

Management of Commercial Banking
Prof. Jitendra Mahakud
Department of Humanities and Social Sciences
Indian Institute of Technology, Kharagpur
Lecture 53
Management of Non-Deposit Liabilities

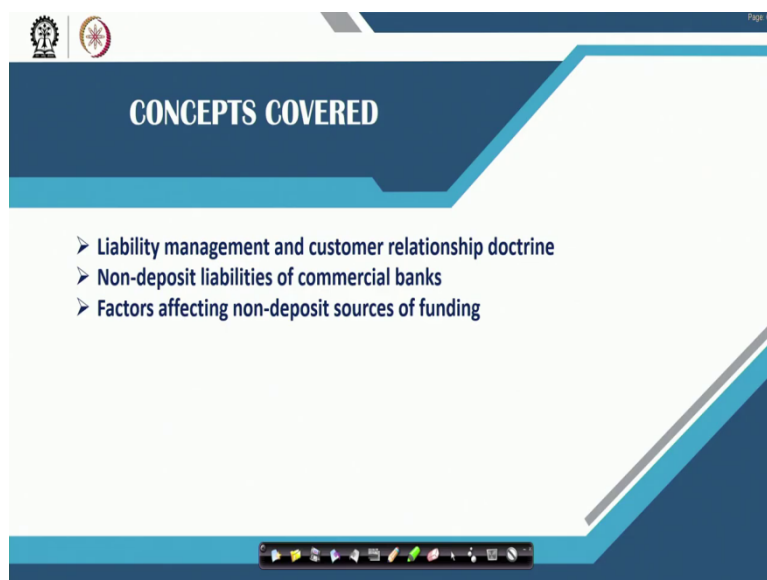
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Good morning. So, in the previous session we have discussed about the pricing of the deposits, which is the major liability of the Commercial Banks. So, apart from the deposits the Commercial Bank has also the other type of non-deposit liabilities. And today's context, because of the emergence of the varieties of the products and the expansion of the banking services, we can say that there are other type of non-deposit liabilities are many.

So, in this context we will be discussing about that, what are those different kind of non-deposit liabilities that exist with the Commercial Banks and why this, how this liability management and the customer relationship concept basically works in this particular context, which creates the importance of the non-deposit liabilities and what are those factors basically we consider whenever we choose the different sources of non-deposit sources of the funding.

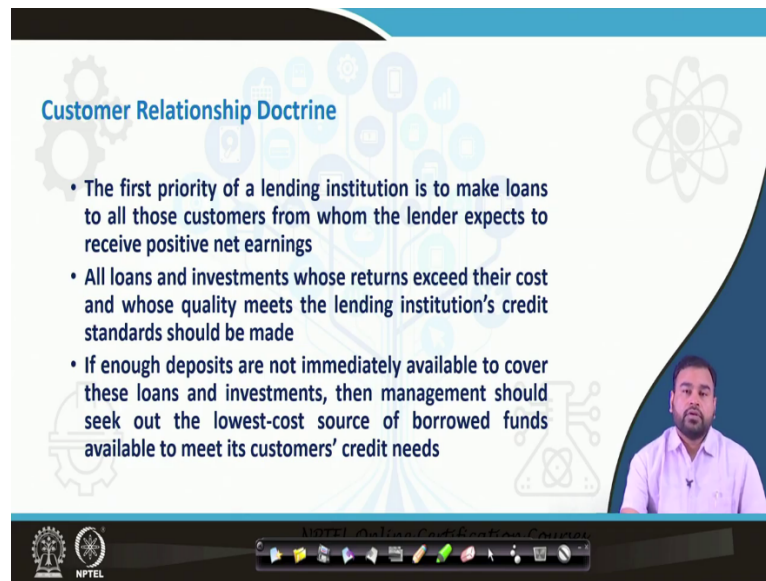
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So, these are the three different issues or different concepts what we are going to cover in today's session. So, here what basically we have to keep in the mind, let us see that, first of all what do mean by this customer relationship doctrine, which creates the importance of the non-deposit liabilities. Whenever we talk about the customer relationship doctrine, that basically has always emerge, always this emergence from the two different or what particular question always raised to us or to always raised by the Commercial Banks.

Apart from the deposits, what does management do to find new money when the deposit volume is inadequate to support all loans and investment activities of the Commercial Bank? If the extra money is required by the Commercial Bank to cater the demand for the loan seekers and as well as the investment opportunities, which are available in the Commercial Bank, then from where the source of revenue will be there and from where the Commercial Banks can raise the money?

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The slide features a blue and white background with a gear and atom icon. The title 'Customer Relationship Doctrine' is in blue. The presenter is a man with a beard in a light purple shirt, visible in a small video window on the right. The NPTEL logo is in the bottom left corner.

