[THE INTERNATIONAL MONETARY SYSTEM]

Over the last hundred years many different international monetary and financial systems have been implemented. The extremes are:

Floating: e.g. US \$, Japanese Yen, Swiss franc, from March 1973 to today. Exchange rates are determined freely by market conditions.

Fixed: e.g. virtually all exchange rates in the Bretton Woods period between 1944 and 1973. Exchange rates all linked to one major currency which is linked to a precious metal.

Other Situations for Exchange Rates:

Managed Floating: (Or, Dirty Floating). Exchange rates are allowed to float within a certain range, or between specified bands.

For example in March, 1979, many European currencies were linked to the DM in the European Monetary System (EMS). Each European currency had a par value (i.e. average value) against the DM and was allowed to vary within 2.25%. The bands were increased for Italy to 6% and after a crisis in 1993 the bands were further widened to 15%.

1. Implementation of Fixed Exchange Rates

Gold Standard (1880 ~ 1914)

The exact date for the beginning of the gold standard system was not known, but it seemed to start from 1821 in Britain.

US was on a gold standard between 1816 and 1821. The US dollar was linked directly to gold with gold coins being used as money.

Between 1821 and 1880 several countries joined Britain and the US in a Gold Standard system.

After 1880s, the gold standard system became the major international monetary arrangement. Under gold standard, each currency is defined in terms of its gold value and currencies are all linked together in a fixed exchange rate system.

In 1885 the US \$ was valued as one once of gold being \$20.67. Gold was only to be traded at this fixed price and all other currencies were fixed to this par value.

Gold is a <u>Commodity Money Standard</u>, since it is a homogenous product world wide, easily stored, portable and is in relatively fixed supply. So, money has a value that is fixed in terms of the

commodity gold.

One advantage with a Commodity Money Standard is that finite amount of gold restricts the supply of money and hence the growth of the price level in the long run.

Under international agreements each government had to limit its money supply to a percentage of its gold reserves. However, sudden changes in the world supply of gold could give rise to short term price changes.

Historically, the official price of gold in terms of troy ounces, has been fixed at certain dates as:

1792: \$19.75, 1834: \$20.67, 1935: \$35.00, 1972: \$38.00, 1973: \$42.22,

From March 1973 onwards gold and the world's major currencies became freely floating.

2. Arrangements after World War I

1914-1918: The war time years saw high levels of government expenditures and high inflation in most European countries.

June 1919: The US returned to the gold standard in June, 1919, most other countries freely floated in the early 1920s.

1925: Britain returned to the Gold Standard and was followed by several other European countries. The par values of most of the currencies were influenced by Gustav Cassell, who is regarded as the originator of the modern theory of Purchasing Power Parity. The values of the currencies were allowed to move within 1% of par. However, many of the price indexes used to construct par values were based on pre war levels and when the gold standard was re-introduced the par values were inappropriate for several countries. As successfully predicted by John Maynard Keynes, the pound was particularly over valued and consequently led to a decline in British exports and exacerbated the recession in the late 1920s. The coal mining industry, which was an important industry at this time, was particularly badly affected as it was faced with reduced world demand for its exports.

1926: General Strike in Britain, largely due to problems in the coal industry together with falling wages and prices in the economy and resulting class conflicts. The economy reached a trough in the depression year of 1929.

1931: Britain leaves the Gold Standard when the British trade deficit became very high, which led to increased demand to convert pounds to gold. The consequent reduction in British gold

reserves led to the British government declaring the pound inconvertible to gold in 1931.

1933: US leaves Gold Standard as market participants attention shifted from pounds to dollars and tried to convert US dollars to gold. The dollar then came into the same problems as with the pound two years earlier and eventually the US abandoned the Gold Standard.

1933-1939: Depression years were a period when countries attempted to stimulate their economies and one way was to devalue their currencies to help their export industries. A sequence of competitive devaluations then occurred, with some governments using foreign exchange controls to advantage their exporting industries and to increase GNP.

3. The Bretton Woods Agreement

In June 1944 representatives of the world's leading industrialized nations met at a conference at Bretton Woods, NH to debate the appropriate financial and trade system following WWII.

