Management of Commercial Banking
Professor Jitendra Mahakud
Department of Humanities and Social Sciences
Indian Institute of Technology, Kharagpur
Lecture 46
Managing Liquidity of Commercial Banks - I

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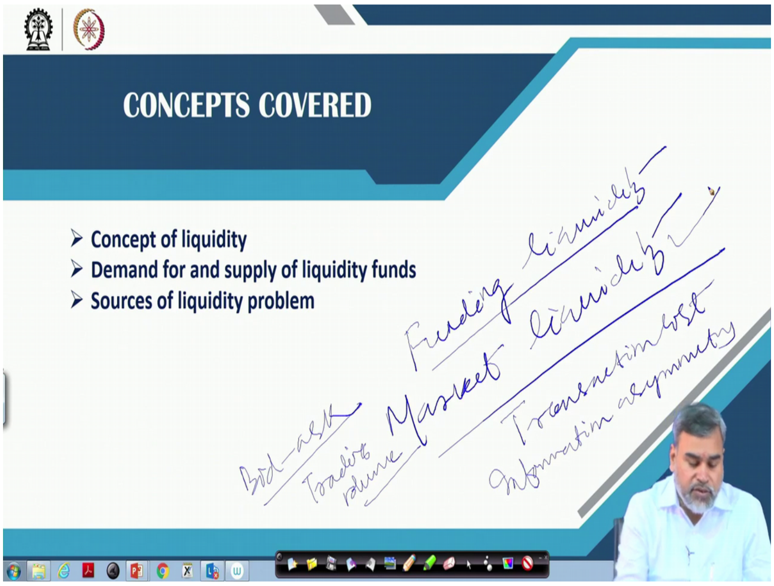

So, after the discussion on the different type of investment strategies or how to manage this investment portfolio of the commercial banks we can start the discussion a major issue with respect to the commercial banking prospective that is basically liquidity management. So, what are those things what we are going to cover in today's session? That is your concept of liquidity.

How the liquidity is defined by the commercial banks? Whether it is different from the general concept of liquidity? Because you see there are many types of liquidity concepts always we come across. Whenever we talk about the liquidity in general broadly there are two types of liquidity we always think of.

One is your funding liquidity and another one is your market liquidity. That means what here we are trying to say that whether this particular organization is well enough to fulfill the liquidity requirements of the different clients or they are really the cash-rich position to overcome any kind of deficiency or the deficiency which arise due to the different kind of fund flows and another one is the market liquidity which talks about that how easily this particular securities can be traded in the market. So, whenever we talk about the market liquidity we are mostly concentrated on the transaction cost.

If the transaction cost is low then the probability of trading or the volume of the trading may be higher. And another thing is that also depends upon the information asymmetry. If market is more asymmetric in terms of information, so there is huge information gap between the stakeholders which are playing in the market then what will happen that due to the gap between them then always there is a premium or the we can say the risk premium involved with respect to the pricing of that particular asset.

That means there will be a huge difference in terms of the buying and selling prices and if the information is with the buyer, not with the seller then seller will basically go for some kind of dilemma that whether the particular product should be sold in that particular price or not but generally the seller is always have more information than the buyer.

So, the buyer will be reluctant if the, always buyer's mind always says that okay if this particular, maybe I do not know much about this particular product so because of that he will charge a price or he will basically go for a bidding of a price which is, may not be synonymous and may be in accordance with the intrinsic value of that particular asset.

So, because of the gap between buyers and sellers this basically the price of that particular asset fluctuates or the actual price may not be realized accordingly. So, that can be generally reflected through the Bid-ask spread and those things basically affect your trading volume etc.

So, in this context that concept is different which is basically a part of the market liquidity but another concept is liquidity, the funding liquidity whether the particular market or particular organization is good enough to fund this requirement of that particular different kind of alternatives or demand for the different kind of financing alternatives which is required by the different stakeholders.

So, the commercial banks are more concerned about that liquidity to fulfill the requirements of the different clients or different customers who are basically dealing with this particular bank for the various activities. So, what are those different factors which affect, demand side factors and the supply side factors which are affecting the liquid funds?