Customer Relationship Doctrine

- The first priority of a lending institution is to make loans to all those customers from whom the lender expects to receive positive net earnings
- All loans and investments whose returns exceed their cost and whose quality meets the lending institution's credit standards should be made
- If enough deposits are not immediately available to cover these loans and investments, then management should seek out the lowest-cost source of borrowed funds available to meet its customers' credit needs

So, that is basically the question always comes to our mind. And in this context, if you see, the first priority of the lending institution is to make loans to those customers whom the lender basically expects to receive positive net earnings. So, if the bank has gone for a proper credit appraisal process, and they have assessed that the customer is a good customer and they will raise the loan from this.

But they will provide the loan to these customers then their data earnings will be increasing, then they cannot forgo those customers, they cannot deny the loans to those customers. But in that particular point of time, may not be enough cash available with them, or may enough money available with them. So, from where they can raise the money?

This is basically first one. And all loans and investment whose returns basically exceed their cost and whose quality basically meets the lending institutions credit standards should be made by default that is basically the customer relationship doctrine. So, if they know that if they will provide the loan, then they can generate the revenue out of this and that is covering up the actual cost, what they are going to bear.

So, then, how basically they will provide that? They have to provide the money to them or provide the credit to them. If they want to provide the credit to them, what is the source of the (deposit), source of the money? So, if the enough deposits are not immediately available to cover these loans and investments, then the management should seek out the lowest cost sources of the borrowed funds, which are available in the market to meet the customer's credit needs

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Customer Relationship Doctrine...

- The bank buys funds in order to satisfy loan requests and reserve requirements
- It is an interest-sensitive approach to raising bank funds
- It is flexible – The bank can decide exactly how much they need and for how long
- The control mechanism to regulate incoming funds is the price of funds

So, when the deposit sources are not adequate enough to cater the demand for the loan seekers and as well as, we can say that the investment point of view then what basically happens, they look for the lowest cost sources of funds which are available in the market and they can raise the money through that to cater these type of demands. So, in this context, what basically we have to see, that the bank basically buys the funds in order to satisfy the loan request and the reserve requirements, whatever mandatory reserve requirements they have.

And, it is an interest-sensitive approach to raise these bank funds because the non-deposit sources interest rates are basically vary from one particular item to another item, one particular instrument to another instrument and it is flexible in the sense the bank can decide exactly how much they need and for how long, which time period varies from overnight basis to years.

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The slide is titled "Alternative Non-deposit Sources of Funds" and features a list of six items: Borrowings from Interbank Market, Repurchase Agreements, Borrowing from Central Bank, Negotiable CDs, Commercial Paper, and Long-Term Non-deposit Funds Sources. The slide is decorated with various icons related to finance and technology, such as gears, a tree, and a person. A video feed of a presenter is visible in the bottom right corner, and the NPTEL logo is in the bottom left corner.

So, depending upon the requirement on which of our how many days the requirement is there, they decide this different sources of the funds. And the control mechanism basically is to regulate the incoming funds is the price of the funds. So, they control the price in such a way, by that whatever revenue they are generating from investing that particular fund or by providing loans from that particular fund, that will be more than the cost what they are going to incur if they raise the money apart from the deposits or from the different sources which are available in the existing market.

So, there are different type of non-deposit sources which are available in the system. The most important source is, the Borrowings from the interbank Market, we have the Repo Agreement, Repurchase Agreements, we have the Borrowings from the Central Bank, we have the negotiable Certificate of Deposits which are existing, we have the Commercial Papers and you remember most of these particular sources are short term in nature.

And at the time of requirement, bank also sometimes can go for some borrowings from the long-term sources like (long) term money market, then other market which exist in the system. So, these are the different sources from where the bank can borrow the money. So, the most important source is the money market for the interbank market, where the surplus fund from one bank can be transmitted to another bank and the money market rates are basically which is prevailed in that particular point of time that is basically cost of that particular fund.

So, mostly if you observe in the Indian context, the interbank market is nothing but the call money market. The interbank market is a call money market, which basically helps to banks to borrow the money without any collateral from the other bank.

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Inter-bank Market

- Mostly the call money market helps the banks to borrow the money without collateral from other banks
- The loans made in this market are of a short-term nature, their maturity varying between one day to a fortnight.
- Federal Funds Market in USA
 - Immediately available reserves are traded between financial institutions and usually returned within 24 hours
 - Deposits with correspondent banks and demand deposit balances of security dealers and governments can be used for loans to institutions
 - Types of Fed Funds Loan Agreements
 - Overnight Loans
 - Negotiated via wire or telephone, returned the next day
 - Normally not secured by specific collateral
 - Term Loans
 - Longer term Fed funds contracts (several days, weeks, or months)
 - Continuing Contracts
 - Automatically renewed each day
 - Normally between smaller respondent institutions and their larger correspondents

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So, the loans or the borrowings which is made by the banks in this particular segment, this is unsecured loan. And there is no such collateral is required to borrow the money from this particular segment. And the particular money which is borrowed from this market are very short term in nature. And their maturity period basically varies from 1 day to 1 fortnight, 1 day to 15 days and we are specifically with reference to India. So, Indian call money market which is popularly known as the call money market, the India's call money market is basically pure interbank market.

