Money and Banking

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Lecture - 1

The Money and Banking course, as I told you given my background, my orientation, I deal it with initially in a historical prospective, what is money that is my first topic. So, money, money was not there in this world, money was invented at a point of time, and after that invention, initial invention it went to many, many changes. So, I deal with this course I begin with, so a historical perspective on money; brief one, this will be my first topic.

And now I come to more complex money, forms or synthetic money that exists, like cards etcetera, I close it there the first topic, so I come, I start with the very old times when money was invented. So, this is more of a just the way you saw my economic problems course, I deal with a historical perspective, world view of development. The Indian economic course first topic, I went to a world view comparative study of various countries with broad data.

Similar to that, I do a kind of a background story to money, then I come to money in a country like India, and then it becomes very Indian. An Indian in the sense many of the Indian things are also known worldwide, so then when you heard about certain things which is happening in Europe, in North America else where you would be able to appreciate that, because those are the similar things we have in India too; so I go in to more traditional monetary economics, etcetera.

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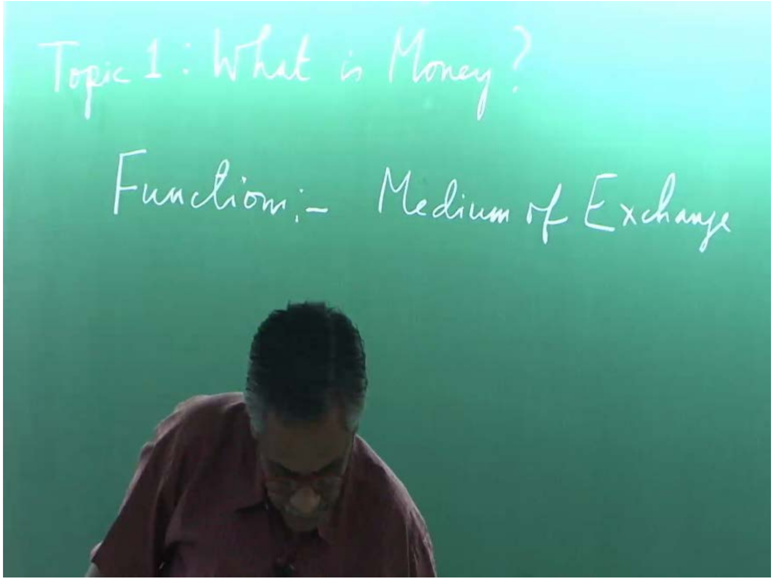

So, topic 1 that I will discuss starts discussing today, what is money, now what is money is, how people identify money is the cash they have in their pocket. So, they can bring out notes, they can bring out coins which is formally known as currency. Money, if you ask people money, sir money, cash, currency what we call currency in economics, currency consists of two items notes and coins; and this is what they identify as money.

But, later you will see in a macro economic context money is just not currency much more than that, much wider concept, much deeper. It has immense significance for our country just like the Reserve Bank governor; he is interested in much more, in many more things, which come under money. So, I am talking about from the point of view of the finance minister the reverse bank governor, what is concerned with, which is called monetary economics essentially, which is also a part of macro economics.

So, I do not go into a banker job, like a banker what you do when you work for city bank, I would not get into that that you learn; if you get a job or as some other course may teach you. First of all, when economics the starting point is, when you talking about a variable, you want to know whether it is a stock variable or a flow variable; for instance you talk about income, income changes every movement of time, it is generated in the economy you work for somebody, somebody produces something and sells it income is generated, it is a very flow variable.

But, money is such a thing, even if you take currency as a narrow definition of money, which is notes and coins in India, Indian notes and coins you will see reserve bank will give you an exact number, how much is that there. So, is very much money therefore, is a stock variable, like capital take an example of physical capital houses part of capital; if you want to know at any point of time on 30 th of July 2012 what is the stock of houses, you will get an exact number, how many buildings are there in the country. It is not a flow variable, it does not change every movement it takes time to change. So, money is a stock variable, the first thing to remember like capital, it is given at a point of time, as a data.

A very related variable in economics as you will take more and more economics courses, advanced economic courses. A very relative variable to money which often you will find in books, which I found in books is that, the papers on monetary in monetary economics on money relative with money often gets into the variable called or another item called wealth, often they get into a discussion on wealth. So, they talk about money, at the same time they are talking about wealth it creates a confusion. Well wealth is something much broader than money, wealth consists of both money and non money assets.