The system was fully implemented at the beginning of 1946. One motivation was to avoid the mistakes made after WWI, when exchange rates were set at inappropriate levels and severe war reparations were imposed on Germany.

Keynes had argued in "<u>Economic Consequences of Peace</u>", 1919, in favor of economic stability of Europe and not for demanding extreme reparations which partly led to the German hyperinflation of 1921 through 1923 and the subsequent rise in nationalism in Germany and eventual WWII.

Main Outcomes of Bretton Woods

(1) Formation of the International Monetary Fund (IMF).

The IMF lends funds to any country suffering cyclical or temporary current account deficits. Persistent deficits should be dealt with by devaluation. The IMF was committed to lend to any member country that had short term deficit problems. Sometimes the IMF imposed conditions on the country's macro economic policies in order to undertake the loan.

(2) <u>Adjustable Peg System</u> which existed between 1944 and 1972. The IMF acted as overseer of current accounts and negotiated discrete adjustments to the exchange rates whenever they were out of "long run equilibrium" position. The US dollar was to become the world's reserve currency and the value of all other currencies to be "pegged" to the dollar. The debts of foreign central banks to be settled in dollars; and only the US dollar would be convertible into gold at a price of \$35 to the once.

(3) The par value of each other currency would be set against the US \$ and had to be maintained within 1% of the par value. Deviations for par were to be adjusted by central bank

intervention; in exceptional circumstances by re-pegging.

(4) Special Drawing Rights (SDRs)

Each country can become a member of the IMF and on making a donation can become entitled to loans from the IMF, which are known as Special Drawing Rights (SDRs). The size of loans available to the member countries are according to their quotas and the SDRs act as book entries to be credited to the member countries, which can be used to meet imbalances without requiring gold to be transferred.

The creation of SDRs was in 1970 and by 1972, the total amount of SDRs was \$9.4bn. The current value of SDRs is the neighborhood of \$21.4bn. Originally 16 countries were contributors to the fund and hence could use the SDRs. Now only five countries are in the system; namely,

<u>Country</u>	<u>% Weight, 1992</u>	<u>% Weight, 1994</u>
US	40%	40.6%
Germany	21%	19.3%
Japan	17%	21.4%
France	11%	10.0%
UK	11%	8.7%

SDRs are mainly used to settle central banks official reserve accounts.

** Research: Pros or Con for IMF. Provide supporting each opinion wit more than one reference

History of the Bretton Woods Regime

Increasing US current account deficits and corresponding West German, French and Japanese surpluses in the 1960s led to the end of the system.

Instead of revaluing their currencies, Germany, France and Japan accumulated large holdings of dollars and consequent right to transform dollars to gold. The total dollar liabilities of the US then exceeded the world gold supply.

One difficulty with the Bretton Woods system was that it tended to favor deficit countries. The IMF conditionality clauses emphasized surplus countries reducing expenditure and/or revaluing their exchange rate.

1971-1973: The situation reached crisis point as central banks built up large dollar reserves and then exercised their right to exchange dollars for gold from the US Treasury.

The gold supply in the US fell from \$26bn in 1945 to \$12bn in 1971; and foreign central banks held US dollars equal to many times the US gold supply. A crisis of confidence developed since the US could no longer promise convertibility of \$ into gold.

August 1971: President Nixon suspended the convertibility of the US dollar to gold.

December 1971: Smithsonian Agreement attempted to realign the world's currencies. The price of gold was raised from \$35 to \$38.02 per ounce of gold, which implied a dollar depreciation of 8%. The variation of currencies around par was increased from 1% to 2.25%.

June 1972: Italy and the UK were unable to maintain their currencies at the agreed rate found they could no longer support the lira and pound by central bank intervention and chose to freely float their currencies. This led to the eventual collapse of the system of fixed exchange rates and the end of the Bretton Woods era.

March 1973: Foreign exchange markets around the world closed for several weeks; most currencies begin to freely float.