And there, mostly the money is, the sources which are basically borrowed, the money which is borrowed that is basically in the overnight basis the borrowing takes place. And there are many players in that particular segment, almost many primary dealers and the banks who play the role in that particular call money market to provide this kind of sources.

And there are some banks who are basically that in the deficit side, they always try to use that particular fund in the system. But if you talk about US market, that is called the federal funds market. Here also the logic is same, there is immediately available reserves are traded between financial institutions and institutions, and usually returned within 24 hours that is also again in the 1 day basis.

And here, the deposits with the correspondent banks and demand deposit balances of security dealers and governments can be used for loans to the different institutions. Little bit different from the call money market, which exist in the Indian context or they call Commercial Banks basically trade with each other or the borrowings and lending activities basically happen with each other.

Little bit different, but the conceptual logic is same between these two segments. And there are different types of loan agreements which are available in the federal system or in the federal funds market, these are the overnight loans, which are negotiated via wire or telephone and which can be returned in the next day. And there is no collateral involved in that, like our call money market.

They can provide a term loan, which is longer term federal funds contract, which period varies from several days, weeks or the months. And there is another kind of contract which is available there, which can be renewed automatically, it is automatically renewed each day and that generally happens between the smaller institutions and their larger correspondents.

So, this is the way the different type of loans which are available in the federal funds market. In the same way also, we have a system, we have a CBLO market, we have a term money market which exist in India. There we have some kind of collateral provide that we will discuss later, but this is the way the money market is useful for short-term borrowings by the Commercial Banks.

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Call Rates

- The rate of interest paid on call loans is known as the call rate. The call rate is highly variable from day to day, and often from hour to hour. It is very sensitive to changes in demand for and supply of call loans.
- The call rate has been freely determined by the market forces since 1989.
- Mostly the call rate in India is defined as interbank call rate.

The slide features a blue and white color scheme with various icons representing technology and finance. A video inset in the bottom right corner shows a man in a light blue shirt speaking. The NPTEL logo is visible in the bottom left corner.

And here, if you see that the interest rate what they pay against that particular loans what they make, that is basically nothing but the call rates. So, the rate of interest which paid on the call loans is known as the call rate. And you remember the call rates are highly volatile in nature. Within a particular day, this basically changes very often from hour to hour basis or from minutes to minutes basis depending upon the demand and supply of that particular fund. And these particular rates are determined by the market forces in 1989, before that the call money market rates were not market determined, it was fixed.

And mostly, already I told you, the call rate in India is defined as interbank call rate because the call money market in India is a interbank market only, the markets is only consisting of the different type of Commercial Banks. And, one commercial banks can always transact with another Commercial Bank, one which act as a lender, another one act as a borrower, in this context that is why it is a pure interbank market with reference to Indian context, which may not be the case for the US market.

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Reasons for Call Rate Volatility

- Requirement for CRR needs create excess demand for liquidity in call money market
- Over extended credit position of Banks
- Occasional market disruptions
- Heavy withdrawal by Institutional investors
- Liquidity crisis in money market
- Sluggish demand in bank deposit with heavy pressure for non-food credit in the banking sector crating asset liability mismatch
- Causality in foreign exchange market and call money market
- Structural deficiencies in the Banking Sector

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But what basically we have seen that the call rates are highly volatile or there is a huge fluctuations happens with respect to the call rates which is available with respect to the call money market or the interbank market or the borrowings what the Commercial Banks make of the rate at which the Commercial Banks basically make the loans, those rates are highly volatile and already we know that the rates are not determined by any Commercial Bank or by the regulatory body.

These rates are completely market determined and this depends upon the demand and supply of the call loans. But why basically this volatility occurs with respect to the call money rates in India? The first one is that the requirements for the CRR, The Cash Reserve Ratio, which is the minimum amount of reserves toward the Commercial Banks has to keep with the Central Bank and depending upon their liabilities of the deposits, the rate (varies), at this particular amount varies, the rates is fixed, but the particular amount is varying.

So, at the time for example, there is a high deposit, but there is a high demand for the loans, if the Commercial Banks, for that bank there is a gap between the deposits and the credits, maybe enough cash will not be available or enough money will not be available which will be given to the Central Bank as a mandatory CRR requirements. In that particular point of time, they can demand for more loans from the interbank market to fulfil that gap.