Asset is what, which is a valuable, which you can sell of tomorrow and get a money or return a price in the market that is called asset. So, when you say sir, I have some assets what are the assets that you can sell, you can talk about property, you can talk about gold, you can talk about jewellery, you can talk about shares even financial assets, you can you can talk about many things. So, when you talk about wealth it is a basket of money and non money assets alright, so there should not be any confusion between money and wealth.

Money is part of wealth, but wealth is just not money, wealth is much bigger than that, but in this course we may come across from time to time, an inference or a, or a connection drawn with wealth. But we are not going to talk about wealth, in advance monetary economic courses we do bring in wealth, even consumption function is a function of wealth, just not money people say, not income. Ancient consumption function if you remember, amount the person consumes depend upon or even at the macro level is a function of income; so you have the concepts of marginal propensity constituents.

But, if you go into much deeper, wider consumption function you will see they would say no, no, no, we are just not interested in the income which gives rise to kind of the money people have, at their disposal. We are interested more in to what kind of a property does he have, because that also influences his consumption habits. So, consumption becomes a function of just not income, consumption becomes function of wealth. And as soon as you say that, you can imagine, so many other variables you are bringing in, how many share prices you have, shares you have, bonds you have, property you have, jewelry you have all determine the amount of consumption.

So, the consumption function changes very much alright. But, in this course we will talk about money, because this is called money and banking, we would not talk about wealth, but we will sometimes connect with wealth in order to explain certain things is that clear. Now, as I said that if money is part of wealth, what do economist think money should consist of, in the most narrow definition, what economist do when they put wealth and suppose they counting a number of value, rupee value they would put typically currency in it, nothing else.

Currency either you are holding it or a company is holding it or whoever, currency is what two parts notes and coins. But, as soon as you start looking in to that narrow definition of money you realize, sir in today's world we have banks, where we have this opportunity now not to keep all our money with ourselves as currency. We can put some of that currency and dip in the deposits, in the deposit accounts of a bank; may be savings account, current account, fixed deposit account, recurring deposit account; whatever you can put it there.

So, are you saying all the money that I have is not part when you count my money, so you can imagine the problem you are getting into, initially you set currency. But now with banks around you where you can go to the bank and deposit your cash, because that provides a safe avenue to protect your money, because suppose there is a dacoit tomorrow or theft all my money gone. I put some there, and I keep something with myself at home.

Some people having lockers at home, so they keep some of their money and non money assets there, some people have that habit; some people do not keep any non money asset at home neither all. Of course, not all money they put them in bank, bank lockers, bank accounts etcetera. So, therefore, as soon as peoples are talking about it then the definition of money widens.

Now, please bring in the checking accounts in a western country, like Canada, USA, France, Germany, whatever, even you walk into a bank you would realize, they give you five times of four types of savings accounts differentiated products. Here if you go to state bank you say I want to open a savings account, saving account one type, you open a savings account. Go to a western country they will show you savings account which type, my goodness, which type means, please read this pamphlet, a pamphlet differentiated.

So, what I am saying is that, as soon as you open that definition and say it is not close to currency that we hold, then immediately it goes into checking accounts. Because, checking accounts are like near money, very close to money it may not be with me, but tomorrow morning I go to the bank, write a cheque get the money. Or instead of paying you my electricity bill, rent whatever or even I can write a cheque to you, I do not need the cash, the purpose of the cash is served.

So, checking accounts become very important therefore, many people say when you define money you please bring in the checking account deposits, within the definition of money, just not currency. So, the definition starts as soon as you open it, starts many things slowly entering into the definition of money alright, so all Indian definitions of money I will give it to you.

And as you can understand in my discussion, I must be looking at money in terms of or rather, why would for why the basic question is why should we at all talk about money, why should we at all talk about currency or checking accounts or even non checking accounts, why should we talk about that. The reason is money serves a number of functions, it facilitates certain things, it helps me if I hold money to do certain things. The simplest one is what we learned in macro economics the transaction demand for money, with money I can transact goods, I can buy goods that I need.

The simplest form that the function that money has which is a k, which is a classical definition of a function of money, add two more functions. One very important ones, to earn money would be had a demand for money function, which bit later became known as a demand for money function, transaction demand and what did (( )) add, speculated demand which did not exists in the classical model.