Or we can say that the funds which are highly liquid in that particular context and if there is a liquidity problem, what are those? Why that particular problem is arising and what are those different sources of liquidity problem? Why the bank is suffering from certain kind of liquidity problem by that they have to ensure that the adequate amount of liquidity should be maintained?

So, these are the three concepts what we are going to discuss in today's session. So let us start with the discussion on the concept of liquidity whenever we think about the commercial banking point of view.

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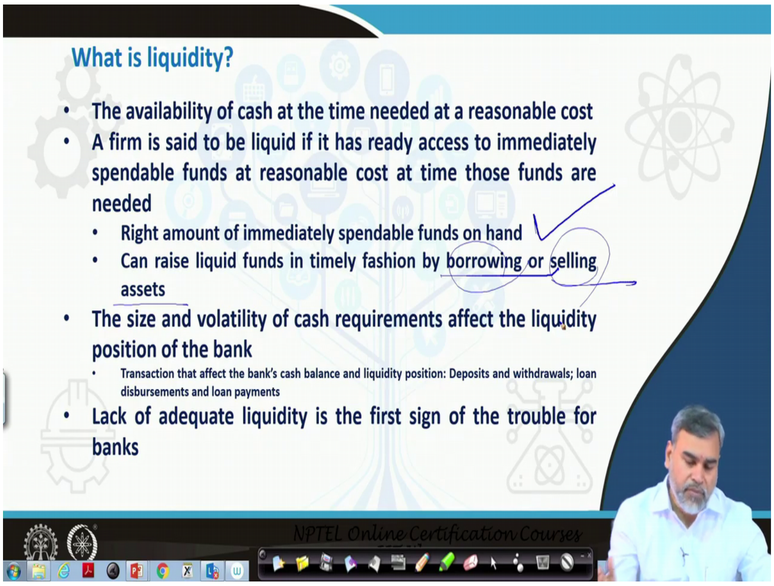

So, whenever you talk about the liquidity from the banking prospective so generally it is basically nothing but it shows the availability of the money or the cash at the time needed at a reasonable cost. If the bank needs the money to fulfill the requirement or the demand for certain customer, certain clients then either the cash is available to them in readymade format or they should raise that particular kind of cash, raise kind of certain kind of capital at a reasonable cost which can be utilized to cater the demand for the different customers.

So, that is why this is basically a part of the availability of the cash with that particular organization and even if the cash is not readymade then they should raise it with a minimal cost. So, a firm or a company or a bank is said to be liquid if it has ready access, if it has ready access to the immediately spendable funds at reasonable cost at time those funds are needed. Whenever funds are needed this particular fund should be readily available or even if it is not readily available then the bank can raise that particular fund with a minimal cost.

So, there are two things which is involved in this context, the right amount of immediately spendable funds on hand, that is one option or they can raise liquid funds in timely fashion by borrowing or selling of the assets. You remember if you have enough funds available with you then there is no problem. Utilize that particular fund and try to cater the demand for the different type of clients or the customers.

But for example you do not have that much kind of cash with you to cater all those demands what they are making then you have to raise that particular fund. So, if you are raising the fund then how you can raise it? Either you can go for borrowing or you can sell some of the assets. So, whenever this particular scenario is arising then this complexity arises. And what is the complexity in that particular context?

For example if you are borrowing then this borrowing rate should not be that much high or the lending, from where basically you are borrowing that money the lender should not charge very high amount of interest rate for that by that you are going to suffer a huge loss whenever you are catering the demand for the customers. Because the money, let you are talking about a bank. You are taking the deposits from the depositors and at the time of the withdrawal of the particular money by the depositors you should have the money available with you.

For example the money is not immediately available with you then you have to borrow this particular money from some other interbank lending market or other some places then your borrowing cost, whatever cost you are going to incur, that should not be higher than the revenue what you are generating against that particular deposits.

