

## **Lecture 14: Evolution of The International Financial System**

### **I. OVERVIEW**

- From this lecture onwards, we make the transition from acquiring tools to applying them. In the remainder of the course, we focus on important events in international macroeconomics: specifically the development of the EMU, the role of the IMF, episodes of currency related crises in East Asia, Latin America etc.
- Before we delve into these topics it is useful to assess the structure of the international financial system, with emphasis on its evolution. This will shed light on the eternal fixed vs. floating debate and also help us understand if we are better off moving in the direction of regional groupings like the EMU.
- We will sketch the history of the international financial system starting with the Gold Standard, leading to the creation of Bretton Woods and through the collapse of the Bretton-Woods system in today's lecture. We will also provide broad highlights of the international financial system post Bretton-Woods.

### **II. THE GOLD STANDARD (1880-1913)**

- Even though the world moved off the gold standard more than 75 years ago, it still resurfaces occasionally. For example, in the 1996 presidential campaign the gold standard was mentioned in occasional speeches by vice-presidential candidate Jack Kemp. However, there has been very little recent support for its re-enactment.
- Gold has historically been used as money mostly for its ability to be a good store of value: gold did not tarnish or erode easily and was fairly scarce. It was also a useful medium of exchange since it was desired by most people and could be transported in fairly small quantities. Gradually, the use of gold for money turned into the minting of coins whose face value typically was equivalent to the intrinsic value of gold.
- Beginning in the late 19th century, the world moved away from gold coins to paper money, with the caveat that the paper was convertible into gold. A holder of a bank note could, if she so desired, exchange it for the equivalent weight in gold. By 1880, most of the major trading nations had adopted this monetary system.
- The rules of the system could be described as follows:
  1. Each country defined the value of its currency in terms of gold - the U.S. government announced a \$/ounce of gold value (about \$20/oz) and the British government a sterling/ounce of gold value.
  2. The \$/pound-sterling exchange rate can be calculated as \$ per ounce of gold/pound-sterling per ounce of gold. These exchange rates were set by arbitrage depending on the transportation costs of gold.

3. Central banks are restricted in not being able to issue more currency than gold reserves.

### **Arguments in Favor of a Gold Standard**

1. Price Stability:

- By tying the money supply to the supply of gold, central banks are unable to expand the money supply.
- The only ways in which they can do so are by acquiring more supplies of gold through production or by running balance of payments surpluses with other countries.

2. Facilitates BOP adjustment automatically:

- This was first described by David Hume and is referred to as Hume's specie flow mechanism.
- The basic idea is that a country that runs a current account deficit needs to export money (gold) to the countries that run a surplus. The surplus of gold reduces the deficit country's money supply and increases the surplus country's money supply.
- This results in a lowering of the deficit country's goods' prices and an increase in the surplus country's goods' prices helping to restore equilibrium.

### **Arguments against a Gold Standard**

1. The growth of output and the growth of gold supplies needs to be closely linked. For example, if the supply of gold increased faster than the supply of goods did there would be inflationary pressure. Conversely, if output increased faster than supplies of gold did there would be deflationary pressure.
2. Volatility in the supply of gold could cause adverse shocks to the economy: rapid changes in the supply of gold would cause rapid changes in the supply of money and cause wild fluctuations in prices that could prove quite disruptive: the benefits of external adjustment are counteracted by the internal disruption.
3. In practice monetary authorities may not be forced to strictly tie their hands in limiting the creation of money, so some of the theoretical advantages may not hold up. For example, the Central Bank could issue more currency without having acquired more gold, and the public may not become aware of what's going on.
4. Countries with respectable monetary policy makers cannot use monetary policy to fight domestic issues like unemployment.

## **III. THE INTERIM YEARS (1914-1944)**

- The onset of the World Wars saw the end of the gold standard as countries, other than the U.S., stopped making their currencies convertible and started printing money to pay for war related expenses.

- After the war, with high rates of inflation and a large stock of outstanding money, a return to the old gold standard was only possible through a deep recession inducing monetary contraction as practiced by the British after WW I.
- The focus shifted from external cooperation to internal reconstruction and events like the Great Depression further illustrated the breakdown of the international monetary system, bringing such bad policy moves such as a deep monetary contraction in the face of a recession.

#### **IV. BRETTON WOODS (1945-1971)**

- Bretton Woods is a little town in New Hampshire, famous mostly for good skiing. In July 1944, the International Monetary and Financial Conference organized by the U.N attempted to put together an international financial system that eliminated the chaos of the inter-war years.
- The terms of the agreement were negotiated by 44 nations, led by the U.S and Britain. The British delegation was led by John Maynard Keynes, perhaps the most famous economist of the 20th century.
- The main hope of creating a new financial system was to stabilize exchange rates, provide capital for reconstruction from the war and foment international cooperation. What they settled on constituted the primary features of the Bretton-Woods agreement.

