# International Finance
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## Lecture - 5
## Floating and Fixed Exchange Rate Regimes

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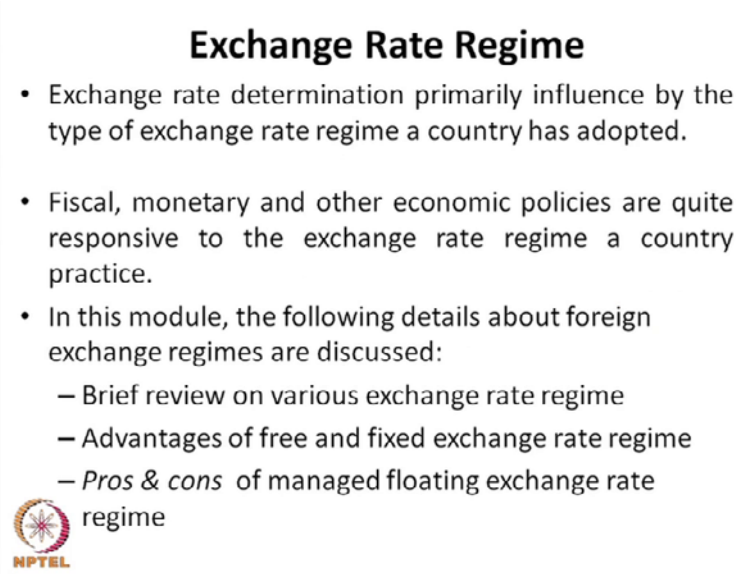

### Exchange Rate Regime

- Exchange rate determination primarily influence by the type of exchange rate regime a country has adopted.
- Fiscal, monetary and other economic policies are quite responsive to the exchange rate regime a country practice.
- In this module, the following details about foreign exchange regimes are discussed:
  - Brief review on various exchange rate regime
  - Advantages of free and fixed exchange rate regime
  - *Pros & cons* of managed floating exchange rate regime

Good morning. Today we will be discussing about floating and fixed exchange rate regime. In the earlier session, session three and four we discussed about various exchange rate system where exchange rate determination process, we discussed. And in the section five and six, we will be discussing the exchange rate regime. Here we will discuss, we will be discussing about exchange rate, floating and fixed exchange rate, exchange rate basket system, and also exchange rate, exchange rate currency board system.

Let us start with the exchange rate regime, fixed and floating exchange rate. Exchange rate determination primarily influenced by the type of exchange rate regime a country has adopted, because every country has different exchange rate system; exchange rate influence the fiscal, monetary and other economic policy, because on the basis of exchange rate the currency, domestic, country's domestic money supplied interest rate, fiscal policy, monetary policy depends.

So, fiscal and monetary policy and other economic policies are quite responsive to change in exchange rate. Hence, always country wanted to have exchange rate regime which suitable for their economic policy. In this module, we will be discussing about, briefly, the various exchange rate regime. The advantages of free and fixed exchange rate regime. Pros and cons of managed and floating exchange rate regime. As I mentioned that, free and fixed exchange rate, these are two extreme. On these two extreme, many exchange rate system can possible. Here, fixed and floating, free floating or a completely fixed, is a rare case. Many countries, adopted in between thumb policy, where they primarily fixed exchange rate for short region, short term; and try to maintain the exchange rate in the long run.

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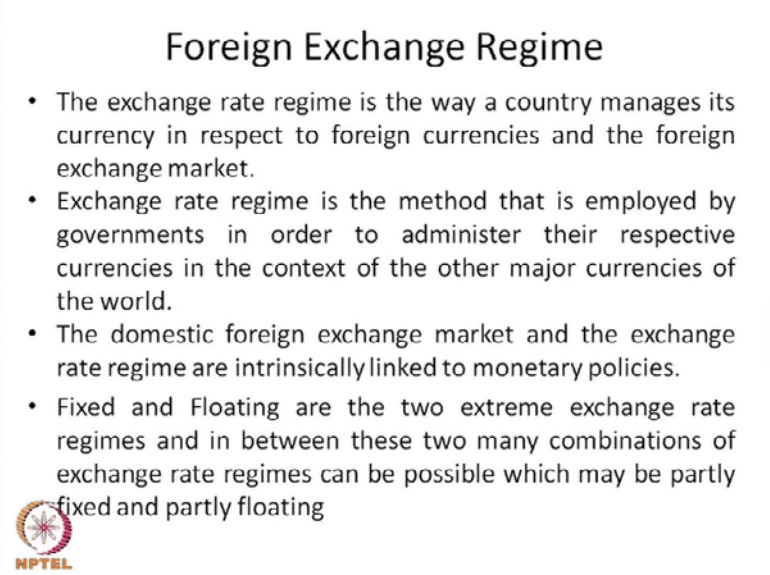

## Foreign Exchange Regime

- The exchange rate regime is the way a country manages its currency in respect to foreign currencies and the foreign exchange market.
- Exchange rate regime is the method that is employed by governments in order to administer their respective currencies in the context of the other major currencies of the world.
- The domestic foreign exchange market and the exchange rate regime are intrinsically linked to monetary policies.
- Fixed and Floating are the two extreme exchange rate regimes and in between these two many combinations of exchange rate regimes can be possible which may be partly fixed and partly floating

So, let us discuss with the exchange rate, foreign exchange rate regime, where exchange rate regime is a way the country manage its, foreign, managed its currency in respect to foreign currency and the foreign exchange rate market. Exchange regime is the method that is employed by the government in order to administer their respective currency, in context of other major currency of the country, of the world. Because the foreign currency influences the international trade, the capital flows, the investment, activity in the country. So, countries always try to have a exchange rate regime which is suitable for their domestic policy.

Domestic foreign exchange market and the exchange rate regimes are linked to monetary policy. Monetary policy, as you know, monetary policy primarily divides, to monitor the inflation, interest rate and money supply. There intricacies are there, among these three variables that is money supply, exchange rate, interest rate and the, and the domestic, may inflation.

So, always country wanted to have a exchange rate regime which is suitable for their domestic interest rate, domestic money supply and also, also, the domestic inflation, control of inflation. So, fixed and floating are the two extreme, and in between these two many combination may exchange rate regime can be possible, which may be partly fixed and partly floating. When, when we analyze exchange rate, fixed and floating, as I mentioned, these are the two extreme. And country always tries to avoid these two extreme; and try to have a exchange rate which is suitable for their monetary and fiscal policy.

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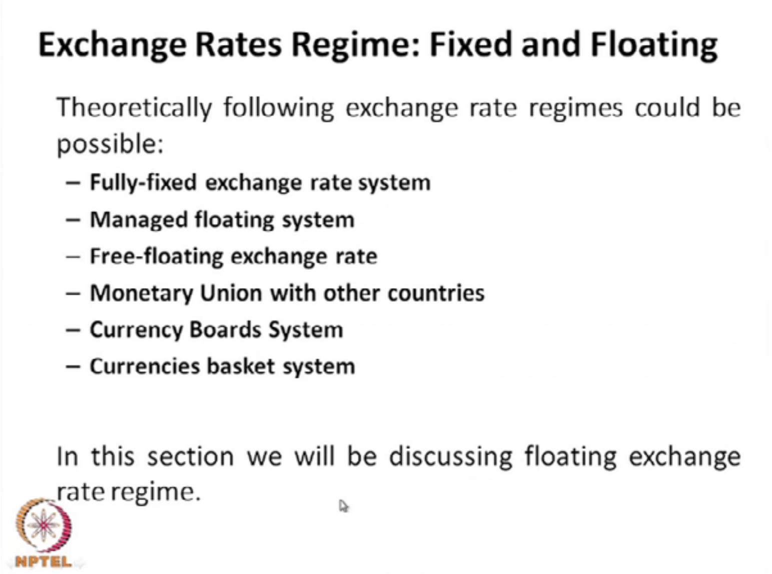

## Exchange Rates Regime: Fixed and Floating

Theoretically following exchange rate regimes could be possible:

- **Fully-fixed exchange rate system**
- **Managed floating system**
- **Free-floating exchange rate**
- **Monetary Union with other countries**
- **Currency Boards System**
- **Currencies basket system**

In this section we will be discussing floating exchange rate regime.