And another thing is that, because even if they have the deposit, they have kept it as a reserves, mandatory reserves then they will face a liquidity crisis. So, in that particular point of time, they can borrow the money from the call money market, by that their liquidity can be maintained and as well as they can also fulfil the CRR requirement, which is mandatory for them, which is imposed by the Central Bank.

That is the first reason, because of that there is a huge fluctuations happens with respect to the call rates in India. Then overextended credit position, sometimes what happens that some of the Commercial Banks extend their credit beyond their deposits, expecting that more deposits, but for some reason, if the deposits are not realized or their expectation is not realized in terms of the deposits, then they have to rely upon the call money market to borrow the money and accordingly there is a huge demand for that particular fund then obviously the call money rate will be increasing.

Another factor is the occasional market disruptions, the market can be fluctuated with respect to certain other economic indicators or the exogenous factors. There are other kind of factors which may distort the market then accordingly your demand and supply of the funds in the call money market may change. It may be, because of the high price, it may be the change in the growth rate, it may be some kind of influence or some kind of changes in the industrial productions.

So, all kind of factors are responsible whenever the demand which has the implications in the demand and supply of the call loans and accordingly that will have the impact upon the call

money rates. And as you know that Indian market financial sector, mostly stock market dominated by the institutional investors.

So, for some reason, if the institutional investors are heavily withdrawing the money from the market then that also create the demand for the call loans because there is a huge demand from the domestic investors to deposit in, to invest in the financial sector. So, that also creates a scarcity for the Commercial Banks to maintain the liquidity and as well as to maintain the CRR, so then what happens that, that also kind of factor which is affecting the demand and supply of the call loans then accordingly the call rates will vary.

Liquidity crisis in the money market, it is because of the monetary policy which is the Central Bank always adopts. So, because of high interest rate in the market that maybe a scarcity of the liquidity. So, at that particular point of time also, the availability of the money with the commercial banks change and the demand for bank credit also change and accordingly that will have the impact on the demand and supply forces of the call money market, then finally, this will have the impact upon the call rate.

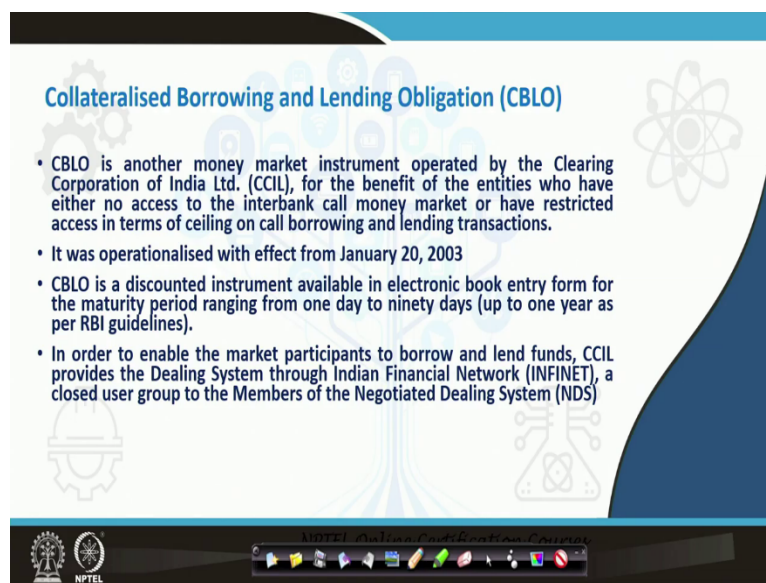
The sluggish demand in the bank deposits and there is a heavy pressure for the non-food credit in the banking sector, which creates the asset liability mismatch for the commercial banks. The non-food credit in this sense there are two types of credits the commercial banks provide, one is the loans given for the food and another one the non-food, which is nothing, but the industrial loans, commercial loans, house loans and other type of retail loans.

So, if there is a heavy demand for the loans, but the demand for or the supply of deposits are not there, then that will have also the impact upon the supply and demand forces of the call loans in the money market or the call money market that automatically have the implications on the call rates. Then, already all the markets are integrated, so if there is a change in the exchange rate that will have the impact on the money market also.

So, accordingly your demand and supply of the availing of the money with respect to that particular market changes, then accordingly what will happen that, it will have the impact upon the call money rates. Finally, we have some structural deficiencies in the banking sector that can be a cause, which can have the impact upon the availability of the deposits with the commercial banks or the loan demand for the customers, then automatically that will have the implication on the demand supply of the call loans, then the call rates gets affected by that.

So, these are the major reasons for the call rate volatility or call rate fluctuations in the call money market, which has also their other implications on the borrowings from that particular market what the commercial banks always want to fulfil the gap between the deposits and the credits and as well as investments. Then, we have in Indian context, we have another market called the CBLO market, that is Collateralized Borrowing and Lending Obligations. So, in this case, we need some collateral to borrow.