##### **Features of the Bretton-Woods Agreement**

- The features of the Bretton Woods system can be described as a “gold-exchange” standard rather than a “gold-standard”. The key difference was that the dollar was the only currency that was backed by and convertible into gold. (The rate initially was \$35 an ounce of gold)
- Other countries would have an “adjustable peg” vis--vis the dollar: basically, they were exchangeable at a fixed rate against the dollar, although the rate could be readjusted at certain times under certain conditions. The dollar or the pound (British pressure added this clause!) could be used as reserve currencies for intervention in foreign exchange markets.
- Each country was allowed to have a 1% band around which their currency was allowed to fluctuate around the fixed rate. Except on the rare occasions when the par value was allowed to be readjusted, countries would have to intervene to ensure that the currency stayed in the required band.
- The IMF (the International Monetary Fund) was created with the specific goal of being the multilateral body that monitored the implementation of the Bretton Woods agreement. Its role was to hold gold reserves and currency reserves that were contributed by the member countries and then lend this money out to other nations that had difficulty meeting their obligations under the agreement.
- The borrowing was classified into tranches, each with attached conditions that became progressively stricter. This enabled the IMF to force countries to adjust excess fiscal deficits, tighten monetary policy etc, and force them to be more consistent with their obligations under the agreement.

- Although the adjustable exchange rate system meant that countries that could no longer sustain the fixed exchange rate vis-a-vis the dollar would be allowed to devalue their currencies, they could only do so with the consent of the other countries and the auspices of the IMF.
- Currencies had to be convertible: central banks had to exchange domestic currency for dollars upon request. However, certain countries were also allowed to institute capital controls on certain types of transactions. Only current account related transactions were required to be fully convertible and countries were allowed to impose restrictions on the exchange of capital account related transactions.
- The capital account restrictions placed limitations on the flow of private capital and often limited international help to official lending between governments. Countries that ran large current account deficits, could not run capital account surpluses and therefore had to resort to large scale intervention with the help of other countries and the IMF.

### **The Asymmetric Position of the Reserve Center Country**

- In a world with N currencies there are only N-1 exchange rates against the reserve currency. If all the countries in the world are fixing their currencies against the reserve currency and acting to keep the rate fixed, then the reserve country has no need to intervene.
- It acquires an advantage in that it can use monetary policy for its own domestic policy purposes while other countries are unable to use monetary policy for domestic policy purposes.
- Therefore a decrease in the reserve country's money supply would cause an appreciation of the reserve currency and force the other central banks to lose external reserves. So the reserve country can affect both the output in its country as well as output in other countries through changes in its monetary policy.

### **The Demise of the Bretton Woods System**

- In the early post-war period, the U.S. government had to provide dollar reserves to all countries who wanted to intervene in their currency markets. The famous comment of the economist Hendrik Houthakker was "You can't play poker unless all of you have chips". This was especially true since many countries insisted on setting their currencies at the pre-war level vis--vis the dollar.
- The increasing supply of dollars worldwide, made available through programs like the Marshall Plan, meant that the credibility of the gold backing of the dollar was in question. U.S. dollars held abroad grew rapidly and this represented a claim on U.S. gold stocks and cast some doubt on the U.S.'s ability to convert dollars into gold upon request.
- Domestic U.S. policies, such as the growing expenditure associated with Vietnam resulted in more printing of dollars to finance expenditure and forced foreign governments to run up holdings of dollar reserves. Although they pursue this for a while a few countries began to become growingly less keen on holding dollars and more keen on holding gold.
- In 1971, the U.S. government "closed the gold window" by decree of President Nixon. The world moved from a gold standard to a dollar standard: from Bretton Woods to the Smithsonian Agreement. Growing increase in the amount of dollars printed further eroded faith in the system and the dollars role as a reserve currency. By 1973, the world had moved to search for a new financial system: one that no longer relied on a worldwide system of pegged exchange rates.

## V. POST BRETTON WOODS: THE QUEST FOR A NEW INTERNATIONAL MONETARY SYSTEM

- Surprisingly, the collapse of the Bretton-Woods system did not lead to a widespread rush to adopt flexible exchange rates. Instead, the post Bretton-Woods era has mostly been about a search for individual or small group adaptations of fixed exchange rate or managed floating exchange rate arrangements.

### The First Oil Price Shock (the early 1970s)

- The search for a replacement system was delayed by the first of the two oil price shocks in the 1970's. The oil price increase was precipitated by the 1973 Arab-Israeli war, which drove up the demand for oil and stifled production: the price of oil quadrupled between 1973 and 1974.
- Increases in the price of oil were coupled with adverse shocks to grain harvests in the Soviet Union and the United States, falls in output of sugar and cocoa and disappearance of Peruvian anchovies (which turn out to be apparently very important in cattle feed).
- The high commodity prices had significant contractionary and inflationary impacts on many commodity importing countries and drove many of them into recession. Conversely, the current account balances of oil importing countries rose dramatically. According to work by Paul Krugman and Maurice Obstfeld, the collective current account balance of the industrialized countries fell from \$14 billion to -\$21 billion in 12 months.
- Since most developed countries had a flexible exchange rate at this time they were able to better withstand the impact of the oil price shock. The depreciation of the currency also helped improve their current account balance. Furthermore, because they had monetary policy autonomy, they were able to pursue expansionary monetary policy and ward off some of the negative impacts of the oil price shock as well.
- Economists generally think of the oil price crisis as a perfect example of the positive aspects of a flexible exchange rate system whereby developed countries were able to use autonomous monetary policy to manage the severity of the impact of the price shock and used the flexible exchange rate to restore balance in the current account without running into any BOP crises.
- By 1976, the industrial nations were ready to accept flexible exchange rates, with a caveat calling for intervention to stop "erratic fluctuations" in exchange rates. At this point, the responsibilities of the IMF were also modified to allow countries to pick whatever exchange rate system they preferred.