To exchange rates regime, fixed and floating, theoretically in between fixed and floating, many exchange rates regime can be possible: fully-fixed exchange rate regime, managed floating exchange floating rate regime, free-floating exchange rate, monetary union with other country, currency boards system, currency basket system.

So, the full, fully-fixed and freely floating, these are extreme; in between the managed floating, managed floating means there is a floating rate and country try to adhere to the exchange rate; and monetary union with other country means, here currency basket and currency union possibilities are there; currency basket means a country have a basket of currency, foreign currency and try to maintain a domestic currency linked to this basket currency; currency board also, same, similarly currency basket type country.

And, however, if you see a countries practices, generally very big countries, big countries in the sense that economy, that export imports are quite impressive, these countries generally practice, what is called a managed floating exchange rate regime; small country, they depends, they depends upon their export, because they generally practice what is called, what is called a monetary union; that is currency board system, or currency basket system. In this section, we will be discussing floating exchange rate regime, their advantages, their disadvantages; and also, whether a country should practice this floating exchange rate regime, we will discuss about that.

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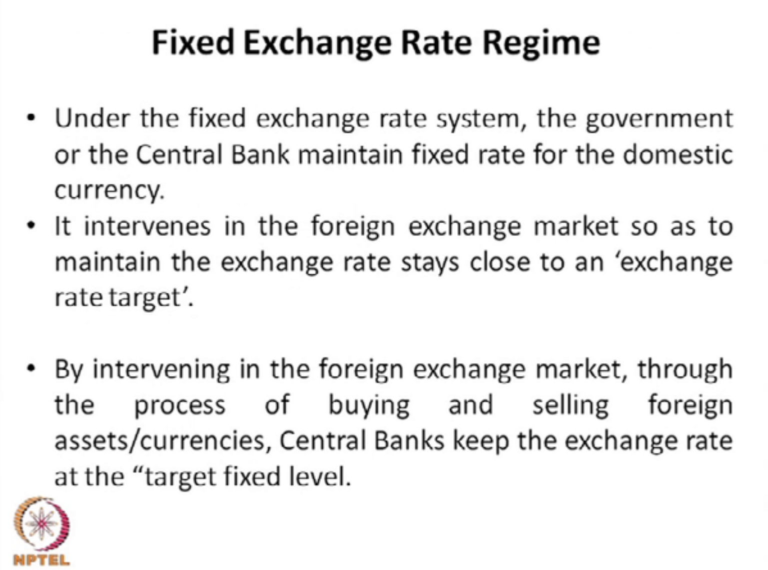

## Fixed Exchange Rate Regime

- Under the fixed exchange rate system, the government or the Central Bank maintain fixed rate for the domestic currency.
- It intervenes in the foreign exchange market so as to maintain the exchange rate stays close to an 'exchange rate target'.
- By intervening in the foreign exchange market, through the process of buying and selling foreign assets/currencies, Central Banks keep the exchange rate at the "target fixed level.

Under fixed exchange rate system, the government or the central bank maintain fixed rate for domestic currency. Domestic currency, they try to maintain the international value of the domestic currency, linked to a fixed rate. The fixed rate means, here, the country, the central bank of the country, generally administer the exchange rate, practice a fixed rate; which may be short run, or may be a medium run, medium, medium time period. They try to fix the exchange rate; and try to adhere this exchange rate, through the, through the purchase of, and buy and sell some foreign currency.

However, always government or the central bank tries to intervene in the foreign exchange market. Particularly, to maintain the, maintain the fixed exchange rate. There is a target exchange rate, the central bank decide to, central bank decide to maintain it; on the, to maintain the closed link between the decided exchange rate, always the central bank try to intervene in the foreign exchange market, by selling foreign currency assets, foreign currency, or directly, currency in the market. And when the country, there is a decline, or the target exchange rate is less than the actual exchange rate, always the country, the central bank try to purchase the foreign currency. When there is a deficit, a target exchange rate is lower than the actual exchange rate, the, always country try to sell the foreign currency, to maintain the exchange rate.

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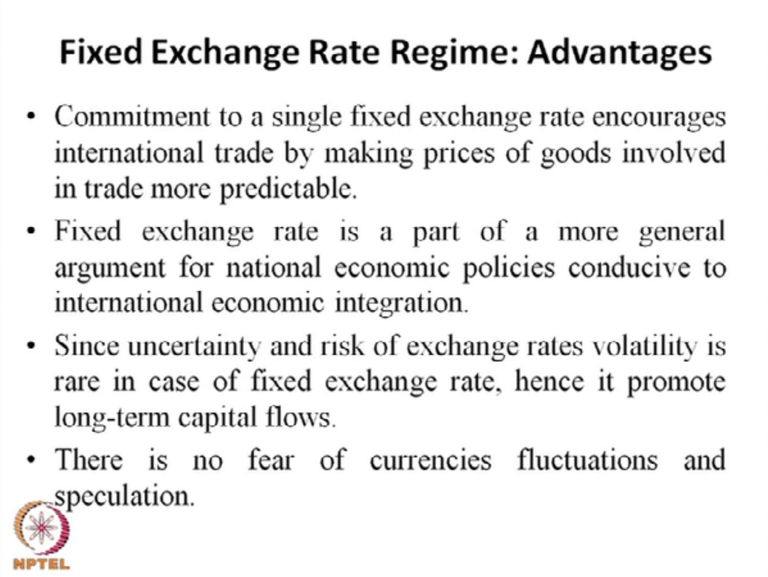

## Fixed Exchange Rate Regime: Advantages

- Commitment to a single fixed exchange rate encourages international trade by making prices of goods involved in trade more predictable.
- Fixed exchange rate is a part of a more general argument for national economic policies conducive to international economic integration.
- Since uncertainty and risk of exchange rates volatility is rare in case of fixed exchange rate, hence it promote long-term capital flows.
- There is no fear of currencies fluctuations and speculation.

However, there are many advantages; many disadvantages are there, in fixed exchange rate. The primary advantages are commitment to a single fixed exchange rate encourages international trade by making prices of goods involve in trade more predictable. Since, exchange rate is fixed, the exporter importer try to, try to adjust their balance sheet, or try to, try to export or import at particular rate. So, there is no fluctuation in the exchange rate. So, it is a, it is commitment, it is, of the central bank to fix the single exchange rate to encourage export import, because when the exchange rate is fixed, the, when exchange rate is fixed, the risk of appreciation or depreciation of domestic currency is not there. This, this actually encourages, what is called the export import, or international trade.

Fixed exchange rate is a part of more general argument for national economic policy conducive to international economic integration. Fixed exchange rate, generally, we, central bank of different countries practice to integrate their economy with the world, world economy. Fixed exchange rate some time, help international economic integration, because the fluctuation of exchange rate, the volatility in the exchange rate, create international risks, which may hamper the international integration. For that reason, always, central bank of different countries tries to maintain a fixed exchange rate, which generally helps in integrating the domestic economy with the world economic system.

Since uncertainty and risk of exchange rate volatility is rare in case of fixed exchange rate, it promote long run capital flow. The capital flow may be in the form of foreign direct investment, may be in the form of foreign institutional investment. Generally, comes to a country when there is a, when there is a uncertainty, or the risk is not there. Because uncertainty and risk create exchange rate volatility, and lead to flight of foreign currency. And for, to improve the capital inflow, inflow to the domestic economy, always this uncertainty or risk of foreign, foreign exchange, foreign, foreign exchange rate volatility should be reduced. And a fixed exchange rate, there is no volatility; there is no uncertainty. And hence, it promotes the capital inflow to domestic economy.

There is no fear of currency fluctuation and speculation. Fixed exchange rate, there is no, because exchange rate is constant; exchange rate is fixed; the currency fluctuation, or the currency speculation is not there. Because in a floating exchange rate, the value of the currency change, or value of the currency, the depreciation or appreciation always there. This depreciation, appreciation, generally linked to the speculation. Speculator in the market, generally buy and purchase foreign currency, take position in the foreign currency market, to get advantage of what is called the appreciation or depreciation of foreign currency.