Because the deposits have been lent out, has been given as the loan and the loan rate what basically we are charging against that, if your money what you have borrowed that carries more cost, the more interest rate than this lending rate what the commercial banks have then the commercial banks are going to incur a huge loss in that particular point of time. So, that is why we have to ensure that.

Second thing is selling the assets. Then how you can sell the asset in a short span of time? So, if really you want to sell the assets in the short span of time the asset should be in such fashion. So like, you should have enough money market instruments available with you. You should have enough government securities available with you.

By that this government security, short term government securities and the other money market instruments can be readily redeemed or can be saleable easily in the market because of low default rate and as well as there is a demand or there is a market for that already existing in the system.

So, these two are basically very much complex in nature to create the liquidity by the commercial banks whenever they need. So, for that a proper liquid, liquidity management policy has to be adopted by that if there is a scenario wherever there is a deficit in terms of the cash to cater the demands for the customers then we can utilize certain assets in such a way by that the liquidity can be maintained or liquidity can be, basically what you can say the liquid demand for the different customers can be catered.

So, here if you see, with respect to this the size and volatility of the cash requirement affect the liquidity position of the bank. How much? How much liquidity or how much liquid cash is required? And how frequently this requirement is changing? What is the volatility? If there is a trend is followed of, or the bank is knowing that in the, by analyzing the historical data the bank is able to say that what kind of demand will be there and how the cash will be, demand will be fluctuating over the time then whether in this period the cash demand will be higher or lower, if that thing can be predicted by the historical data then it is may be reasonably adequate for the commercial banks to maintain the liquidity.

But generally what happens if the cash figure is fluctuating largely and the bank is not in a position to forecast accurately that how much liquid demand will be there, how much liquidity is required in the next near future then it is difficult for the bank to maintain that liquidity, so here with respect to that if you see the transactions that affect the bank's cash balance and liquidity position that basically is nothing but the withdrawals and the deposits, loan disbursements, and the loan payments.

So, here what are those factors responsible, major factors which are basically affecting this liquidity position of the bank? That is the frequency of the deposits, withdrawal. How frequently these deposits are withdrawn, then how much is the loan disbursement the bank has to made in that particular period, and as well as the loan payments. How much loan payments they have to make?

So, these are the major factors which are basically responsible factor which is affecting the liquidity of the commercial bank. So, that is why we have to ensure that this particular position should be maintained in such a way by that even if there is a requirement of liquidity the commercial banks will be readily manage that particular thing in the better way.

So, if there is a problem in the liquidity for any reason, any commercial bank is facing a liquidity problem then it is the first sign of the trouble for the banks. So, that basically creates a trouble for the banks in the sense the customers will lose their confidence and this, because of the lack of the confidence further generation of the deposits will be relatively difficult by the commercial bank and as well as it will have a spiral impact on the various other banking activities within that particular system.

So, that is why the bank should always ensure that the liquidity should not be hampered and the day-to-day requirements of the consumers or the customers who are basically the clients of the banks, their demand or may be their requirements should be fulfilled in the timely fashion. By that the investors or the consumers' confidence in the particular market against that particular bank will be maintained. By that the liquidity can be maintained. So, this is basically about the concept of liquidity.

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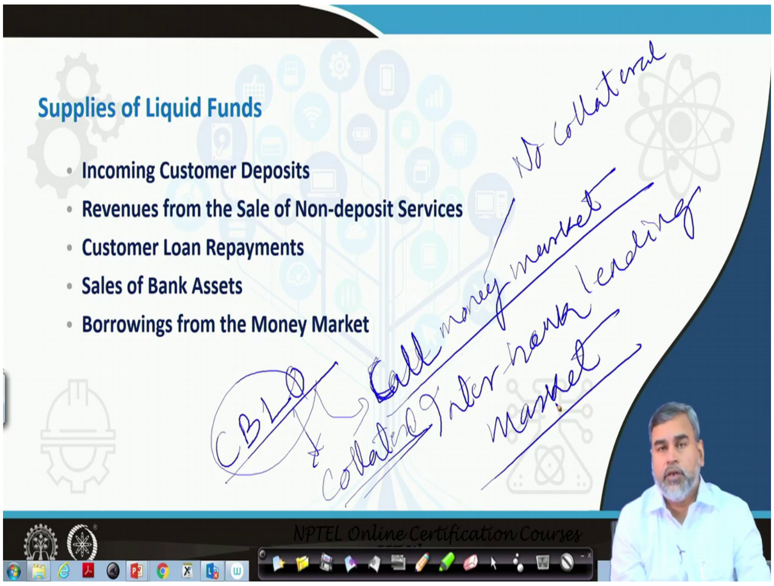