And also there is one more demand for money function is there which nobody pays any attention, called precautionary demand, I keep aside some money for my unforeseen, unexpected bad days precautionary demand, so precautionary purposes. So, one is transaction purpose, one is the speculative purpose, another one the precautionary purpose. Now, these are the modern concepts of money, but if you look go back into a historical book on the definition of money or development of money.

You will see that the first thing they mentioned as the function of money, and that is why we need money, that is why we talk about currency as part of money, is that money serves one very important function, the most important one is that it is a medium of exchange. Medium means via media through which you exchange things, you are selling shirts alright, I am not selling anything that you want to buy, I am selling my knowledge of money and banking.

And a shirt seller said who cares about your knowledge of money and banking I do not need it, even if you give me ten books I do not need it or your notes. I sell shirts, because I have to buy vegetables in the evening before I go home. (( )) transaction (( )), he is not interested in my money and banking notes, and I am interested in his shirts he does not want to sell them to me.

Now, what your money does is that money serves as a medium of exchange, I handover money to him he happily gives the shirts to me, and he takes the money to the vegetable sellers in the evening and he buys the vegetable, and the vegetable seller is happy to accept that money. But this money did not exist, it was invented to facilitate transactions. So, the most important function or the oldest function of money is that, money is a medium of exchange.

It serves the functions, we talk about the functions is that it serves as the medium of exchange serves as the medium of exchange. Now, so somebody either a king or a queen or the old ministers, historic data suggests 1, 00, 000 of years old, money exists they have found archeological findings from underneath the grounds or whatever, wherever. So, money therefore the most important and the oldest function like it has been serving, is this function called medium of exchange. So, it facilitates transactions, without money how would transaction take place, we used to call that the Barter system.

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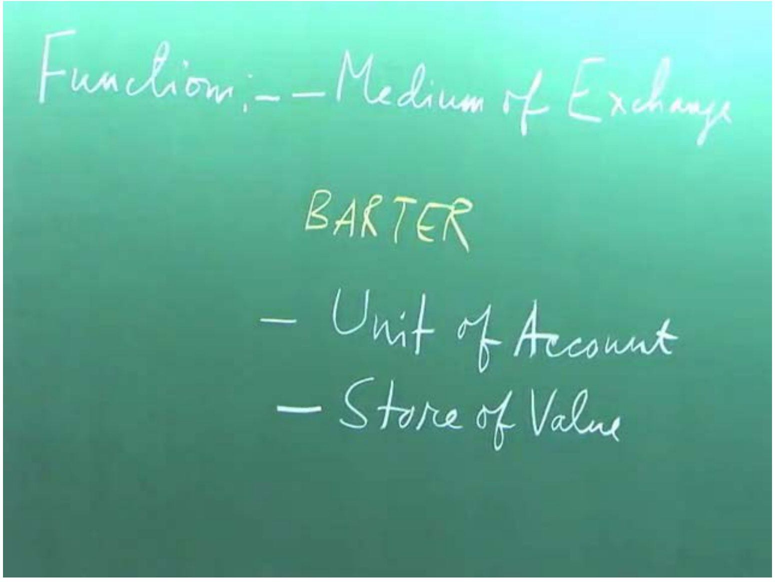

We used to call that the Barter system, without money earlier you had something called the Barter system what happened in barter just now I told you goods against goods, goods against services were exchanged. A doctor I need his services, so doctor says what do you produce I say shirts, I will write the medicine and the prescription you give me two shirts, Barter system.

Then I go to somebody else I need vegetables, so I ask the vegetable seller what do you need, he said I am in need of shoes for my children, he say I am a cobbler I produce shoes he say good news, give me a pair of shoes of this size, I will give you the vegetables in return alright. Then I go to I am a cobbler, I go to doctor I said then shirt producer then I go to somebody else like who produces bags, and he says ok, I can give you three bags for one pair of shoes he says.

So, what is happening here is that, there is always in a transaction and exchange rate, two shirts per pair of shoes, a medical one prescription for one pair of shoe, some amount of vegetables for some pair of shoes. So, now every individual producer will develop multiple exchange rates in barter depending upon which item they are buying, with whom they are buying, and all are expressed in terms of physical quantity of goods.