With the end of the floating exchange rate system, the future role of the IMF was unclear. Over twenty years later this question has still not been satisfactorily resolved; the IMF has tended to become a policy advisor for less developed countries.

4. Floating Exchange Rates

In March 1973 the world's major currencies began a period in which they were determined by free market conditions.

However, some governments decided to try and intervene in the markets and to influence the course of exchange rate movements. Various alternatives to freely floating are pegging to a strong currency such as the dollar or DM, pegging to a basket of currencies such as SDRs or ECU.

** Researchr: Summary textbook p50-54 and apply to HK system***

5. the European Monetary System (EMS) and the Euro

Optimum currency area is the best area within which exchange rates are fixed and between which exchange rates are flexible. This is the mixture of the fixed system and the floating system. The typical example of the optimum currency area is the European Monetary System (EMS). The EMS is characterized by fixed rates within the system in terms of the leading currency (DM) and floating rates between the EMS and the rest of the world.

European Monetary System

The European Monetary System was formed in March 1979 to maintain close bands between several European currencies. The European Monetary System (EMS) is based on the Exchange Rate Mechanism (ERM) and is open to all members of the European Union, although at any one time, not every country would be a member of the ERM.

The ERM is a classic example of a pegged exchange rate system where every currency is tied to the DM and allowed to move + or - X% above or below the agreed central/par rate.

The group of European currencies in the EMS were often known as the "snake".

Government policies tried to keep the rates within bands so that they could be easily linked in January, 1999 to a common currency known as the Euro.

European Currency Unit (ECU)

The ECU is a component of the SDRs and all members of the European Union have their currencies weighted according to their "relative importance". Hence the ECU is an Effective exchange Rate. Note the weights are not particularly intuitive and are mainly determined by each country's size of GNP and their quantity of trade. One ECU then represents a small piece of each European currency. ECUs can be useful for hedging purposes for multinational corporations that do business all over Europe and clearly carries less exchange rate risk than an individual currency. Dealing with ECUs also reduces the total number of transactions.

[The Euro Currency]

1. The history of the euro

April 18, 1951

Paris Treaty signed

France, West Germany, Italy, Luxembourg, Belgium and The Netherlands agree on establishing the European Coal and Steel Community (ECSC)

March 1957

Treaties of Rome signed

The Treaties, signed by Belgium, France, West Germany, Italy, Luxembourg and The Netherlands, cover the establishment of the European Economic Community (EEC) and the European Atomic Energy Community (Euratom).

1971-1973

Breakdown of the Bretton Woods system of fixed exchange rates

Beginning with President Nixon closing the gold window in 1971 and ultimately resulting in widespread currency floats and devaluations, the breakdown of the Bretton Woods system dealt a serious blow to hopes for a shift to a European monetary union.

March 1979

European Monetary System (EMS) created.

The European Monetary System (EMS) takes effect, based on a currency unit called the Ecu. The system is designed to stabilize the exchange rates of the national currencies and counter inflation.

February 1986

Single European Act signed

The Single European Act modifying the Treaty of Rome is signed, formalizing political co-operation between the member states and including six new areas of competence, including monetary co-operation.

February 7, 1992

The Maastricht Treaty signed.

The Treaty elevated the project of European integration to a new and far more ambitious level by setting a firm date - January 1999 at the latest - for the replacement of national currencies by a single, shared currency, the euro.

Maastricht Treaty: Summary of economic and monetary union policies

Maastricht Treaty: Objectives, principles and citizenship

September 17, 1992

Sterling is suspended within ERM. UK withdraws from ERM after sterling falls below its floor against the D-Mark.

January 12, 1994

European Monetary Institute was created which was a precursor for the future European Central Bank, meets for the first time.

December 1995

EU backs Euro as name for single currency.

EU leaders brace themselves for a tough three-year campaign to win support for the planned single currency.

June 1, 1998

European Central Bank established. The ECB's exchange rate policy remains uncertain. Analysts foresee volatility for the single currency.

January 1, 1999

The single currency began its life at \$1.18 according to the Maastricht Treaty

December 3, 1999 Single currency falls below \$1 for the first time.