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Collateralised Borrowing and Lending Obligation (CBLO)

- CBLO is another money market instrument operated by the Clearing Corporation of India Ltd. (CCIL), for the benefit of the entities who have either no access to the interbank call money market or have restricted access in terms of ceiling on call borrowing and lending transactions.
- It was operationalised with effect from January 20, 2003
- CBLO is a discounted instrument available in electronic book entry form for the maturity period ranging from one day to ninety days (up to one year as per RBI guidelines).
- In order to enable the market participants to borrow and lend funds, CCIL provides the Dealing System through Indian Financial Network (INFINET), a closed user group to the Members of the Negotiated Dealing System (NDS)

Apart from the call money market, we have a CBLO market. Here it is operated by the Clearing Corporation of India. Here, there is, because all the banks or all the entities are not entitled to participate in the call money market, so because the call money market loans are basically unsecured loans, so there are some restrictions for the participation.

So, considering that we have a CBLO market, where the entities who have either no access to the interbank market or have restricted access in terms of ceiling on call borrowings and lending transactions, they can use the CBLO market to borrow the money. And in the CBLO market, we have, the collateral is involved in that, the bank has to provide certain collateral to borrow the money from the CBLO market.

And this market is relatively new with reference to the Indian financial system that is started in 2003 only. And this is basically a discounted interest instrument which is available in the electronic book entry form for the maturity period which ranging from one day to 90 days. Reasonably longer period than the call money (transaction) call money transactions which happening in the money market.

And if it can be extended up to 1 year with the proper approval from the Central Bank that is the Reserve Bank of India. So, in order to enable the market participants in this particular segment, the CCIL basically provides a platform for this, there is a secondary trading platform available for this market that is basically through the Indian Financial Network.

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Collateralised Borrowing and Lending Obligation (CBLO) Cont...

- It is an obligation by the borrower to return the money borrowed, at a specified future date
- Provides authority to the lender to receive money lent, at a specified future date with an option/privilege to transfer the authority to another person for value received
- It is underlying charge on securities held in custody (with CCIL) for the amount borrowed/lent.

It is a closed user group to the members of the negotiated dealing systems. So, because through that particular platform the borrowing and lending activities take place between the different financial entities, including certain commercial banks, which exist in the system. So, it is an obligation by the borrower to return the money borrowed at a specified future date according to the CBLO agreement and provides the authority to the lender to receive money which is lent out at a specified future date with an option to transfer the authority to another person for the value received.

So, there is an honour safe issue, which is clause, which is involved in that particular kind of transactions, so it is underlying charge and security held in custody for the amount borrowed, which is lent or lend in this particular segment. So, here the custodian is the CCIL that is the Clearing Corporation of India Limited.

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Repurchase Agreements (RPs)

- Viewed as collateralized government funds transactions
- With RPs, the purchaser of funds provides collateral in the form of marketable securities, reducing the credit risk
- An RP transaction is often for overnight funds

$$\text{Interest cost of RP} = \frac{\text{Amount borrowed} \times \text{Current RP rate} \times \text{Number of days in RP borrowing}}{360 \text{ days}}$$

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We have another instrument that is called the Repurchase Agreement or the Repo, which is again very popular across the globe. So, this is again a collateralized security. The Bank has to provide certain collateral for borrowing the money from the repo market and mostly the collaterals are the government securities, whatever government securities they have, they have invested, that government securities have to be used as the collateral if they want to borrow from the repo market.

Here the purchaser basically provides the collateral in the form of marketable securities and that thing basically is helpful for reducing the credit risk in that particular process. And mostly, it is again used for the overnight funds. In Indian context, we have the liquidity adjustment facility, through this the repo transactions take place. And it is one of the most important instrument, repo rate is the most important instrument of the monetary policy.

And here, the repo rate it is a policy rate, where it is not market determined, it is determined by the regulators. So, if you want to calculate the interest cost for the repo rate or repo transactions, then how much money you are borrowing against that multiplied by the current repo rate into the number of days in the repo rate borrowing divide by the 360 days or you can go for 365 days. So, depending upon the number of days in a year, what you are considering, then you can divide it with 360 or 365 days.

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Borrowing from Central Banks

- The central bank makes the loan through its discount window by crediting the borrowing institution's reserve account
- Each loan made by the central banks must be backed by collateral acceptable to the central bank
- Several types of loans available:
 - Primary Credit
 - This loan is available for short terms and to institutions in sound financial condition
 - Rate is slightly higher than the money market rate
 - Secondary Credit
 - These loans are available at a higher interest rate to institutions not qualifying for primary credit
 - Seasonal Credit
 - These loans cover longer periods than primary credit for small and medium institutions experiencing seasonal swings in deposits and loans

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Accordingly, the total interest cost what you are varying with respect to the repo transactions, that basically works in this particular context. So, but it is a quite powerful instrument in terms of the borrowings, short term borrowings for the Commercial Banks from the Central Bank, and Central Bank plays a very significant role in that particular process.