The problem is that it requires a co incidence of wants, you want something from me I want something from you, then we have a Barter transaction. If the co-incidence of ones do not take place, then we cannot have an exchange alright, see in my notes I have line like this, under Barter one request double co-incidence of want, so lecturer will have to be a farmer in is class, will have to have a farmer in is class to be able to buy food from the latter in exchange for is lecturers.

So, Barter transaction therefore involve what we call the economics a very high transaction cost, is a transaction between you and me, between two parties, two people is very high. Because double co-incident of wants he multiples exchange rates to transactions alright, and it becomes very difficult to remember and all in physical quantities.

Therefore, money to function effectively which people historically have realized, initially money was not that an efficient mode when even after it was invented, to money to function effectively as a medium of exchange, it must satisfy the following criteria. What are the criteria, number 1 I can take money to Jagdish, and say Jagdish I want to buy, Jagdish says money guaranteed.

So, it requires standardization money, the money he carries, the money he carries, the money he carries, the money he carries, there will be confusion lack of confidence and people would not be able to use money, because people can refuse it. So, money must be standardized in order to function effectively as the medium of exchange, number 1.

Number 2, it cannot be so even after it has been standardized, somebody out there who sells something very important say a doctor or a lawyer, and say I refuse to accept money, it cannot be like that. Money should be made acceptable to everybody, if somebody refuses to use money, then money cannot function well. So, money should be widely accepted number two quality, a property it is required, for money to function effectively as medium of exchange. Third problem, money must be divisible to make these, easy to make the change like I want to buy half a Kg of something, but the price is per Kg.

So, I should be able to provide the money for half a Kg which may involve some notes and some coins, if you do not have the coin system or you do not have the notes of smaller denomination, it is very difficult to make the transactions. In India you must have seen one thing has happened lately, that the money of smaller denominations have disappeared, many of the money which was in notes.

Now, do not exist they are in coin form and it is very difficult to carry all that coin, 5 rupee coin, 2 rupee coin etcetera, 1 rupee coin, so often there is a rounding off going on at the shops when you buy. This rounding off you will see if you particularly if you visit the big shops, either the food eating places or the clothes stores or whatever the bill comes to its likes 451 round off to 450, because coin, the change may not be available alright.

So, money should be divisible to make the change which should be acceptable, since smaller denomination suppose, I got I want only 250 grams of something which require some coins, not 1 Kg which is 10 rupees easy, but 250 grams, 2 to 2 rupees 50 paisa I need , that is it. The forth point that you should remember, for money to function as a effective medium of exchange, the fourth point is it must be easy to carry.

Just now I told you it that the Indian system multi system has made many notes converted into coins; it has become difficult to carry. So, money should be easy to carry, money (( )), like house wife going to bazaar (( )) house wife (( )), so money should be easy to carry its very important property, to function as an effective medium of exchange, it sounds common sense, but these things are developed remember they have evolved over time, they did not develop over time.

Then the final point which is very important to me, all these things are more or less acceptable, money must not deteriorate quickly, (( )) money (( )) problem (( )), a deteriorate of notes I have faced often, and it cannot function effectively as a medium of exchange.

It should be made in a way, so that the quality is good it does not deteriorate, and if the notes are deteriorate checked they should be withdrawn and replaced by fresh currency, by the central bank of the country. You know the central bank, I am coming to that, in any country in every country all banks have a boss, called the central bank, what is the name of the central bank in India?

RBI

RBI yes, every country has that in fact, that is the sole authority of money issue, banks are not, government is not even individuals individuals of course, are not even government does not issue money, central bank does it, its very specialized job I am coming to that. These are the things I will teach you here, but the not the commercial bank stuff activity alright, so it must not deteriorate quickly; it is a very important, property or quality that is required for money to serve effectively as a medium of exchange alright.

Student: (( ))

No, no no no no that is a different value, I am coming to value of money, this is a very good point, I am coming to value of money, there is something called value of money it is a different concept, it has to be computed. 100 rupee note may have different value of money in different times that is a different story. I am talking about the 100 rupee note itself the currency, I am not talking about value of money, I am talking about the currency alright.

Next and a very important function of money after money was invented which made life simpler, is that money allowed a much simpler unit of account, you can keep your accounts like an accountant keeps the expenses and the revenues coming in, in a tabular form in tables, it is very easy to keep the accounts. Because, now whatever is bought is in terms of money, not 3 book shelves, 4 shirts, 5 pair of shoes. And no nothing is comparable to the other one, you cannot buy you cannot say 5 pair of shoes was more expensive than 3 tables, you cannot just say that it is very difficult to compute the value alright.