September 25, 2000 <u>G7 nations stand firm on euro.</u> Leading central banks intervene in support of the ailing euro.

August 30 2001

European Central Bank releases final details of euro banknote.

September ~ December 2001 Euro banknotes and coins available to banks in member countries.

January 1 2002

Euro notes and coins enter circulation in the 12 participating states of the EU. All non-cash transactions will hereafter take place in euros. Dual circulation period begins, in which consumers can still use national currencies but will be given change only in euros.

2. Next movements of the EURO

February 28 2002

Most of national currencies end as legal tender.

German commercial banks exchanging national banknotes and coins for euros until at least this date.

Commercial banks in Austria, Finland, Greece and Ireland will decide individual deadlines for currency exchanges.

Italy has not made a decision on commercial bank currency exchanges.

March 2002

<u>National currencies will no longer be valid</u> although people will be able to exchange old banknotes and coins for euros in national central banks.

2003 and beyond

The 12 eurozone central banks have set various deadlines for exchanging old national currencies:

Central banks in Germany, Ireland, Spain and Austria, have said they will exchange old notes and coins indefinitely.

Central banks in Belgium and Luxembourg, say they will exchange old notes indefinitely but have set a deadline of the end of 2004 for coins.

Italy and Finland have each set a deadline of 10 years for notes and coins.

Greece and France have each set a deadline of 10 years for notes; Greece will exchange coins for two years, France for three.

The Netherlands has set deadlines of January 1, 2007 for coins and January 1, 2032 for notes.

Portugal will exchange notes for 20 years (the deadline for coins is December 31, 2002).

3. General information for the EURO

The euro

Euro is the European Union's single currency, which came into circulation on January 1, 2002 after years of negotiations and preparation on January 1 1999 when 11 EU countries formed an Economic and Monetary Union (EMU) and irrevocably locked the exchange rates of their currencies against the euro.

The euro is the official unit of account for European Union (EU) and is used for EU budgets and transactions. It also serves as the reserve asset if the EU.

Although the eurozone's citizens are using their own bank notes and coins, they are no longer stand-alone currencies, but subdivisions of the euro. Their value against the euro is irrevocably fixed. So 1 euro is the same as 166.386 Spanish pesetas or 6.56 French

francs. There are 100 cents in a euro, sometimes called euro cents.

There are seven euro notes and eight euro coins. The notes are: 500, 200, 100, 50, 20, 10, and 5 euro. The coins are: 2 euro, 1 euro, 50 euro cent, 20 euro cent, 10 euro cent, 5 euro cent, 2 euro cent, and 1 euro cent.

Member country

Twelve countries in Europe now make up the eurozone. They are Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal and Spain.

Danish voters on September 28 2000 became the first European citizens to decide by popular referendum whether to adopt the euro. In the final count, 53.1 per cent voted against the euro. And, the governments of UK and Sweden have decided to stay outside the euro for the time being.

How to join the euro?

In order to join the euro a country must be a member of the European Union and be able to pass economic tests set out by the Maastricht Treaty.

The Treaty requires economies to have achieved certain levels of performance on inflation, public deficits and debts, exchange rates and interest rates. These targets ensure not only stable economic conditions but also a degree of convergence between participating member states which allows EMU to function smoothly.

The terms of the Treaty are that:

- Annual government deficit must not exceed 3 per cent of GDP
- Total outstanding government debt must not exceed 60 per cent of GDP
- Rate of inflation within 1.5 percentage points of the three best performing EU countries
- Average nominal long-term interest rate must be within 2 percentage points of the average rate in the three countries with the lowest inflation rates
- Exchange rate stability, meaning that for at least 2 years the currency has kept within the "normal" fluctuation margins of European Exchange Rate Mechanism (ERM)

The final judgment on whether a member state fulfils the necessary conditions for the adoption of the euro is made by the European Council.

EMU

Economic and Monetary Union (EMU) is the single currency area within the European Union single market in which people, goods, services and capital move with minimal restrictions. It is intended that EMU will create the framework for economic growth and stability.

The rules, institutions and objectives of EMU are set down in the Maastricht Treaty.