Then, sometimes also we can borrow from the Central Bank, the Central Bank basically makes the loan through the discount window, rate discounting, discounting facility to the exporters, in Indian context that happens or different kind of business units they provide for the specific purpose. But in US context, if you see that, there are different ways this particular financing is made or the lending is made by the Central Bank to the different kind of banks.

So, each loan made by the Central Bank must be backed by the collateral which is acceptable to that particular Central Bank, that you have to keep in the mind. And there are several types of loans which are available from the Central Bank side, one is your Primary Credit, Secondary Credit and the Seasonal Credit. And what do you mean by the primary credit?

This loan is basically available for the short term and to institutions in sound financial conditions, the particular banks which are in a good set, their balance sheet is quite strong, they are not exposed to more credit risk and all, those kind of organizations get this kind of loan as a primary credit. And the rate which is imposed on that particular credit is little bit higher than the money market rate.

So, we have a repo market also, we have a borrowing market from the Central Bank also, which is outside the repo operations or the lap operation, liquidity adjustment facility operations, in that particular market, this particular borrowings can take place. We have a secondary credit, where these loans are available at a higher interest rate to the institutions not qualifying the primary credit, because their financial condition is not that good enough to get the fund from the Central Bank as a primary credit.

So, there the interest rate is relatively higher because there is more risk involved in terms of the credit risk. The seasonal credit, these loans basically cover for a longer period of time than primary and the secondary credits, that is for the small and medium institutions, which are experiencing the seasonal swings in deposits and the loans.

Because of the busy season and the slack season, sometime the deposit and loans figure, loan characteristics changes and the bigger banks are basically are able to manage that, but in the smaller banks it is very difficult to manage whenever there is heavy swings. Seasonal swings happens with respect to the deposit and loans at that particular point of time, they can rely on the Central Bank in terms of the seasonal credits. So, this is another source through which the borrowings can take place by the Commercial Banks.

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Development and Sale of Large Negotiable CDs

- An interest-bearing receipt which shows the evidence of the deposit of funds in the bank for a specified period of time for a specified interest rate
- It is considered a hybrid account since it is legally a deposit
- Interest rates on fixed-rate CDs are quoted on an interest-bearing basis and the rate is computed assuming a 360-day year
- Represent the majority of all large negotiable CDs issued
 - Suppose a depository institution promises an 8 percent annual interest rate to the buyer of a \$100,000 six-month (180-day) CD
 - The depositor will have the following at the end of six months

Amount due = Principal + Principal \times $\frac{\text{Days to maturity}}{360 \text{ days}}$ \times Annual rate of interest

CD customer

$$= \$100,000 + \$100,000 \times \frac{180}{360} \times 0.08$$

$$= \$104,000$$

We have another source that is called the negotiable CDs or the Certificate of Deposits. And the certificate of deposits, basically is an interest bearing receipt, which shows the evidence of the deposit of the funds in the bank for a specified period of time, for a specific interest

rate. So, this is consider as a hybrid instrument, because one way this is consider as a deposit, other way this has been consider as a non-deposit liability or a non-deposit instrument.

So, because of that this is consider as a hybrid account or hybrid instrument. So, the interest rate on the fixed rate Certificate of Deposits are quoted on an interest bearing basis and the rate is computed assuming a 360 day per year or 365 whatever rate you can, you can use. It represents the majority of all large negotiable CDs which are used. There are many types of CDs which are available in the market, so you can use those things.

Suppose a depository institutions promises an 8% annual interest rate to the buyer of 100000 dollar for the 6 months CDs, 180 day CDs, then how much the depositor have to pay for that? Then here it is calculated in this way, there is the principal, which is 1,00,000 dollar in this case plus principal into days to maturity divided by 360 days into the annual rate of interest.

So, that is your 8 percent is the annual rate, 1,00,000 dollar is the principal, then 1,00,000 plus 1,00,000 into 180 by 360 multiplied by 0.08, that means here we are using the day count conventions instead of using the direct way of calculating the interest rate. We have days to maturity has to be considered, then 180 by 360, here the maturity period is 180 days, and 180 by 360 into 0.08 that will give you 1,04,000 dollar. So, in this context, that is another way the banks basically can borrow the money from the different sources for their investment and as well as providing the loans.

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Commercial Paper Market

- Commercial paper consists of short-term notes, with maturities normally ranging from three or four days to nine months, issued by well-known companies to raise working capital
- The notes are generally sold at a discount from face value through security dealers or through direct contact with the issuing company
- This funds source tends to be high in volume and moderate in cost but also volatile in available capacity and subject to credit risk

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Then we have another market which also there in this particular segment that is called the Commercial Papers. Commercial Papers are mostly issued by the companies smaller, there are certain conditions they have to satisfy if they want to provide the commercial papers or issue the commercial papers. So, that is why the commercial paper basically consisting of the short term notes with maturities normally from 3 to 4 days to the 9 months and issued by the well-known companies to raise their working capital.