So, now most important another important function that it has is that, is that it has simplified the system of accounting, so you can keep your accounts in money in unit of account, so money has an unit of account with Barters you have so many prices which are relative prices. Shoes in terms of shirts, shirts in terms of tables, tables in terms of something else you have so many, but now between any two items there is one price alright.

Suppose, there are four goods that have been exchanged there will be six Barter exchange rates am I correct, in my mathematics here, there are four goods A, B, C, D are exchanged between them how many prices are there, I have said six, am I correct correct, four goods how many prices will be there in a Barter system? Six, A to B, A to C, A to D, then B to C, B to D.

(())

7 6 6 so four goods yeah for four goods being exchanged in the market there are six relative prices in the Barter system, coming to money how many prices will be there, four goods four prices thing have become simpler. Now, therefore, a system works much better in keeping accounts, in determining prices, in evaluating one against each other, because you have a common unit now money. So, some price which is 50, and some where you pay 70 you clearly know which one is more expensive, earlier it was very difficult three shirts one table, which one is more expensive I do not know.

Finally, there is one more function which became important with speculated demand for money I guess, very important is that, which we all know where were the money, I told you about money being part of wealth. Why this has become important and monitory economy has picked up many years back now 50, 60 years back, may be more 70 years back, monitory economics picked it up money. And often there was slide into discussion on wealth and relationship to any anything any macro variable, this is the function called store of value, you store your value that is why it is part of wealth in money.

So, you can jag dish tomorrow goes out and tells his friends, I have a stock of so much money in my account, I stored it my goodness I do not have it, so he sounds like he is a rich man, because he stored more value than you have. So, money is used to store value alright, just like jewelry is used to store value, because it will fetch a good price, good money or income or return in future. So, money is a store of value, although it is a little bit shaky, but it definitely has this function, store of value.

Money functions as a repository of purchasing power, purchasing power what money buys, the purchasing power of money often people refer to money as purchasing power, repository of purchasing power that money can have. Because, if you store it today, you can use it tomorrow to buy things, see the whole idea of savings, the whole idea of speculator demand for money, you put money away on a speculatory purpose, you get a better return to use it later.

These modern concepts, where different times are coming, some dynamism coming not a static frame work at all these are, though we discussed them in static frame work, where very much. Because, of this property of money, a function of money got store of value, you can store value in it, you put money in fixed deposit, classic example fixed deposit accounts. You store money there to be used 5 years later, 3 years later various fixed deposit schemes are available in banks.

So, therefore, money is a kind of an asset people say, monitory asset, money asset is an asset where in which you can store value, asset is something which is valuable which can use later. But, remember as I told you there are many non money assets also, therefore a question an issue that often comes up is that when people talk about money and it compares money with other forms of assets, other forms of assets in wealth.

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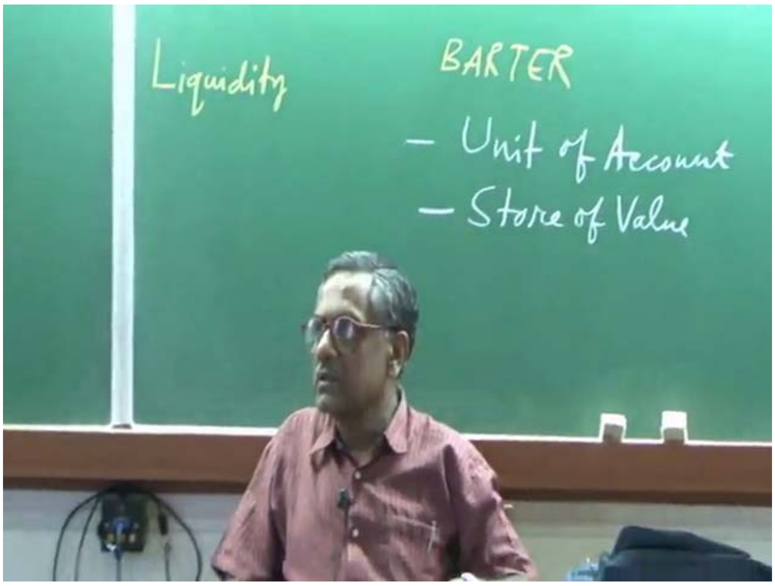

An issue often that comes up is that, the issue about liquidity is very important, the issue about liquidity I should mention this, the issue about liquidity, and people says money is the most liquid form of asset, people say. However, different kinds of money at different have different liquidity, liquid means what, the thing most liquid is, the currency that is in my pocket, I do not have to even go home to use it. I can readily buy whatever I want, given the amount of currency I have; this is the most liquid form.