Economic and Monetary Union is based on two concepts: the co-ordination of economic

policies and an independent monetary institution, the ECB.

The Council of Finance Ministers (which brings together the ministers for economic affairs and finance of the member states) is responsible for defining the major principles of economic policy. It can put pressure on the participating states for them to respect their budgetary commitments. In February 2001 EU ministers asked Ireland to revise its budget as it broke ECB guidelines and was likely to trigger further rises in inflation.

Monetary policy in the eurozone

Monetary policy in the eurozone is implemented by the European Central Bank, together with member national central banks.

The ECB is independent of political and private institutions of the European Union and member states. The ECB has its own budget, independent of that of the European Community.

The ECB has three boards. The executive board consists of the president, Wim Duisenberg, and five others. They are in charge of the day-to-day running of the ECB. Members of the executive board are restricted to a maximum of one eight-year term of office.

The governing council is its most important. It consists of the six executive board members and the governors of the participating national central banks. The council currently meets fortnightly and takes all monetary policy decisions such as changes in interest rates or exchange rate policy.

The general council is made up of all EU national central bank governors, including those outside EMU (UK, Sweden and Denmark) and the President and Vice President of the ECB. The non-EMU central bank governors can participate in the consultative and co-ordinating functions of the ECB but can not take part in deciding monetary policy.

The ECB's main objective, enshrined in the Maastricht Treaty, is to maintain price stability. The medium-term target inflation rate of between 0 and 2 per cent a year has been criticized for being too strict. Some say it forces the ECB to keep interest rates so high that they stifle economic growth. 2 per cent is not a target; it is the highest permissible level. Ideally, the ECB wants average inflation to be lower than 2 per cent.

The role of the eurozone national central banks

Although the ECB makes the big monetary policy decisions, the national central banks implement them in their own countries. All eurozone national central banks contribute to monetary policy decisions through membership of the ECB's governing council.

National central banks will continue to be responsible for the delivery of non-core central banking tasks which vary from country to country. For example, the Banque de France is involved in producing risk assessment for companies. Another one? Is there a non-core central banking task which they have in common.

The banks are responsible for overseeing the production and delivery of euro notes and

coins in their own countries.

Interestingly, Luxembourg, which did not have a national central bank before, had to create its own central bank before entering European Monetary Union.

The role of non-participating EU central banks

National central banks of member states not participating in the euro area have a different status to eurozone central banks.

They are allowed to participate in the consultative and co-ordinating functions of the ECB and can contribute to statistical data. Non-EMU central banks cannot contribute to monetary policy for the eurozone. They continue to conduct national monetary policies.

ESCB

This stands for European System of Central Banks and is a network made up by the ECB and all national central banks from the EU.

The Eurosystem refers to the ECB and the national central banks of the member states which have adopted the euro.

It is a complex relationship - the ECB is more powerful, yet the national central banks are also the shareholders in the ECB.

The national central banks of Member States not participating in the euro area have a different status, which permits them to conduct national monetary policies, but not to take part in deciding and implementing monetary policy for the euro area.

[Research 3: the EURO]

1. Why did the euro initially perform so badly in the foreign exchange markets? Is the euro inherently weak?

The euro's performance since its launch nearly three years ago has been disappointing. Having begun its life at \$1.18 in January 1999, the single currency quickly fell below parity with the US dollar and has since been unable to reach that level, while its rallies have often owed more to the dollar's weakness than its own strength. Given the US economy's current weakness, do the single currency's travails indicate that the euro is inherently weak ?

There are many theories.

Most commentators focus on outflows of investment capital from the eurozone. The superior rates of growth offered by the US economy in 2000 sucked money from the eurozone into US stocks and corporate bonds. European companies have also been enthusiastic sellers of euros in their bid to buy up US competitors.

These outflows more than offset the enthusiasm of foreign exchange professionals for the currency. Traders consistently bet on a rising euro and foreign exchange analysts have long been predicting a rise in the currency. However, even this support for the euro was removed, frustrated by the failure of the euro to rally.