Then what are those different kind of supplies of the liquid funds? So, whenever we talk about the different type of sources of the supply for the liquid funds, already we know that the major factor which is affecting the supply of the liquid funds that is the customer deposits. How much deposit the customer is making?

The customer deposits is the major factor which is affecting the supplies of the liquid funds. Then you have the revenues from the sale of the non-deposit services. You can also generate certain revenue by selling this non-deposit services. Customer loan repayments, how the customer is repaying the loan in the regular interval, whether there is not much default against this particular loan, that means the probability of non-performing asset is relatively less and customer is basically, honestly he is paying the loan in the frequent interval.

By that the bank's forecasting in terms of the loan repayment is not going to be adversely affected, or may be accuracy of the prediction is maintained. And obviously sale of the bank assets, remember the sale of the bank assets means it is not the fixed asset; it is the financial assets which are short term securities.

The commercial banks which have the short term securities what they are holding in terms of government securities or in terms of other kind of securities so the money market instruments and all, they can sell those securities in the open market and through that they can generate certain kind of revenue. Some revenue proceedings can be taken place through that kind of positions.

So, this is another kind of sources from where the supplies of the liquid funds can be made. They can borrow from the money market because in India if you see that we have a money market all of you know, that is called the Call money market. The Call money market can be used from where, this is nothing but the Inter-bank lending market.

From this Inter-bank lending market at the time of requirement the commercial banks can borrow from each other to fulfill the day-to-day requirements. They can use it, and in Inter-bank lending market relatively a very short term market or the Call money market is very short term in nature from where the overnight basis the money can be borrowed and this money can be utilized for maintaining their liquidity. And we have another short term market also which is existing that is called CBLO market, Collateralized Borrowing Lending Obligations market.

Here you remember this market is insecured market, no collateral, but in the CBLO market some collateral is required, and reasonably this market is longer than, or the maturity period of the CBLO market is longer than the maturity period of the Inter-bank lending market or the Call money market. So, this is another source from where the liquid funds can be supplied or the commercial banks can raise the liquid funds, liquid funds to fulfill the requirements.

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Then we have some demand for liquidity. Whenever you talk about the demand for liquidity we have, why the liquidity is demanded? One is deposit withdrawals, customer deposit withdrawals. We have credit request from the quality loan customers who needs this particular money, one is your deposit withdrawals, we have the quality loan customers.

We have the repayment of the non-deposit borrowings. We can pay certain money through this non-deposit borrowings, and we have some operating expenses, daily expenses and also we have to pay the taxes. So, this is basically from where the outflow will take place, and the inflows that means the customers withdrawals is the major factor which is always we should take care whenever we talk about the demand for the liquidity.

And the supply is the deposit base obviously but withdrawal, demand withdrawals is the demand side and loan, short term loans can be demanded, the credit request can be made for the different kind of short term loans. Then we have the, obviously there are many activities the commercial banks do where they have the many non-deposit borrowings they have made, so against that they have to also pay the interest and as well as the principal.

So, the repayment of the non-deposit borrowings is another factor. And day-to-day wise there are many expenses the commercial banks do. The operating expenses is relatively higher. So, because of that they have to pay these things and as well as the tax is also another factor to which the money is basically required. Then we have another factor that is basically the payment of the dividends. If any kind of company is, or any kind of bank is paying the dividends then they have to pay the dividends from this. For that also some liquid funds is required.