In a. in a, in case of fixed exchange rate, such kind of appreciation, depreciation is not there. Hence, the speculation uncertainty is not there. And hence, it promote the capital inflow to domestic economy. So, fixed exchange rate advantages are there, advantages of what is called the promotion of international trade, enhancement of international economic integration, and capital inflow, because uncertainty and risk are not there, in case of fixed exchange rate.

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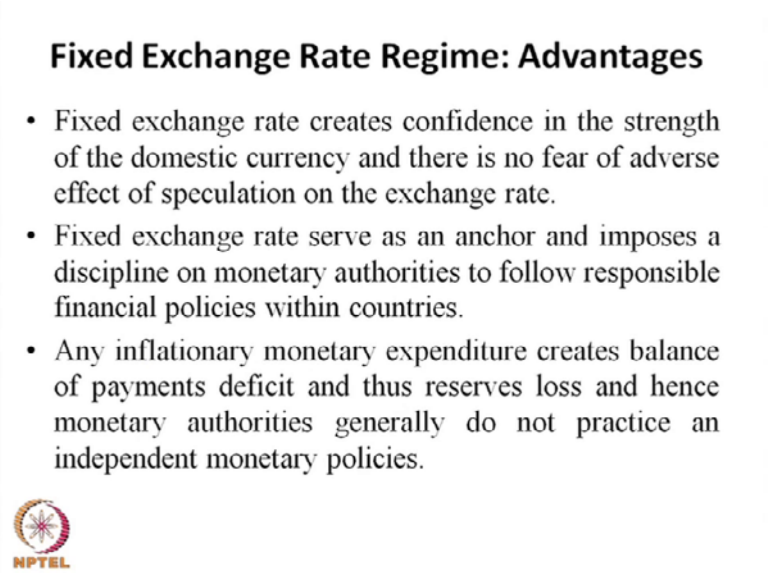

## Fixed Exchange Rate Regime: Advantages

- Fixed exchange rate creates confidence in the strength of the domestic currency and there is no fear of adverse effect of speculation on the exchange rate.
- Fixed exchange rate serve as an anchor and imposes a discipline on monetary authorities to follow responsible financial policies within countries.
- Any inflationary monetary expenditure creates balance of payments deficit and thus reserves loss and hence monetary authorities generally do not practice an independent monetary policies.

There are many other advantages, are also there. Fixed exchange rate creates confidence and strength in the domestic currency. And there is no fear of adverse effect of speculation on the exchange rate. Because since exchange rate is fixed, there is no speculation, there is no uncertainty, it creates confidence on the domestic, domestic currency, because the value of the domestic currency remain constant, since there is a fixed exchange rate. For creating a confidence in the economy, we generally, many country practice what is called fixed exchange rate.

Fixed exchange rate serve as a anchor and imposes a discipline monetary, discipline on monetary authority to follow a responsible financial policies within the country. Because on the basis of exchange rate, the domestic inflation, domestic interest rate, domestic economic, economic money, domestic money supply depends. And since, the country practising a fixed exchange rate, it create a anchor, a discipline on the, on the monetary authority to maintain the low level inflation, maintain stability in the interest rate, stability in monetary policy, so because only then the exchange rate can be fixed. If there is interested volatility, if there is inflation, if there is excess money supply in the economy, the fixed exchange rate practice, practices not possible. Because of this reason, the fixed exchange rate provides a extra force on the, on, extra force on domestic monetary authority, to practice a discipline monetary policy, where they have to maintain a low level inflation, stability in the money supply and also stability in interest rate, interest rate.

However, inflationary, any inflationary monetary expenditure creates balance of payments deficit. When, there is balance of payment deficit, there should be, there, there, there is very difficult on the part of monetary authority, to maintain a fixed exchange rate, because the deficit, deficit balance of payment lead to depreciation of domestic currency. When there is domestic, depreciation of domestic currency, the foreign, monetary authority has to intervene in the foreign exchange market, by selling foreign currency. They have to maintain a exchange rate reserve, to practice a fixed exchange rate policy. Because in a depreciation or appreciation of domestic currency lead to volatility in the fixed, volatility in exchange rate. And hence, to maintain a target exchange rate, or a fixed exchange rate, it is essential one on the part of the monetary authority, to practice a disciplinary monetary policy, where they have to, they have to, remove the any inflationary bias, and also any interest rate volatility. So, fixed exchange rate provides a disciplinary monetary policy.

Other advantages are there in the fixed exchange rate. The exchange rate was, like, in case of fixed exchange rate, the monetary authority has a severe strain to maintain, what is called a stable exchange rate regime. Because they have to regularly intervene in the foreign currency market to maintain stability in the exchange rate system. So, it is very difficult on the part of monetary authority to maintain a fixed exchange rate because they need to intervene in foreign currency market every moment. As we know, foreign currency market is highly volatile market; it is highly liquid market; and turnover in foreign currency market is quite high. Any, any kind of expectation, any kind of imbalance in foreign balance of payment, it leads to depreciation appreciation of foreign currency. And for that reason, every time the monetary authority, the central bank should whistle in foreign currency market, to maintain stability in exchange rate system. This, for to maintain stability in exchange rate system, they need a huge amount of foreign currency reserve, in the form of foreign currency asset, which allow them to intervene in the foreign currency market to maintain the fixed exchange rate.

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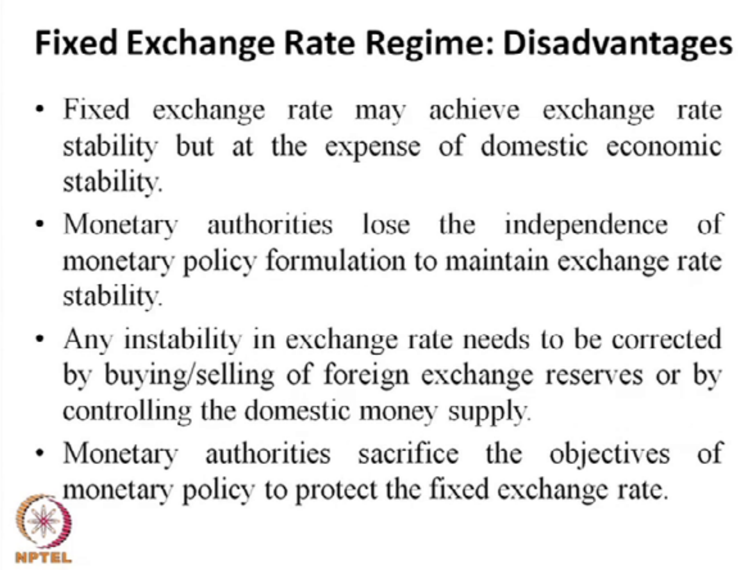

## Fixed Exchange Rate Regime: Disadvantages

- Fixed exchange rate may achieve exchange rate stability but at the expense of domestic economic stability.
- Monetary authorities lose the independence of monetary policy formulation to maintain exchange rate stability.
- Any instability in exchange rate needs to be corrected by buying/selling of foreign exchange reserves or by controlling the domestic money supply.
- Monetary authorities sacrifice the objectives of monetary policy to protect the fixed exchange rate.

Let us discuss about the disadvantages of a fixed exchange rate. As I mentioned, there are many advantages of fixed exchange rate; at the same time, there are many disadvantages of fixed exchange rate. Fixed exchange rate may achieve exchange rate stability; but at the expense of domestic stability, because to maintain the fixed exchange rate, what you need? We need control on money supply; we need a control in international interest rate; we need a control inflationary regime. And all these possible, all you have a curtail, our economic, domestic economic activity. Because when you do not supply excess money, money in the economy, there may not be liquidity; and there is no liquidity, the domestic economy expansion will suffer. So, to maintain a low level inflation, you have to have a interest rate, we have a, we have to have a money supply, which, which we have to sacrifice, to sacrifice for maintaining external stability of the currency. So, we have to achieve a stability in external value of the currency, by sacrificing the domestic economic activity. So, domestic stability, generally suffer because of, because to maintain external stability of the economy.

Monetary authority also loses their independence of monetary policy formulation, to maintain exchange rate stability. Because domestic, monetary authority, generally, requires to monitor the economy, a independence in formulation of monetary policy. Because to maintain a independence in monetary policy, it is, it is essential that, it is not possible to control the exchange rate money supply. And at the same time, interest rate continuously, to maintain the stability in the exchange rate, because this three are interdependent; and there is what is called a, what is called a dilemma of trinity.