International concern over the weakness of the euro reached a peak in September of 2000 when the world's main central banks intervened to prop up the currency. Analysts are divided over how far this action - which was later followed by several bouts of unilateral intervention by the European Central Bank - helped the currency. The euro has not fallen back to pre-intervention levels, but it has got close and never managed a sustained rally.

In addition to capital outflows, analysts argue, the euro has been undermined by the performance of the ECB. The public announcements of Europe's central bankers have frequently been contradictory, disorientating traders and fund managers. And when the ECB has appeared to speak with a common voice, the rhetoric has appeared in conflict with monetary policy. The ECB enraged financial markets on May 10 by cutting interest rates after two weeks of hawkish pronouncements by prominent central bank governors. Criticism has particularly centered on Wim Duisenberg, the president of the ECB, whose pronouncements frequently sent the euro tumbling.

By the summer of 2001, however, the euro staged a recovery, but that even that was attributed to weakness in the dollar.

2. How are businesses within the eurozone affected by the euro?

Companies operating within the eurozone have already enjoyed a reduction in many of their costs, particularly in treasury management, foreign exchange transactions and through the elimination of much foreign exchange risk.

With the conversion to euro notes and coins however, increased price transparency should trigger strong competition in some sectors so, the cost to consumers of certain goods in certain markets may have to fall. Businesses also face one-off costs in the changing of equipment and staff training.

However, critics of the euro feel that handing over control of interest rates and exchange rate policy to the ECB could mean that action is taken centrally which is inappropriate for the economies in which companies operate.

3. Britain and the euro dilemma: Will the UK join the euro?

UK politicians have turned their attention to the single European currency. Labor has drawn up a timetable for a euro referendum, which it will hold if the "economic conditions are right", while the Conservative party-line is to keep the pound, thereby keeping "control of our economic policy including the ability to set interest rates to suit British economic conditions." So which party is right? If a referendum were held in the next year or so, which way would you vote?

The arguments for and against are complex and often confusing, but essentially they fall into two groups. One group claims the case is pragmatic and that no matters of principle are involved; the other claims the opposite, that principle over-rides whatever other advantage there may be.

The first group says that entry is purely a question of where Britain's economic interest lies. If it can be shown that the country's material well-being will benefit, then we should go in; if not, not.

The second group says that, on the contrary, the very future of the country, its identity and its freedom to make its own decisions as a nation, are at stake, since entry will inevitably lead to a loss of British sovereignty to European institutions.

Tony Blair's Labor government belongs to the first group. It has declared that there are no political barriers to entry and that the only tests to be applied are of economic advantage. As Gordon Brown, chancellor of the exchequer, has put it, the government is pro-euro "because...we believe that - in principle - membership of the euro can bring benefits to Britain."

Brown has devised a set of five tests to apply in the process of deciding whether Britain

will in fact benefit. The conditions set out in the tests will be assessed by June 2003. If the government decides they have been met it will put British entry to a referendum soon afterwards. Membership could be completed with the euro becoming Britain's currency, the government believes, within 40 months of deciding to go ahead with a referendum.

The five tests are:

Is there sustainable convergence between UK and the eurozone economies? Is there sufficient flexibility to cope with economic change? Will it encourage or discourage companies from investing in the UK? What will the impact be on the financial services industry? Will it be good for employment?

Clear distinctions between the pragmatists and the opponents on principle are easily muddied. For instance, critics of the government's five tests claim they are too vague to be meaningful. You could argue, they say, that the tests have already been met or, on the other hand, that they never could be.

Besides, supposedly objective economic criteria can easily be manipulated as, it is said, was the judgment on Italy's financial soundness at the time of the euro's launch. So why wait for a referendum until 2003? Why not have one now or, alternatively, rule out the whole project, now being as good a time as any for either decision.

Here we come to what is perhaps the key issue for the government. Opinion is divided, as much in business as the unions, on the political left as well as the right. Polls suggest that the UK population is divided three-to-one against entering the European currency.

Whatever its judgment of the five economic tests may be, the government will have to make a sixth judgment, on whether it dare risk defeat in a popular vote on such an important issue.