dollar and gold. The demise of this system has concretely taught us four important lessons: (I) the lack of operational adjustment mechanisms, (II) the great adversity of running a system of fixed exchange rates (or adjustable

peg) in the presence of highly mobile international capital, (III) that there was strong international cooperation and close coordination among participating governments and central banks around the world which was very easily distinguishable from the last quarter of the nineteenth century since the possibility of international economic coordination or collaboration was virtually non-existent during the gold standard era. (IV) Even though there were strenuous efforts being made by the member countries to defend the parity, sustainability of this system turned out to be impossible as keeping the parity at a stable rate would require unparalleled foreign exchange market intervention as well as international support at all levels.

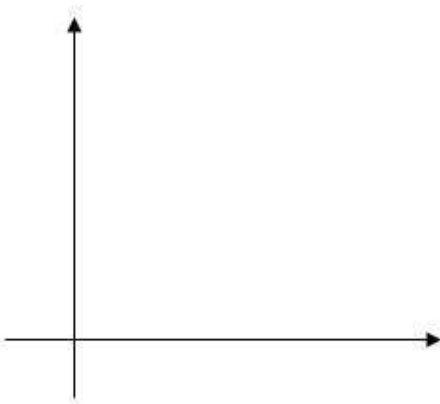
### **Post-1973 International Monetary System**

After the collapse of the Bretton Woods System, the sudden rise of cross-border capital mobility has drastically transformed the very essence of international monetary relations. Throughout much of the operational phase of this system, much of the countries were able to avoid balance of payment deficits to some degree since they were able to avail themselves to the protection of the pegged exchange rates. This breathing space provided by the Bretton Woods agreement has also enabled countries to freely re-direct their monetary policies in the direction that they considered necessary.

Following the collapse of Bretton Woods, countries were completely free to control the supply of their own currencies. They could increase their money supplies without the backing

of any precious metal required for that increase in the money supply. Governments also realized the fact that there was a profit to be made just by *printing* their currency. The profits made by governments are called “seigniorage.”

Graph 1.2:



However, by the late 1970s, some countries have gotten too greedy for seigniorage, meaning that they allowed changes in their domestic currency largely. It was during this time when many countries have fixed their exchange rate systems.

Some of the benefits of this system included: (i) the minimization of uncertainty for the future exchange rates (ii) the assumption of a supervisory role by the monetary policy which would be responsible for keeping the money supply under control (i.e. self-imposed discipline on monetary policy (iii) The

occurrence of a change in a country's balance of payments is more likely under the fixed exchange rate system. However, it can be controlled by devaluation (one-time change).

Conversely, some of the costs that were associated with the system of fixed exchange rates included the following deficiencies: (a) First, under this system, monetary policy would not completely be independent. For instance, in the event of a severe recession, when a large increase in money supply is needed, fixed exchange rate regime would not allow it. (b) Second, monetary policy is most tempted to break the rule of not allowing the money supply to grow excessively. An example would be the "systemic risk" of irresponsible monetary policy. It is better to have a flexible exchange rate system, which would show the consequences of changes in the money supply on a daily basis.

On the other hand, those countries that were running independent monetary policies with floating exchange rates have selected to use some key currencies such the U.S. dollar (\$), Euro (€), Japanese Yen (¥) and also what is called the Special Drawing Rights (SDRs).

The SDRs were created during the Bretton Woods system in 1969 as an alternative to the strongest currencies to support the fixed exchange rates regime (only to be issued by the IMF). The SDRs are basically an international reserve asset that was put to use under the guidance of the IMF when two of the major currencies: the gold and the U.S. dollar, fell short of achieving



their intended objectives of underpinning the expansion of international trade and encouraging financial flows between the member countries.