There is, economic logic is that, it is very difficult to control a floating, fixed exchange rate, a interest rate, and at the same time a stability in money supply, because this three are interdependent. And you need, you can only control two, at a particular time period; you cannot control all the three. So, it is very difficult to maintain stability in external value of the currency by an, having a independent monetary policy. Monetary policy, the monetary authority practice; they need a, they need freedom in formulating what is called interest rate regime, in formulating money supply policy. Because to maintain a fixed exchange regime, the monetary authority cannot have freedom in deciding, what is the require, what should be the minimum requirement of money supply? What should be the interest structure in the economy? And this, for this, they have to sacrifice the fixed exchange rate.

So, fixed exchange rate does not allow a, to practice a, independent monetary policy. Any instability in exchange rate need to be corrected by a buying selling of foreign, foreign exchange reserve, or by controlling the domestic money supply, because when you want to maintain stability in exchange rate, the monetary authority need to interfere in the domestic market by in the form of continuously buying and selling foreign, foreign assets. So, they have to maintain a, excessive reserve which allows them to control the exchange rate, any moment. Because whenever they are interfering in the foreign exchange market, there is a, they are controlling, what is called a domestic money supply in the economy. They have to sacrifice the independence of formulating monetary policy; and they have to intervene in the foreign currency market, any, every moment to maintain stability in exchange rate.

Monetary authority sacrifice the objective of monetary policy, to protect a fixed exchange rate. Because the objective of monetary policy to control inflation, and through a responsive monetary policy. The responsive monetary policy, allow them to, allow them, to decide, what should be the level of money supply in the economy? What should be the structure of interest rate? If, they decide these two, and try to maintain these two, they cannot control the fixed exchange rate. So, fixed exchange rate, fixed exchange rate, or the stability in exchange rate market, requires the monetary authority should, protect, should not protect the domestic economy, because they have to sacrifice the domestic economy, or stability of the domestic economy, to practice a fixed exchange rate.

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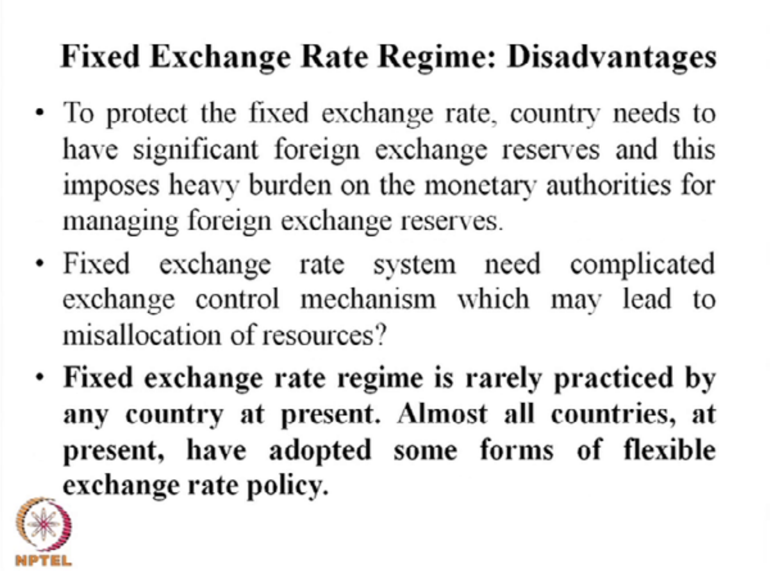

**Fixed Exchange Rate Regime: Disadvantages**

- To protect the fixed exchange rate, country needs to have significant foreign exchange reserves and this imposes heavy burden on the monetary authorities for managing foreign exchange reserves.
- Fixed exchange rate system need complicated exchange control mechanism which may lead to misallocation of resources?
- **Fixed exchange rate regime is rarely practiced by any country at present. Almost all countries, at present, have adopted some forms of flexible exchange rate policy.**

So, other disadvantages are there. To protect the fixed exchange rate, country needs to have a significant foreign exchange reserve. And this imposes heavy burden on monetary authority for managing exchange rate reserves. Because to protect the exchange rate, or targeted exchange rate, the central bank or the monetary authority need to interfere in the foreign currency market, every moment. Because foreign currency market is highly liquid market; and in every moment, there is appreciation and depreciation of foreign, domestic currency. To protect the exchange rate, the monetary authority, need to intervene in the foreign currency market, by buying and selling of foreign currency assets. When they want to buy and sell foreign currency assets, they have to have significant exchange rate reserve. So, the exchange rate, exchange rate reserve has a own cost; maintaining a exchange rate reserve, there is a cost on the part of monetary authority.

So, monetary authority, monetary authority need to have a huge amount of reserve to control the fixed exchange rate. So, there is a cost of maintaining exchange, fixed exchange rate. This cost is not only monetary cost, not only the policy formulation cost; at the same time is cost of keeping a huge amount of foreign currency reserve.

Fixed exchange rate system need a complicated exchange control mechanism, which may lead to misallocation of resources. Because we are practising fixed exchange rate; means, you are not allowing the determination, market determination exchange rate regime; means, market forces are not there; it deciding, what should be the value of the domestic, actual value of the domestic currency. And this may lead to misallocation of, a misallocation of resources. Because the misallocation of resources is, misallocation resources are there. Because the monetary authority intervening in foreign currency markets, every moment, to keep foreign currency, foreign currency rate constant. And there are many utilization, many sources of utilization of foreign currency assets are there. But these assets are being sacrificed to maintain exchange, fixed exchange rate regime.

So, we need exchange control mechanism. The exchange control mechanism may be in the form of export control, import control, free control on free movement of capital, control on, control on what is called a balance of payment regime. So, these are requirements to practice a fixed exchange rate; and this lead to misallocation of resources.

So, it is very difficult to practice, what is called a fixed exchange rate regime. Because there are many advantages are there, no doubt; at the same time disadvantages are more. Because disadvantages in the form of surrendering the domestic monetary policy and implementing a monetary policy which may not be suitable for domestic economy.

So, no countries in the world, have, in this world have fixed exchange rate regime, at present. Fixed exchange rate regime is rarely practiced, by any country at present. Almost all countries at present have adopted some forms of flexible exchange rate policy; where, where the fixed and fixed exchange rate regime is practiced in the form of a targeting exchange rate, which may not be a official exchange rate. The market forces decide the exchange rate; at the same time, the monetary authority try to maintain a exchange rate, which is suitable for their domestic economy; and always try to maintain this exchange rate by continuously buying and selling or through policy intervention in exchange rate market. But monetary authority never decide, what should be the fixed exchange rate for the country.

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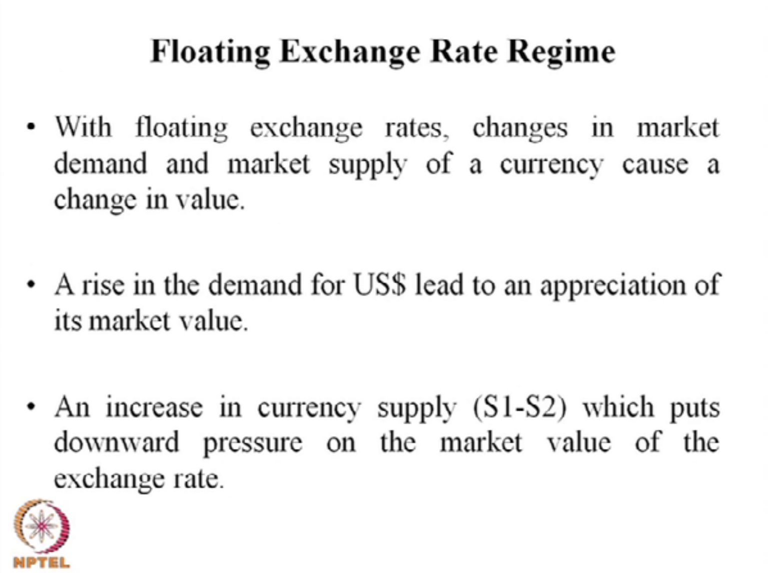

## Floating Exchange Rate Regime

- With floating exchange rates, changes in market demand and market supply of a currency cause a change in value.
- A rise in the demand for US$ lead to an appreciation of its market value.
- An increase in currency supply (S1-S2) which puts downward pressure on the market value of the exchange rate.