### The Second Oil Price Shock (the late 1970's)

- The expansionary monetary policy pursued by the U.S. had helped it recover fairly quickly from the oil price shock but further attempts to boost the economy through expansionary monetary policy (with lower interest rates) led to a steep depreciation of the dollar which further fueled U.S. inflation because of increases in the price of imports.
- By the late 1970's (the tail-end of the Carter administration) the U.S. economy was characterized by a weak dollar and high rates of inflation. The fall of the Shah of Iran in 1979 led to the second oil crisis: roughly a doubling in the price of oil between 1978 and 1980. The impact of the second oil crisis was milder, but industrial countries still continued to run current account deficits.

- In 1979, Paul Volcker was appointed to be the new Fed chair; he announced that he would tighten monetary policy to reduce inflation in the U.S. economy. So the response to the second oil price shock was very different. Instead of pursuing expansionary monetary policy, the U.S. and the other developed countries: pursued contractionary monetary policies.

### **The Period of the Rising Dollar (the mid 1980's) and the Plaza Accord**

- As a result, by the early 1980's the U.S. and most industrial economies were stuck in a deep recession (U.S. unemployment rates were as high as 9.5% in 1982. Developing countries, which had already borrowed significant amounts of foreign money in the first oil crisis, continued to run substantial current account deficits and the debt burdens in these countries reached crisis proportions: especially in Latin America.
- The tight monetary policy pursued by Paul Volcker did its job. By the early 1980's U.S. inflation had declined rapidly. Furthermore the tight monetary policy had led to a steep appreciation of the dollar. The stronger dollar worsened the U.S. current account deficit and helped the Europeans improve theirs.
- However, the European nations were unhappy with the fact that prices of U.S. imports were adding to inflation faced in their countries. They responded with tighter interest rates thus dragging their economies into a recession as well. These types of competitive interest rate increases are sometimes referred to as attempts to "export" inflation.
- The appreciation of the dollar was leading to an unprecedented increase in the U.S. trade deficit (coupled of course with the Reagan era tax cuts and investment increases). The increase in the trade deficit led to an increase in protectionist pressures in the U.S.
- This led to a meeting by leaders of the industrial nations to intervene in the foreign exchange markets to bring about fall in the value of the dollar devaluation. The meeting was held at the Plaza hotel in New York and the agreement reached that day is often referred to as the Plaza Accords.

### **The Period of the Falling Dollar (the late 1980s) and the Louvre Accord**

- The U.S. was finally moving from a position of "benign neglect" towards the dollar to a position of active intervention in foreign exchange markets.
- The interventions were successful but as always there were new problems that emerged: European countries were now unhappy with the appreciation of their currencies and began to worry about their current account balances.
- In 1987, members of the G-5 (the U.S., Britain, France, Germany, Japan) and Canada had gathered at the Louvre in Paris to establish a new system of exchange rate cooperation. This meeting is often referred to as the Louvre Accords.
- The Louvre Accords called for the establishment of target zones (bands around which currencies were allowed to fluctuate, believed to be around 5% of the exchange rates prevailing at the time.)
- The currencies stayed within this range although by now the dollar was depreciating substantially. This meant that the U.S central bank had to raise interest rates if they were keen on maintaining the value of the dollar within the prescribed exchange rate band.

- Thoughts that monetary policy makers would focus so much on the external sector were dashed by the stock market collapse in October 1987. Alan Greenspan, the Fed chair at the time, took immediate steps to lower interest rates by easing monetary policy to help prevent the economy from going into a severe tailspin.
- The lowering of interest rates meant that the dollar depreciated to a far greater extent than the target bands established by the Louvre Accords allowed for. Even though subsequent attempts to establish a worldwide system of exchange rate bands were periodically revived they have never since taken effect.
- However, the European nations had maintained a version of a fixed exchange rate system through this period: from 1979 onwards. The European countries basically agreed on a system of managed exchange rates amongst themselves while allowing for their currencies to float against the dollar. This was known as the European Monetary System or EMS.
- In more recent times, the significant European development has been the adaptation of the Euro and the movement towards European Monetary Union. We will analyze the transition from EMS to EMU and discuss the pros and cons of each system in a subsequent lecture.
- In the rest of the world, the 1990s has been a remarkable mix of prosperity and turmoil. We will study the behavior of the international financial system in more detail during the second half of the course.