So, the Commercial Banks also can use, that is another source to fulfil their gap or they can take the help of the commercial papers basically to fulfil the gap of the credits and deposits. And these commercial papers are generally sold at a discount from the face value through the security dealers and through direct contact with the issuing company.

And this fund source tends to be high in volume and moderate in cost, but also volatile in available capacity and subject to credit risk, there are high credit risk involved in the commercial papers segment to whenever it has been used as an alternative source of the financing, but still that particular market has certain relevance whenever we talk about the different type of deposit schemes or non-deposit schemes what the Commercial Banks use. And apart from this, already I told you, there is another term lending or term financing alternatives are available.

Within the money market, we have a term financing or term money market which is existing, where the maturity period can go up to 3 years. From there also the Commercial Bank sometimes can borrow the money with little bit higher interest rate, because as you know that there is a trade-off between the interest rate for the long-term period and the short-term period.

And the long-term interest rates are riskier and there is more credit risk involved with respect to that. So, because of that, always we can observe that the rates which is imposed on the different long-term rates, that is higher than the short-term rates, short term kind of borrowings, what the Commercial Banks make. So, that is also another type of sources what you can see from where the lending institutions or the Commercial Banks can borrow the money.

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Choosing among Alternative Non-deposit Sources

- The demand for nondeposit funds is determined basically by the size of the gap between the institution's total credit demands and its deposits and other available monies
- Gap is based on:
 - Current and projected demand and investments the bank desires to make
 - Current and expected deposit inflows and other available funds
- Size of this gap determines the need for nondeposit funds

Available funds gap (AFG) = Current and projected loans and investments the lending institution desires to make – Current and expected deposit inflows and other available funds

NPTEL

So, if you want to choose among all, then what basically we have to see, we have to see the demand for non-deposit fund determined by the size of the gap between the institution's total credit and the deposits. The gap is based on the current and projected demand and investments in the bank desires to or wishes to make, current and expected deposit inflows and other available funds. So, the available funds gap if you want to calculate, that is basically your current and projected loans and investment, the lending institutions desire to make minus the current and expected deposit inflows and other available funds, which are there with the Commercial Bank.

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Non-deposit Funding Sources: Factors to Consider

1. The relative costs of raising funds from each source
2. The risk (volatility and dependability) of each funding source
3. The length of time (maturity or term) for which funds are needed
4. The size of the institution that requires more funds
5. Regulations limiting the use of alternative funds sources

NPTEL

So, then the factors they consider, the relative cost of raising funds from each source, risk regarded to the major factor, the risk of each funding source, that means the volatility or the dependability, the length of the time for which the funds are required, if it is very short-term, they can go to money market, if it is a long term, they can go to the term lending markets, the size of the institutions that requires more funds, regulations which is basically limit the alternative uses of or alternative fund sources by the, and the particular there is Central Bank might have imposed certain kind of regulations on that, from where the Commercial Banks can borrow the money apart from the deposits.

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Formula for doing cost comparisons among alternative sources of funds

$$\text{Effective cost rate on deposit and nondeposit sources of funds} = \frac{\text{Current interest cost on amounts borrowed} + \text{Noninterest costs incurred to access these funds}}{\text{Net investable funds raised from this source}}$$

where

$$\text{Current interest cost on amounts borrowed} = \text{Prevailing interest rate in the money market} \times \text{Amount of funds borrowed}$$

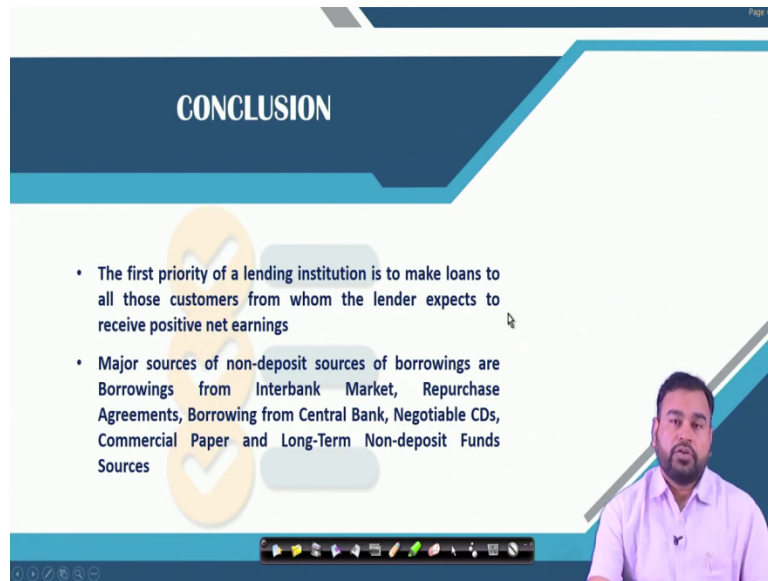
$$\text{Noninterest costs to access funds} = \text{Estimated cost rate representing staff time, facilities, and transaction costs} \times \text{Amount of funds borrowed}$$

$$\text{Net investable funds raised} = \text{Total amount borrowed less legal reserve requirements (if any), deposit insurance assessments (if any), and funds placed in nonearning assets}$$