Let us discuss the, what is the, what is called floating exchange rate regime? If you see, the floating exchange rate system, as I mentioned earlier, the floating exchange rate system, the market forces decide the exchange rate. The market forces here, the market forces of supply and demand of foreign currency. Each, each currency has a own demand and own supply process. And that demand and supply of currency decides the exchange rate, or the value of the currency in the international market. With the floating exchange rate, changes in market, demand and supply, decide the exchange rate value. The monetary authority never try to adopt any fixed exchange rate; never try to decide what should be the ideal exchange rate for the country; never try to interfere in addressing, or try to maintain a target value of a domestic currency. They allow the market forces to decide the exchange rate value.

So, a rise in the demand for US dollar, lead to appreciation of market value; an increase in currency supply, which puts downward pressure on the market value of the exchange rate. Here we will discuss, when there is free demand, free market forces are there, in the form of supply and demand side. How they decide the exchange rate? Whenever there is a more demand, what should be the exchange rate; whenever there is more supply, what should be the exchange rate. In the free market rate, free, freely floating exchange rate system; the monetary, the freely exchange rate system, it is the demand and supply in the real market, decide the exchange rate value.

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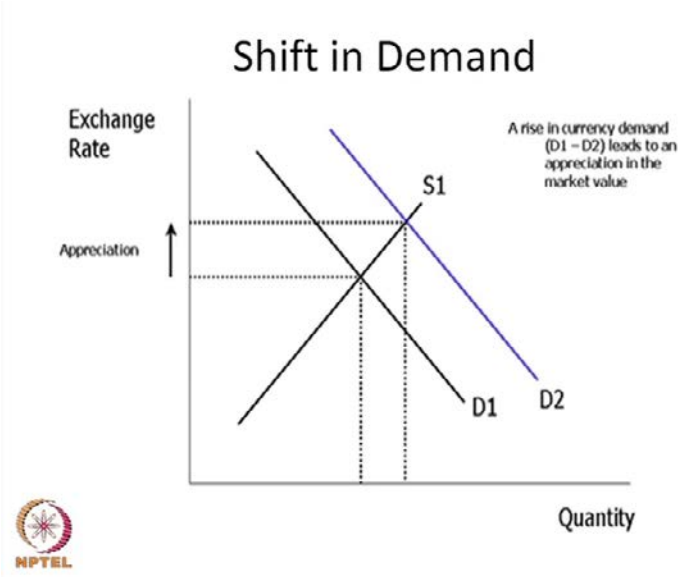

Shift in Demand

A rise in currency demand (D1 – D2) leads to an appreciation in the market value

If you see the diagram, here y axis, we have the rate of change of foreign currency; in x axis, we have quantity supply, quantity supply and quantity demand. The exchange rate is y axis; and x axis we have quantity supply of exchange rate, exchange; quantity supply of, that is called exchange or the foreign currency. Here you see that, D 1 and D 1 and D 2, are the demand of foreign currency; and S 1 is the supply of foreign currency. With the increasing supply of foreign currency, the exchange rate appreciated; when economy receive more, more foreign currency, the foreign currency domestic value of currency appreciate; when there is more supply of the US dollar in Indian economy, Indian rupee will appreciate. When there is, so for that reason, S 1 that is supply of foreign currency, upward sloping; when there is more demand of foreign currency, rupee will depreciate. So, then D 1or D 2, the demand curve is downward sloping. In the initial period, when demand is D 1, supply is S 1, demand is D 1, supply is S 1, the exchange rate decide at particular level; the exchange rate decide at this point.

With the demand of more dollars or more foreign currency, supply remain constant. The demand curve shift from D 1 to D 2; that is upward shift will be there; upward parallel shift is there. At this point, that since there is more demand of foreign currency, the foreign currency appreciate against the domestic value. And this exchange rate, the equilibrium take place as a higher level.

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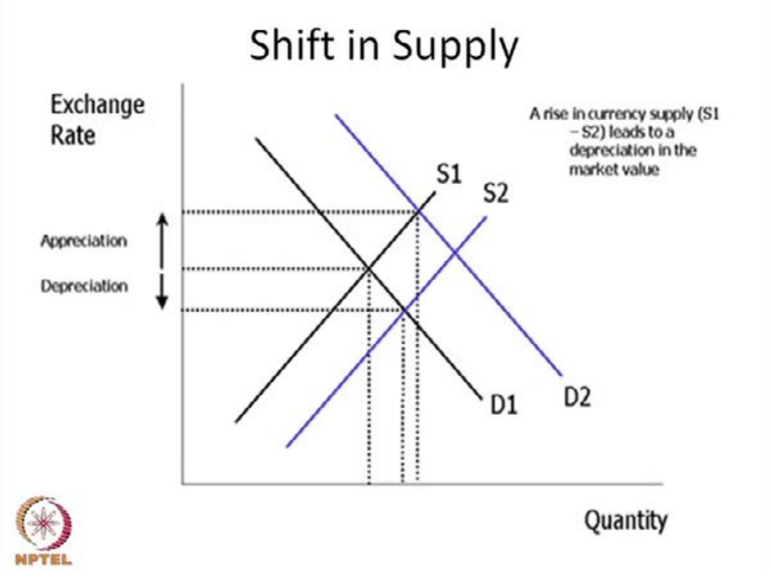

Similarly, if you see the shift in supply, demand remain constant; there is shift in supply, here, demand is D 1, supply is S 1. The rate of exchange, rate, exchange rate determined at this level; this level exchange rate decide. And when supply is increasing, when there is more supply of foreign currency in the domestic economy, the supply curve shift left toward, towards the x axis, there is a parallel shift, downward shift, there is a parallel downward shift. New supply curve is S 2, with the more supply of foreign currency, the quantity increases; when there is more supply of foreign currency, a domestic value of foreign currency depreciate. The domestic money supply, domestic value of money depreciates, and new equilibrium takes place at here. Earlier equilibrium was here; the new equilibrium takes place here. Suppose, there is, at the same time, there is a parallel, there is a more demand in the foreign currency market.

So, with the more demand, D 1 shift rightward; towards parallel shift rightward, and at the new demand curve, new supply curve S 2, and new demand curve D 2, that, equilibrium take place here. If the supply remain constant, demand increase, with the old supply curve here; then equilibrium take place here. The both, supply and demand, together increase; then there is a new demand curve, new supply curve, we have S 2 and D 2. So, here, equilibrium takes place here.

So, what does it mean? It means that whenever, it means that with the increase in demand of foreign currency, if supply remain constant, there is appreciation of value of foreign currency, there is a depreciation value of the domestic currency. And at the, if there is more supply of foreign currency, demand remain constant, demand remain constant; domestic value of the currency will appreciate. And there will be appreciation in domestic value of currency in international market. However, if the supply and demand, together increase, we have, we have a new equilibrium point. The new equilibrium point may appreciate, depreciate, depends upon the level of demand and level of supply. If the level of demand is more, the new, at the new equilibrium, the domestic value of currency may depreciate; with the level of supply is more than demand or the new equilibrium, domestic value of currency appreciate. So, if you interpret in a different way, different way, when they were, there is a market force, when market forces decides the value of the currency, the demand and supply forces decides the value of the currency in actual market; then the process of determination depends upon the strength of demand and strength of supply. That actually, the shift in demand curve, shift in supply curve, reflect here.