So, if you want to find out the net liquidity position of this particular bank, the net liquidity position is nothing but the supply of liquid funds minus the demand for the liquid funds, so that is the net liquidity position for any commercial bank if you want to calculate that the difference between the supply of liquid funds minus the demand for the liquid funds.

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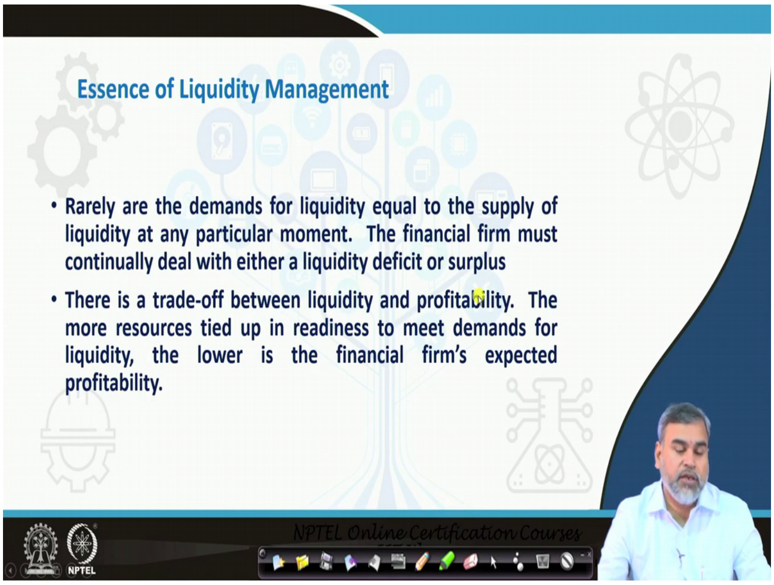

But one thing you keep in the mind always if you see that rarely the demand for liquid funds equal to the supply of liquid funds. At any point of time if you see it is very rarely you will observe that the demand for the liquid funds is equal to the supply of liquid funds. That means either there is a deficit or there is a surplus.

Either the demand is more or the supply is more. Depending upon the conditions, depending upon the banks, depending upon the other many peripheral factors if you observe, always there is a surplus or there is a deficit. So, if always there is a surplus or the deficit then what basically the commercial bank has to do?

The commercial bank is in the dilemma that how this particular gap or that equilibrium can be maintained. And another thing you remember, already we know that there is a tradeoff between liquidity and profitability. The bank cannot keep enough money, cash with them because the cash does not carry any kind of return.

If cash does not carry any kind of return then keeping enough cash expecting that the demand for liquidity will be there and we have to cater those demands then the profitability gets hampered because the money is not utilized in the market properly. If the money is not utilized in the market properly then the return generation from that particular asset will be relatively difficult.

So, then what will happen that there is always a kind of tradeoff between liquidity and profitability. So, if you see that your liquidity and profitability tradeoff will work together or you have to understand this then a proper balance between these two has to be maintained. So, the bank cannot keep enough liquidity with them or bank cannot keep their liquidity zero, or the bank cannot also go for all type of money as the investment or any kind of activities which carry certain kind of return against that.

So, then what happens that a proper balance has to be maintained between these two and in this context what we can say that a proper liquidity has to be maintained. And if there is a requirement then the liquidity can be created. And how this liquidity can be created? The liquidity can be created by selling the different short term securities or borrowings from the money market or the short term market which is existing in the system. So, this is the way basically the essence of liquidity management is very much required, very much needed in this particular context.