The SDRs are generally allocated in proportion to the contributions of the members to the IMF. If a member country wants to contribute more than the required amount, then the IMF would issue SDRs to this member. The value of SDR is currently expressed in a basket of four currencies as opposed to the past where it was represented solely by the U.S. dollar. Today these are: the U.S. dollar, the Japanese Yen, pound sterling and the Euro. The use of the SDRs may vary depending on the need trading arrangements. For instance, if the U.S. government had a desire to export certain goods or a service from Japan and was reluctant to make a payment in U.S. dollars, the transaction can be made with the usage of SDRs since both countries are participating members of the IMF.

In brief, it is possible to argue that the post-1973 period was largely marked by three crucial turning points, which have shaped much of the historical structure of the international monetary system. The first significant event was the advent of the “European Currency Snake” (also referred to as the snake in the tunnel), the second was the eruption of the “Great Debate” between fixed exchange rates and floating exchange rates, and the third event encompasses the dynamic changes in the monetary policies of the U.S. Federal Reserve.

By the mid-1970s, a globalization trend emerged that

simultaneously promoted free trade and the elimination of capital controls (i.e. reduction of barriers to trade). This trend, in essence, came into being with the ongoing development in the areas of telecommunications, information technologies, as well as with the rapid structural improvements in the financial markets.

The liberalization of exchange rates during this period has revived unpleasant memories of the post-WWI era where floating exchange rates have largely caused massive hyperinflation. “Europe, not the United States or Japan, was where floating currencies had been associated with hyperinflation in the 1920s. Europe was where the devaluations of the 1930 had most corroded good economic relations.” (Eichengreen, 2008, pg. 150)

Many European countries with the breakdown of the Bretton Woods system were reluctant to go back to a system of floating exchange rates. Therefore, in an attempt to devise a single currency band among European countries, the concept of the “snake in the tunnel” was introduced. This monetary policy was supposed to limit fluctuations among various European currencies and peg all the European Economic Community (EEC) currency bands to one another. The so-called *snake* provided a window of opportunity for the European currencies to trade with each other, especially with the Smithsonian agreement setting bands of above or below  $\pm 2.25\%$  for maintaining the exchange rates, which allowed European currencies to fluctuate

in relation to their individual rate against the U.S. dollar. However, the snake in the tunnel fell apart in 1973 with the free-floating of the U.S. dollar as a result of the quadrupling oil prices (i.e. oil shock of 1973) and with several other currencies simultaneously joining and abandoning it.

In 1979, after the failure of the snake in the tunnel system, a new system was introduced called the “European Monetary System” (EMS) where the European Currency Unit (ECU) would be defined. Some of the key terms of the agreement were: (1) The ECU, which is composed of a basket of currencies, would prevent any fluctuations above 2.25% in bilateral exchange rates among member countries. (2) A new system called the Exchange Rate System (ERS) would be established which would limit exchange rate variability and prepare grounds for monetary stability in Europe. (3) Credit would be extended to all the members in need.

In the outcome of negotiations, even though no currency was declared the key/anchor currency, the German *Deutsche Mark* and the German *Bundesbank* were undeniably lying at the heart of this system. This was mainly because of its relatively strong value compared to other currencies and due to the monetary policies of the bank, which advocated for low-inflation in European economies. Over time, it turned out that the implicit designation of the German currency, as some of the member countries did not welcome the anchor currency.

By the mid-1990s, the EMS had suffered a series of

turbulences: (I) primarily with the escalating tension over which member country's currency would be the anchor currency, (II) the implementation of incompatible economic policies among member countries followed by an increase in violation of the rule of 2.25% in bilateral exchange rates have caused the system to lose its elementary functions. "The European Monetary System was no longer a functional arrangement in May 1998 as the member countries fixed their mutual exchange rates when participating in the Euro."

([http://en.wikipedia.org/wiki/European\\_Monetary\\_System](http://en.wikipedia.org/wiki/European_Monetary_System))

This situation has gradually led to the foundation of a single European currency called the "*Euro*" (€) after the signing of the Treaty of Maastricht on February 7<sup>th</sup>, 1992 which made the Euro the only legal tender for the European Community. Some of the most important criteria were: (I) controls on inflation levels (i.e. the inflation level in a given member country should not be more than 1.5% higher than the average of the other three members with the lowest inflation rates). (II) The proportion/ratio of the annual government deficit to gross domestic product (GDP) should not exceed the 3% margin by the end of the preceding fiscal year. (III) "Applicant countries should have joined the exchange-rate mechanism under the European Monetary System (EMS) for two consecutive years and should not have devalued its currency during the period. (IV) The nominal long-term interest rate must not be more than 2 percentage points higher than in the three lowest inflation member states."