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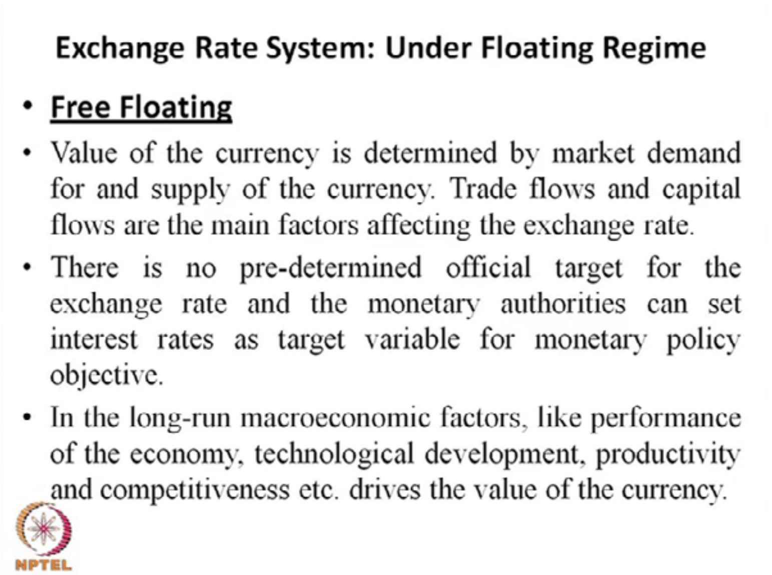

Exchange Rate System: Under Floating Regime

- **Free Floating**
- Value of the currency is determined by market demand for and supply of the currency. Trade flows and capital flows are the main factors affecting the exchange rate.
- There is no pre-determined official target for the exchange rate and the monetary authorities can set interest rates as target variable for monetary policy objective.
- In the long-run macroeconomic factors, like performance of the economy, technological development, productivity and competitiveness etc. drives the value of the currency.

Let us understand, what are the, under the fixed exchange rate, under the floating exchange rate system, which are the, what are the advantages are there? What are the disadvantages are there? The value of currency determined by market demand and for supply, and market, market demand and supply, the trade flow and capital flow are the main factor affecting the exchange rate. The currency when the free floating is there, the demand, demand in foreign currency arise, because the importers, those who are importing goods and services on foreign country, they demand foreign currency; those who are supposed to pay, have pay liability in the form of foreign currency, they also demand foreign currency; at the same time, there is a flows of foreign currency, flow of foreign currency is there, in the form of export; also, in the form of other trade flows are there, other than trade flows are there. So, the trade, trade requirements and the capital flow decide the exchange rate; decide the value of the, value of the currency under free floating regime.

Under free floating regime, there is no free determined exchange rate, on the part of monetary authority. Monetary authority never decides any exchange rate. It is the market forces, which decides the exchange rate or the value of the domestic currency. However, it does not mean that central bank never interfere in foreign currency market, under free floating regime, because it is free floating or fixed regime. The central bank always interfere in the domestic foreign currency market, because they, they want to avoid excessive floating, excessive fluctuation in foreign currency because of, because the excessive fluctuation in foreign currency affect the international trade.

So, in case of fixed exchange rate regime, the monetary authority intervene every moment, to maintain a fixed exchange rate; in case of free floating regime, the monetary authority intervene regularly, not every moment, to, so as to arrest any kind of excessive volatility in free floating regime. Because as I mentioned, there are many factor which affects the exchange rate. And there are many way exchange rate also affect the domestic money, domestic monetary policy or domestic economic policy. Because excessive floating affects, hamper the international trade; at the same time, fixed exchange rate, hamper the domestic monetary policy.

So, we have to understand that, neither you want a fixed exchange rate, nor we want a free floating exchange rate. Always monetary authority wants a exchange rate which is, which is suitable for their economic policy. So, exchange rate also influenced by many macro economics factors like performance of the economy, technological development, productivity and competitiveness, it, which generally drive the value of the currency. No doubt, macroeconomic factors are short run. May be in the long run also, performance of the economy, technological development, productivity, competitiveness these are the long run parameters.

So, in the long run, it is the performance of the economy that decide the exchange rate, in a market economy; in a short run, it is the trade flow or the flow of foreign currency decide the exchange rate. So, what do you want? We, neither we want a freely floating exchange rate, nor you want a fixed exchange rate. Because these two are extreme; they are, they have number of advantages disadvantage; you want a stable economic policy or a free and exchange rate system which help in, help our domestic economy.

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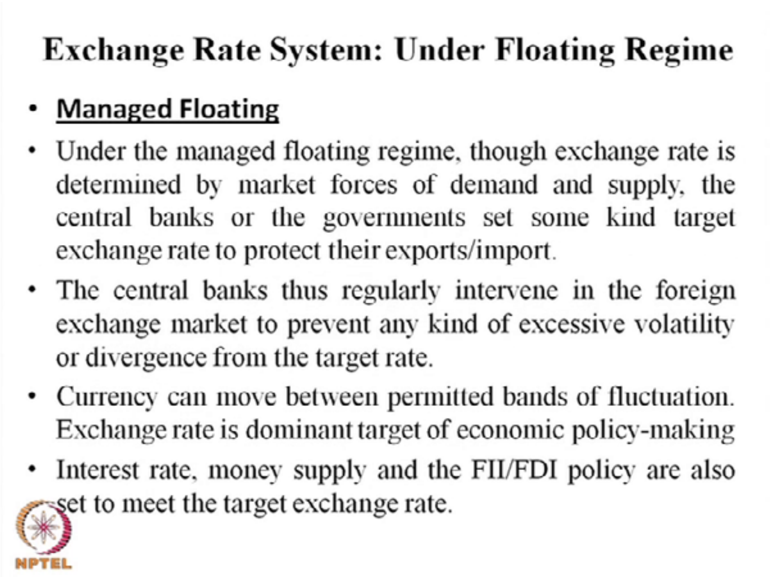

**Exchange Rate System: Under Floating Regime**

- **Managed Floating**
- Under the managed floating regime, though exchange rate is determined by market forces of demand and supply, the central banks or the governments set some kind target exchange rate to protect their exports/import.
- The central banks thus regularly intervene in the foreign exchange market to prevent any kind of excessive volatility or divergence from the target rate.
- Currency can move between permitted bands of fluctuation. Exchange rate is dominant target of economic policy-making
- Interest rate, money supply and the FII/FDI policy are also set to meet the target exchange rate.

So, always, if you see; if you see the real world, the real world, there is a practice of managed floating rather than free floating exchange rate. In managed floating exchange rate, there is a target region. The target region decided by the monetary authority, what is called target exchange rate? However, in the real market, real market, the central bank and the monetary authority never decide, or never tell, what is the target exchange rate? Under the managed floating exchange rate regime, in place of every moment intervention in foreign currency market, the monetary authority regularly intervene foreign currency market, to arrest any kind of excessive volatility in foreign currency.

So, under managed floating, exchange rate regime, though exchange rate is determined by the market forces, the central bank or the government set some kind of target exchange rate, to protect their export import. As I mentioned, we are not practicing fixed exchange rate; at the same time, we are not practicing, what is called free floating exchange rate? What you are practicing? A managed floating exchange rate, under the managed floating exchange rate system, the demand and supply of foreign currency, decide the exchange rate. However, the monetary authority or the central bank always practice a target exchange rate, a target exchange rate, which promote their export import. A target exchange rate is a rate, which promote capital inflow to the domestic economy.

So, always the monetary authority try to intervene in the money, exchange rate market, when the exchange rate beyond, exchange rate appreciate or depreciate beyond a limit which the limit set by the monetary authority. The limit is set on the basis of a regime which should not hamper the export and import.

So, central bank, thus regularly intervene in the market, foreign exchange market, to prevent any kind of excessive volatility, or divergence from target exchange rate. Because the target exchange rate which promote international trade, which promote capital inflow to the domestic economy; a rate which allow the monetary authority to practice a independent monetary policy; a, which allow the monetary authority to frame domestic microeconomic policy which is good for the country, or which is suitable for the country.

So, they do not want exchange rate. Let it be decided by the market forces, beyond a target, beyond the target region. If the exchange rate, appreciate or depreciate, beyond the target region, target rate or target region, the monetary authority intervene in the foreign currency market, by, in the form of selling or purchasing foreign currency. to prevent the exchange rate to go beyond the limit.

Currency can move between the permitted band of fluctuations. The monetary authority allow the foreign currency to fluctuate on a particular limit. The limits or the band of the fluctuation decide by the monetary authority. And the monetary authority never disclose this, to market forces. At the same time, the interest rate, money supply and foreign direct investment, foreign, foreign institutional investment, all this policy are, inter, are framed on the basis of a target exchange rate. They frame a target exchange rate, which allow the monetary authority to have a monetary, have a policy of interest rate; have a policy of money supply; have a policy of foreign institutional investment, foreign direct investment, which is good for the country. So, while deciding the exchange rate, a target exchange rate, the monetary authority take into account, the macroeconomic parameters;

macroeconomic parameter, which are suitable for the country. So, target exchange rate determined by the, decided by the monetary authority; at the same time, monetary authority allow the exchange rate to be determined by the market forces, on the basis of demand and supply of foreign currency.