The next most liquid form of money is what I have, in an almera or a desk or a shelf or somewhere at home, less liquidity, but if you do a hierarchy from the most liquid to less liquid least liquid, then it will be the savings account. Because, in the bank I go or today with automatic teller machines, I put a card in get the cash out; after that then you have these other kinds of accounts, like fixed deposit etcetera which takes 1 week, 10 days notice to break it.

So, I will get a penalty I would not earn the interest income, but I can use the cash, then you have these less liquid, assets I am coming out of money now less liquid assets, like shares and bonds. Where I have to approach the broker, the dealer to sell it off, then come the jewelry, then the property, so you can have a degree of liquidity of assets worth money, various kinds of money, and various kinds of non money assets. So, liquidity is a central issue which dictates, which determine how people hold money.

And therefore, in what form like up this is amazing stuff. How human beings instinctively decide, when they get an income a salary, how much to keep it in the most liquid form at home, how much to keep in the savings account, how much to park with other forms of assets. Some may go into jewelry, some may go into fixed accounts, fixed deposit, some at a later stage may go into a property some may go into shares, bonds.

And the less liquid form you choose that means, you are saying basically that is really meant for future I have no need to use them now, so it is because of degree of confidence, the need, the want that the individual has. So, liquidity becomes a very interesting thing, in fact one can empirically estimate the liquidity of various kinds of money in an econometric model may be, how do Indians judge money, how liquid they are alright.

Automatic Teller Machines are new to India, they are not new, only we had to go to the bank and transaction costs are very high, with automatic teller machine transaction costs are down. What are transaction costs, when you want to transact something you need to take the money out, there can be transaction costs, transaction costs may be economic cost, non economic cost; that I will have to wait till tomorrow morning 10 o clock the bank to open.

And I have to walk 2 miles to go to the bank is saying, there is a transaction cost involved, which may be a psychic cost, which may be a waiting cost, which may be actually money cost that I pay the broker to get my shares sold off. It may involve money cost, it may involve non money cost, so liquidity and transaction costs are often associated.

If you are putting money in the fixed deposit, there is a high transaction cost, because you get the money quickly that means, it is very less liquid that means, it has been your conscious decision, and you know perfectly well with some surety some probability that you do not need the money, let the transaction cost be high. But if you need some cash in a very liquid form, because certain things have to be bought immediately, you should not choose a form which is less liquid; you should choose the form which is most liquid.

With instant teller machines its like having the bank at home, anytime 24 hours I can go provided this machine is working, put my card in take the money out alright, do you understand what I am saying. So, liquidity becomes a central issue when you talk about money, very much a central issue, now I come to his issue, there is also a concept of value of money, which is called purchasing power, value of money is also this issue called value of money.

Then the value of money is a very different concept, it has nothing to do with liquidity, it has nothing to do with transaction costs involved in our lives, that I have to walk to the bank, wait for the bank to open, pay the dealer, pay the broker, to get the shares sold off in a secondary market, nothing of that sort. Value of money in simple terms is that how much money can buy, the purchasing power of money, and you know a common determinant of value of money is the prices. If there is inflation, price they going up, the same money can buy less, so the purchasing power is deteriorated.

So, the value of money is falling is a very different thing alright, where as in case of non money assets, the value of those items are often quite stable, because if there is an inflation their market price is also start climbing upwards. So, it is like inflation indexed, so the value does not change much, so 10 years later, in fact a property that you bought with 10000, you may sell it off at 20000, and the inflation may have prices may have doubled in the economy.

So, the value of the property in terms of purchasing power from the money that you get has not gone down, but in case of money, cash what we call the value of money is answerable, particularly when you have inflation alright, so the value of money goes down. So, let me talk about the value of money, and purchasing power that is where we begin in tomorrow's class, alright alright for today.