[http://en.wikipedia.org/wiki/Maastricht\\_Treaty](http://en.wikipedia.org/wiki/Maastricht_Treaty))

The purpose of the imposition of the Maastricht criteria was to bring about exchange rate stability to the Euro zone (also known as Optimum Currency Area), which is an economic union of member states that use the Euro as their currency. The benefits of joining the Optimum Currency Area included: (1) A higher economic integration, (2) free-movement of goods and services and factors of production, (3) Common tariff structures on non-members, (4) Economic symmetry and stability, and finally (5) more self-control on monetary policy. In 1998, 11 countries announced the adoption of Euro as their currency and in the following year, Euro was introduced and the European Central Bank was established.

### **Conclusion**

The key foundation stone of the pre-war gold standard era required strict adherence to the rules of the game as currency convertibility was the crucial component for maintaining this regime. The emergence of the classical gold standard system prior to the WWI was accidental. This can be partially attributed to the fact that this regime evolved out in an era where a variety of commodities such as; cattle, wine, jewelry and diamonds were being used and traded for daily transactions instead of paper currency. A further contributing factor to the development of this regime came about with Britain's accidental acceptance of a *de facto* gold standard system by the end of the nineteenth century.

Britain's assumption of both financial and commercial leadership has become an attractive alternative and a perfect substitute for silver. In the end, countries who had a desire to trade with Britain have gradually converted to a more popular gold-based system. It was precisely during this era, when an international system of fixed exchange rates came into effect.

Prior to the collapse of the Bretton Woods System in the early 1970s, there was a widespread belief in the international community that the high levels of volatility of capital flows were the root cause of the problem. The reason for this was the lack of tight regulation in international capital flows, which gave rise to a destabilization of national currencies.

In return, this international predicament forced governments to take drastic measures to protect their domestic economies whether by raising tariffs or by increasing import quotas, which is very similar to what they have done during the inter-war period. As a counterattack strategy, those countries that chose to devalue their currencies would witness their immediate neighbors impose the same strategy of currency devaluation which then would trigger a reactionary war of tariffs and quotas.

In essence, the lessons extracted from the unfortunate economic circumstances of the 1930s have demonstrated that currency instability was the least desired strategy for the establishment of a free international trade. Therefore, it was understood that the restoration of global economic growth presupposed a system that would favor limited international

capital flows and a sustainable regime for currency stability.

As for the grand monetary experiment conducted by the members of the European Union, there needs to be an increased level of willingness to forego a certain degree national sovereignty to create and further advance the dream of a full-fledged European Economic Integration. The initial steps for the formation of a complete monetary union were taken with the creation of a single common currency called the Euro. However, what is now a feasible economic goal for Europe stands as a difficult objective to be achieved for other regional monetary unions around the world such Latin America, the Middle East, Africa and East Asia as there is less willingness to compromise national sovereignty instead of a stronger monetary union.

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Karl Paul Polanyi: was a Hungarian intellectual known for his opposition to traditional economic thought and his influential book *"The Great Transformation."* Polanyi is remembered today as the originator of substantivism, a cultural approach to economics, which emphasized the way economies are embedded in society and culture. Polanyi's approach to the ancient economies has been applied to a variety of cases, such as Pre-Columbian America and ancient Mesopotamia, although some scholars have denied its utility to the study of ancient societies in general. His book *The Great Transformation* also became a model for historical sociology. His theories eventually became the foundation for the economic democracy movement. His daughter Kari Polanyi-Levitt is Emerita Professor of Economics at McGill University, Montreal.