So, if you want to calculate this, then the effective cost rate on deposit and non-deposit sources of funds, that is current interest cost on amounts borrowed plus the non-interest cost incurred to assess these funds divided by the net investable funds raised from the source. And the current interest cost on amount borrowed is nothing but the prevailing interest rate in the money market multiplied by the amount of money borrowed.

Non interest cost to assess the funds is nothing but the estimated cost of representing the staff time, facilities and transaction costs, these are basically overhead cost into the amount of funds borrowed. And the net investable funds are nothing but the total amount of borrowed less the legal reserve requirements if there is any, deposit insurance assessments and funds placed in nonearning assets. So, all these things has to be deducted from their, let us be adjusted, then finally, the net investable funds can be calculated from there, then finally, we can calculate the effective cost rate on the deposit and the non-deposit sources of the funds.

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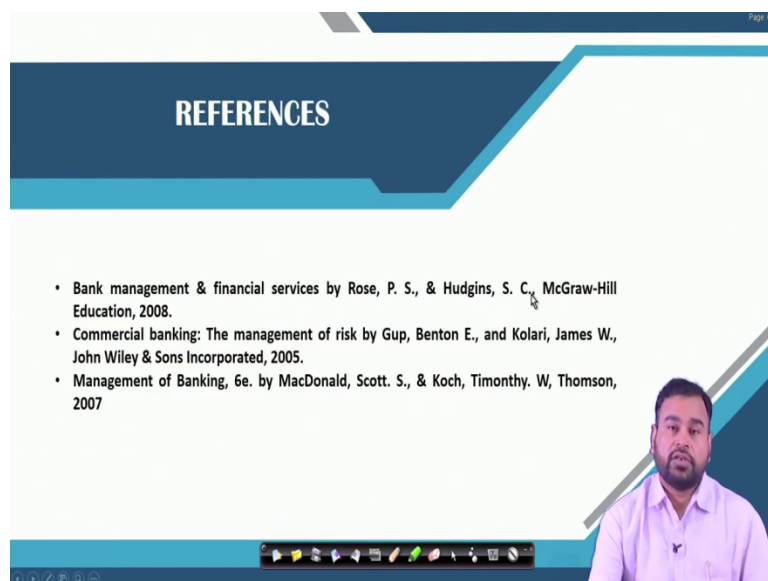


The slide is titled "CONCLUSION" in a dark blue header. It contains two bullet points: "The first priority of a lending institution is to make loans to all those customers from whom the lender expects to receive positive net earnings" and "Major sources of non-deposit sources of borrowings are Borrowings from Interbank Market, Repurchase Agreements, Borrowing from Central Bank, Negotiable CDs, Commercial Paper and Long-Term Non-deposit Funds Sources". A large yellow checkmark icon is in the background. A video feed of a presenter is in the bottom right corner.

- The first priority of a lending institution is to make loans to all those customers from whom the lender expects to receive positive net earnings
- Major sources of non-deposit sources of borrowings are Borrowings from Interbank Market, Repurchase Agreements, Borrowing from Central Bank, Negotiable CDs, Commercial Paper and Long-Term Non-deposit Funds Sources

So, what we have discussed here? The first priority of a lending institution is to make loans to all those customers from whom the lender expects to receive positive net earnings. The major sources of non-deposit sources of borrowings are borrowing from interbank market, repurchase agreements, borrowing from Central Bank, Negotiable CDs, commercial papers and some long-term non-deposit funds like your term money market. And there are various factors which are responsible to choose the alternative sources of funds as the non-deposit funds in the segment.

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The slide is titled "REFERENCES" in a dark blue header. It contains three bullet points listing books: "Bank management & financial services by Rose, P. S., & Hudgins, S. C., McGraw-Hill Education, 2008.", "Commercial banking: The management of risk by Gup, Benton E., and Kolari, James W., John Wiley & Sons Incorporated, 2005.", and "Management of Banking, 6e. by MacDonald, Scott. S., & Koch, Timothy. W, Thomson, 2007". A video feed of a presenter is in the bottom right corner.

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So, these are the references you can go through for this. Thank you.