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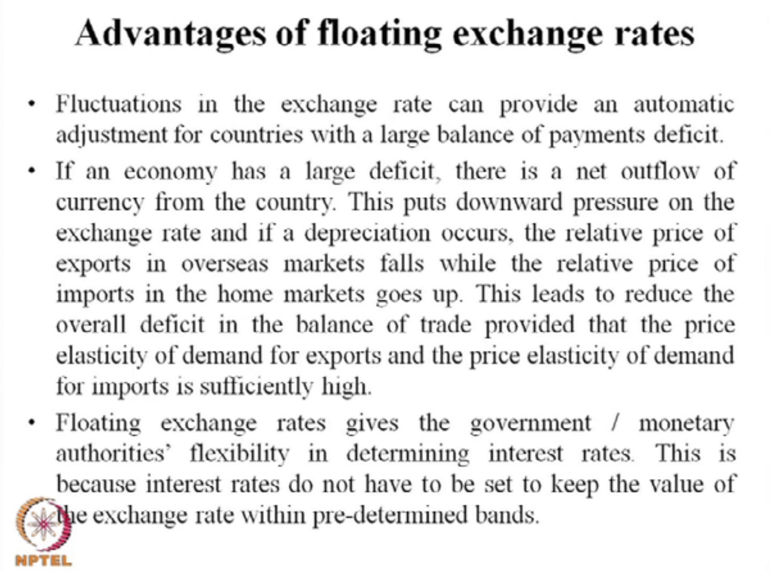

# Advantages of floating exchange rates

- Fluctuations in the exchange rate can provide an automatic adjustment for countries with a large balance of payments deficit.
- If an economy has a large deficit, there is a net outflow of currency from the country. This puts downward pressure on the exchange rate and if a depreciation occurs, the relative price of exports in overseas markets falls while the relative price of imports in the home markets goes up. This leads to reduce the overall deficit in the balance of trade provided that the price elasticity of demand for exports and the price elasticity of demand for imports is sufficiently high.
- Floating exchange rates gives the government / monetary authorities' flexibility in determining interest rates. This is because interest rates do not have to be set to keep the value of the exchange rate within pre-determined bands.

So, which are, which are the, what are the advantages of floating exchange rate? There are many. The fluctuation in the exchange rate, can provide a automatic adjustment for country, with large balance of payment deficit, because in case of floating exchange rate, the market forces decide or correct the adjustment, in balance of payment. Balance of payment having, may be having a deficit; may be having surplus. When there is deficit balance of payment, domestic currency depreciate; when domestic currency depreciate, there, it is a, it creates incentive for export; and there will be more export; and there is more flow of foreign currency to the economy; and this automatically correct the deficit balance of payment. When, when there is a surplus balance of payment, when there is surplus balance of payment, the domestic currency appreciates, which create disincentive for export, and export curtail; foreign capital, foreign, foreign inflow in the form of trade, in the form of export reduces; and surplus of foreign, surplus balance of payment, automatically corrected.

Thus, in an economy, if an economy has a large deficit, there is a net outflow of foreign currency; this put downward pressure on the exchange rate. And if depreciation occurs, the relative price of export, in overseas market falls; while the relative price of import, in home market goes up, this lead to reduce the overall deficit in the balance of trade. And provided that the price elasticity of demand of export, and price elasticity of import is sufficiently high. The export import price elasticity; if they are more elastic, then any depreciation appreciation of foreign currency, any depreciation appreciation of foreign currency automatically correct the deficit or surplus balance of payment. Floating exchange rate gives the government, or the monetary authority, flexibility in determining the interest rate; at the same time, it keeps the value of currency to fluctuate under a limit. The limit is determined by the monetary authority. So, flexible exchange rate or the managed floating exchange rate, is the ideal exchange rate, to be practiced in real economic world.

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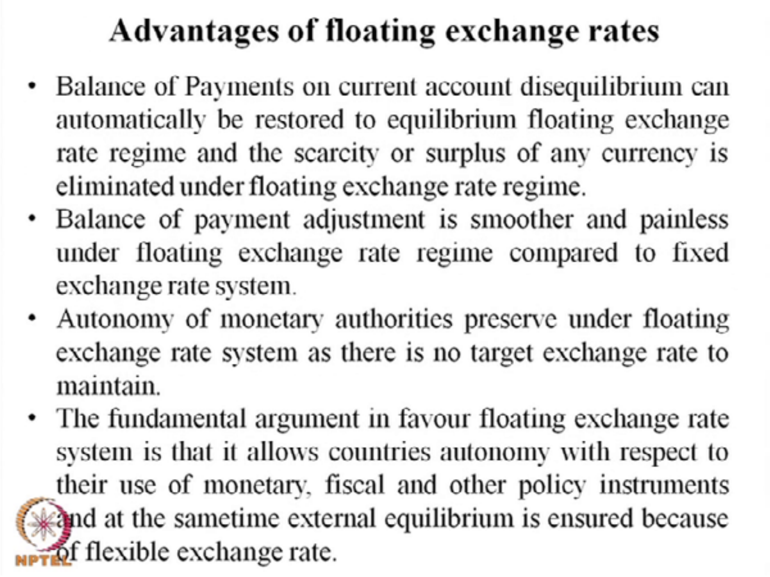

## Advantages of floating exchange rates

- Balance of Payments on current account disequilibrium can automatically be restored to equilibrium floating exchange rate regime and the scarcity or surplus of any currency is eliminated under floating exchange rate regime.
- Balance of payment adjustment is smoother and painless under floating exchange rate regime compared to fixed exchange rate system.
- Autonomy of monetary authorities preserve under floating exchange rate system as there is no target exchange rate to maintain.
- The fundamental argument in favour floating exchange rate system is that it allows countries autonomy with respect to their use of monetary, fiscal and other policy instruments and at the sametime external equilibrium is ensured because of flexible exchange rate.

So, what are the advantages of floating exchange rate, further. The balance of payment on account of disequilibrium, automatically corrected; restored to a because of floating exchange rate regime. Balance of payment adjustment is smoother, because the market forces, correct the balance of payment deficit or surplus. Autonomy of monetary authority preserves, because monetary authority get the autonomy in deciding the monetary policy; in deciding the level of inflation, level of interest rate, level of money supply in the economy. At the same time, they also have the freedom, in intervening in foreign currency market. So, the fundamental argument in favour of floating exchange rate system is that, it allow country’s autonomy with respect to their use of monetary fiscal, and other policy instrument; and at the same time, external equilibrium is ensured because of flexible exchange rate regime.

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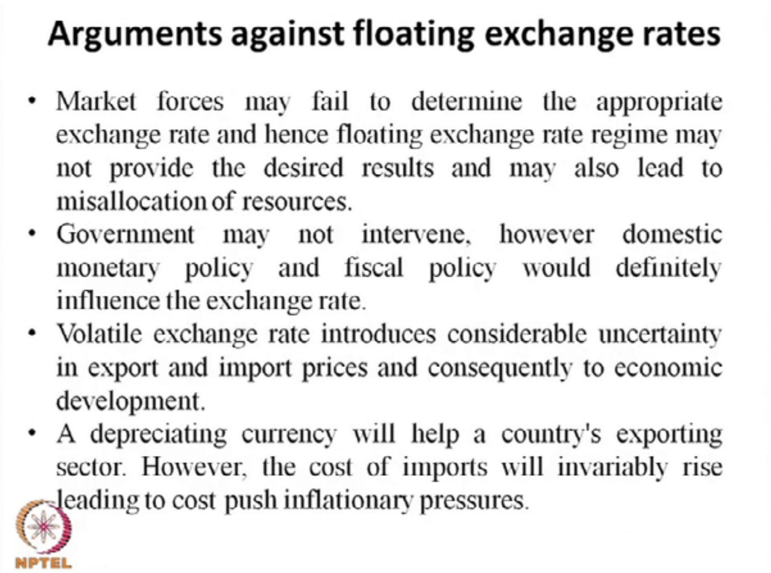

## Arguments against floating exchange rates

- Market forces may fail to determine the appropriate exchange rate and hence floating exchange rate regime may not provide the desired results and may also lead to misallocation of resources.
- Government may not intervene, however domestic monetary policy and fiscal policy would definitely influence the exchange rate.
- Volatile exchange rate introduces considerable uncertainty in export and import prices and consequently to economic development.
- A depreciating currency will help a country's exporting sector. However, the cost of imports will invariably rise leading to cost push inflationary pressures.