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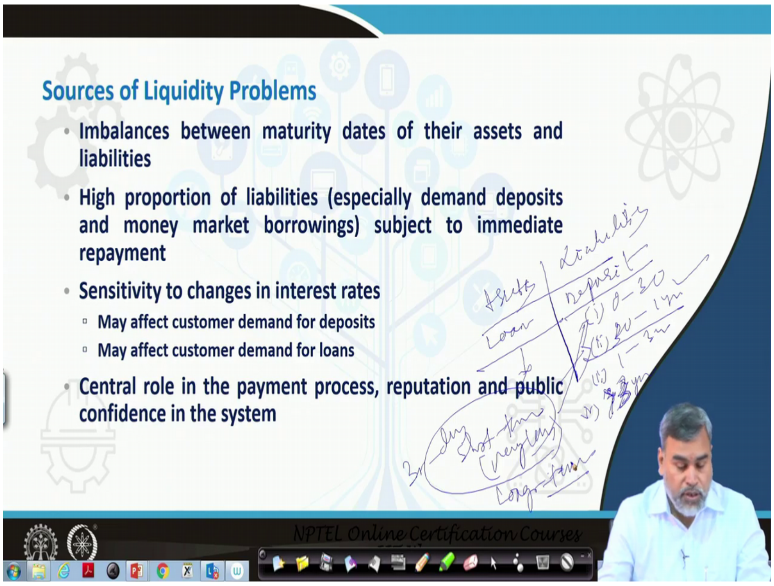

Then if you see that there are, if there is a problem in the liquidity, you assume that there is a problem in the liquidity then what is going to happen? If there is a problem in the liquidity then there is imbalance between the maturity dates of their assets and liabilities. Why that problem arises? What is the sources? Why liquidity problem can arise in a commercial bank? What is the possibility, possible sources, possible reasons for that?

If you remember, a commercial banks, if you see the balance sheet of a commercial bank then if you see that let a simple balance sheet we have asset, we have the liability, assets and liabilities. You see your asset is the loan; your liability is the deposit. But in general if you see the maturity period of the deposits and the loans you will find the huge differences.

Let if you are going for a different maturity of the loans, 0 to 30 days, or you can go for 30 days to 1 year, then you have 1 to 3 years or more than 3 years. If you see this then what basically you will observe if you compare it with respect to the loan?

The short term loans whose period is may be up to 30 days is very less in comparison the deposit of 0 to 30 days. And the loans of the other maturity bucket that is 30 days to 1 year is also relatively less than the deposits. So, then mostly if you observe the loans which are available in the market, these are basically the long term in nature.

So, if the loans are long term in nature then how this long term loans demand can be fulfilled by the short term deposits whatever the commercial banks are. So, because of that the bank has to play a very critical kind of role, or they have to make a certain kind of strategy by that this temporal gap that is called the temporal gap, the temporal gap can be managed.

So, there is imbalance between the maturity dates of their assets and maturity dates of liabilities. So, that is the major reasons for the problem of liquidity. That may be a possible problem of the liquidity and that already the balance sheet sees that. If you see the composition of the balance sheet that will say that there is a gap between the maturity dates of the assets and maturity dates of the liabilities. This is number 1. Because there is a high proportion of liabilities, especially demand deposits and money market borrowings subject to immediate repayment. And another problem point here, that is one thing.

Second thing, you have borrowed some money from the money market. And mostly, already just now we have discussed the Call money market is a overnight market; whatever money you have borrowed today that money has to be returned back tomorrow. So, if the money has to be returned back tomorrow then where the money will be generated?

The commercial bank is really able to generate that money within one day or whether the short term requirements is really, can be fulfilled by these particular borrowings? And from there they have extracted certain kind of return and again whether really it is possible for them to repay that particular money the next day? That is another problem.

Another problem, basically sources of liquidity problem can be sensitivity to change in the interest rate. Because if there is a change in the interest rate then it affects the customer demand for the deposits and also the demands for the loans. So, let bank have forecasted certain kind of trend in terms of deposits and the lending activities.

So, if the bank has already forecasted some lending and as well as the deposit activities of the commercial banks but for example all of sudden there is change in interest rate, and the interest rate could not be predicted properly, that already we know. If the interest rate has increased the demand for bank deposits may increase or demand for bank loan will decline.

Then the supply side is there but demand side is not there. But the interest rate is declining the deposit base will decline but the demand for loan will increase. There is imbalance. That also has to be properly maintained. So, the sensitivity, that how this interest rate is going to change, that is also a very important factor to understand that how this liquidity problem is going to be in the future and this is also another source of liquidity problem.