But, there are many, many economist, many financial, international finance expert, they have negative argument against the floating exchange rate regime. The market forces because under the floating exchange rate regime, we are surrendering the process of adjustment of foreign currency to market forces. Market forces, may not always correct, or fail to correct, fail to decide what is the actual exchange rate? It may happen, it may allow uncertainty; it may allow speculator to decide the exchange rate, the value of the foreign currency or the exchange rate in the international market.

Government may intervene, but intervention in foreign currency market also required. Government or the central bank should also have a foreign, some kind of foreign exchange reserve, which, which generally have a cost aspect. Whenever there is intervention in foreign currency market, some extent the freedom in monetary policy formulation, fiscal policy formulation is affected. Excessive volatility or uncertainty, in foreign currency floating, foreign currency market, because of floating exchange rate regime, though it is managed floating, also create, also generate, what is called, some kind of negative in the international trade aspect. A depreciating currency, if the currency is depreciating, the market forces speculator create such kind of environment, it leads to further depreciation of the currency. What is, and generally, it create some kind of pressure on the part of importer, to postpone the import; and also, some kind of pressure on the part of exporter, to postpone the export, because depreciation create further environment of depreciation, which hamper the value of the domestic currency.

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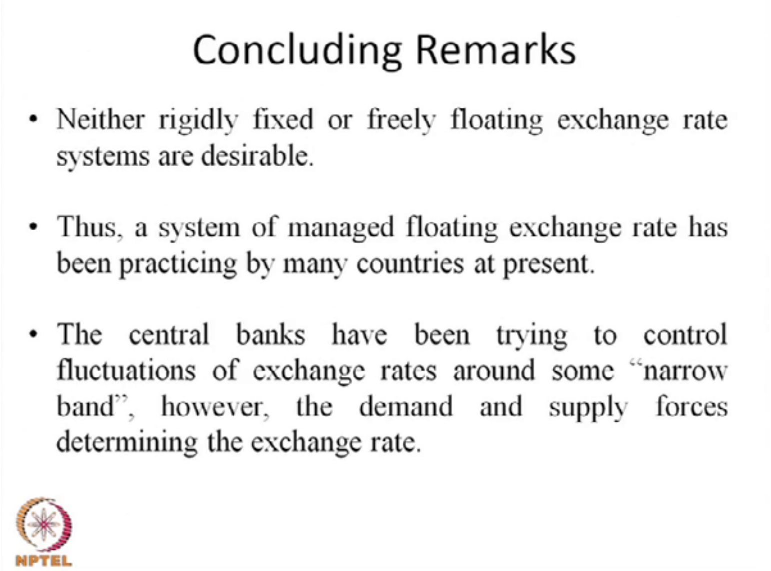

## Concluding Remarks

- Neither rigidly fixed or freely floating exchange rate systems are desirable.
- Thus, a system of managed floating exchange rate has been practicing by many countries at present.
- The central banks have been trying to control fluctuations of exchange rates around some “narrow band”, however, the demand and supply forces determining the exchange rate.

However, I can conclude, we can conclude that neither, neither rigid, neither rigidly fixed, nor freely floating exchange rate system, are desirable for the economy. Thus, we need a system of managed floating exchange rate, where there is a freedom on the part of monetary authority to intervene in the market whenever there is requirement.

The central bank has been trying to control fluctuation exchange rate, around some narrow band. However, the demand and supply forces determine the exchange rate, in a, which is good for the country. Thus, neither you want a fixed exchange rate, nor you want a completely, a freely floating exchange rate. What you want? A managed floating exchange rate, where the market forces decide the exchange rate; at the same time, central bank had the freedom in intervening the foreign exchange market and deciding the rate, which is good for the country; where, they are the same time, they enjoy in deciding the monetary policy, exchange rate policy and fiscal policy, which is good for the country. With this, let us conclude the session five. Let us come to, the references are here; we can go through the references.

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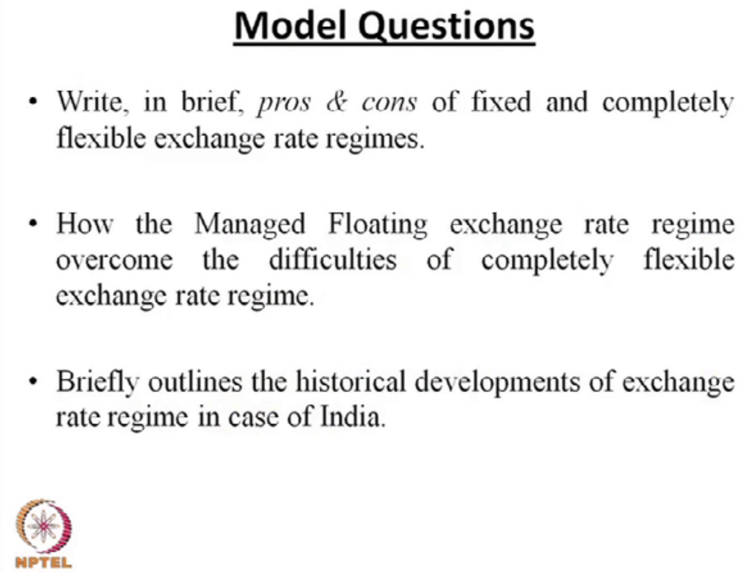

## Model Questions

- Write, in brief, *pros & cons* of fixed and completely flexible exchange rate regimes.
- How the Managed Floating exchange rate regime overcome the difficulties of completely flexible exchange rate regime.
- Briefly outlines the historical developments of exchange rate regime in case of India.

And, let us discuss some model questions. The model questions are here: Write in brief the pros and cons of fixed, and complete fixed and completely flexible exchange rate regimes. Here, you discuss what is advantages, and disadvantages of fixed and floating exchange rate regime, and bring out what is the requirement for a country at present; whether you need fixed, whether you need floating, whether you need a free and floating, in between what is called a managed, managed floating exchange rate system.

Second, how the managed floating exchange rate regime overcome the difficulties of completely flexible exchange rate regime. Here you discuss first, what is the meaning of managed floating? What is the meaning of completely flexible exchange rate regime? Bring out, you have to discuss here, what is the disadvantages of flexible exchange rate, completely flexible exchange rate regime; and also, try to, try to discuss, what are the advantages of managed floating exchange rate regime; how, which are the difficulty in completely flexible exchange regime can be overcome through the managed floating exchange rate regime, you have to outline that.

In the third, next third question, you briefly outline the historical development of exchange rate regime in case of India. Here, you have to discuss about the exchange rate, exchange rate market development in case of India. After the independence, how the exchange rate regime was; during the time of independence what are the exchange rate regime in case of India? How the exchange, exchange rate that is rupee linked to the pound sterling? In early 80s, rupee were dealing from pound sterling; later part of 80s, we started a foreign exchange market. In early 19, we face severe balance of payment crisis, and government of India the central bank force to abandon the exchange rate, fixed exchange rate regime. They allow the rupee to, this rupee, to the market forces. Let the market forces of demand and supply, decide the exchange rate of rupee.

At the same time, they practiced, over the period the exchange rate market was liberalized. At present, we have what is called a current account convertibility; and some extent, significantly, significant extent we have liberalizing, liberalization in capital account. Our trades, that is export import, our payment, inflow outflow of foreign currency on the current account decided by the market forces. In case of, in case of, capital account that is purchase of gold, purchase of, coming of foreign currency asset, purchase of foreign currency asset, these are the decided by the government of India, through the process of exchange rate control regime. These are the historical development, you decide, in case of India. We can go through the RBI report of foreign currency market; that will give you sufficient guideline or sufficient information to you, to discuss the historical development of exchange rate regime, in case of India.

Thank you.