And another factor also, the central role in the payment process, the reputation of the commercial bank and the public confidence in the system. Whether the consumer has the confidence on this particular bank to deposit the money or really they are inclined to use that particular fund for the various activities by taking the loans?

That is again a behavioral or psychological factor what we can say but that also plays a significant role in terms of the liquidity problem. So, these are the major factors which are basically responsible or major sources which are responsible for the liquidity problems in the commercial bank.

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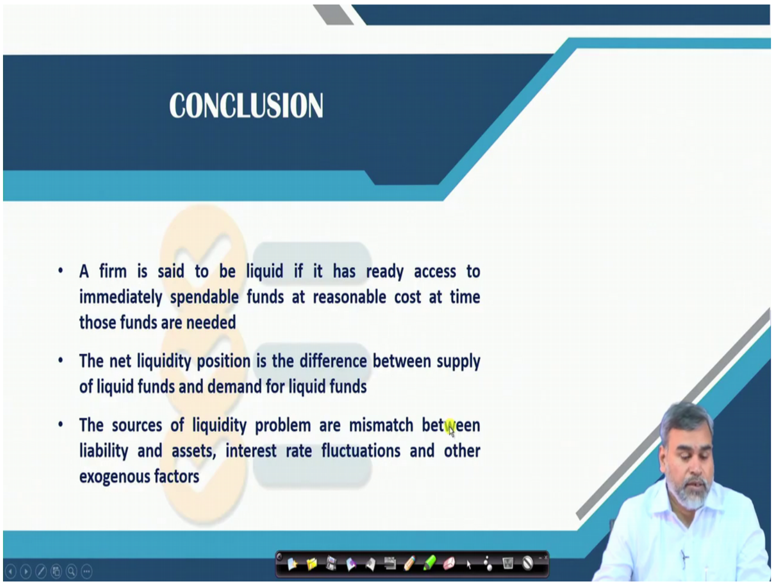

So, what we have discussed? A firm is said to be liquid if it has ready access to the immediately spendable funds at reasonable cost at the time those funds are needed. Then net liquidity position is nothing but the difference between the supplier of the liquid funds and the demand for the liquid funds, and the sources of liquidity problem basically are mismatch between the liability and assets, interest rate fluctuations and other exogenous factors including behavioral factors or the market conditions. So, these are the different issues or different concepts which are related to the problem of liquidity for the commercial bank.

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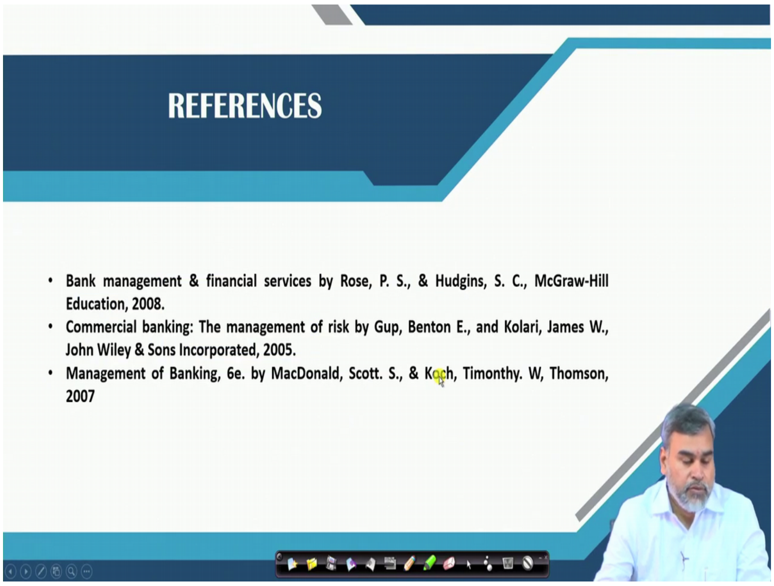

So, these are the references you can go through to detailed discussion on these issues. Thank you.