Management of Commercial Banking
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Lecture 57
Management of Bank Capital 1

So, after the discussion on the off-balance sheet activities, another major important aspects of the commercial bank is bank capital. So, you might have heard about the bank capital concept a lot, because the bank capital ratio is consider as the stability ratio for the commercial bank. The bank capital is basically utilized or is will be used, if the bank is going to be in crisis or the bank is going to face the problem in near future.

So, considering the importance of the bank capital, the different ways the bank capital is basically maintained, a particular ratio of the bank capital is maintain and various sources has to be explored from where the bank capital can be raised by that the bank's efficiency, not efficiency in the sense of stability, the bank stability can be maintained in a particular period of time.

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Considering this in today's class, we will be discussing about the two things. One is that, what are those different components, the constituents of the bank capital, this is number one and number two, why the bank capital is important and another thing is that in the, there is a question always we ask ourselves, the bank capital is a highly regulated.

But what is reason that the bank capitals are regulated? Then what is the point of having a strict regulation to hold the bank capital in the market or for the commercial bank? So, this is the many questions always, you always face and we will be discussing about over the period that how this bank capitals are basically playing an important role in the banking activities and first of all why it is required.

(Refer Slide Time: 02:30)

Before that, if you see that bank is exposed to many types of risk. This type of risk already we have discussed. This credit risk, it is nothing but the default liquidity risk to fulfil the requirement of the customer's need. Interest rate risk, due to the fluctuations of interest rate, the price of all type of assets the valuation of all type of assets the banks are holding that is going to be sensed. Operational risk, that is basically coming out of different kind of frauds, natural calamities, you have the reputation risk, you have other kind of inefficiency which is existing in the system with respect to the non-financial factors.

So, then we have the exchange rate risk, which is also a factor which is nothing but because the bank has exposure to the foreign exchange market. So, any change in the exchange rate also will have the impact on the total income or the profit of the commercial banks. So, because of that they are also exposed to exchange rate risk.

So, these are the, there are many other types of risk. But these are the major broad risk, what the commercial banks always face that already we know. So, then how to you make it defence against that risk? The commercial banks would have adopt certain kind of strategy to minimize that risk in the system. By that, there objectives can be fulfilled in terms of profitability and the liquidity. So, this is what basically our concern, so whenever we talk about this.

So, the different ways the bank has able to defend that kind of risk what they are going to face or they are exposed. One is they can make a very quality management. They have to maintain that particular balance sheet in such a way or they can have efficient managers within the system by that this all those on balance sheet and off balance sheet items can be managed properly and by that, they can have some kind of proper risk management process, which will reduce this kind of risk for them.

That is number one or they can diversify themselves. The diversification can be made geographically. Because there are some kind of risk which is related to operational risk or the unsystematic risk what we call it or we can say that idiosyncratic risk which is specific to the bank. So, those kind of risk and also that is also related to regulation. So, there are some kind of way the regulations are different, market disciplines are different. So, they can get advantage certain things with respect to that.

So, because of that they can geographically diversify themselves. They can do there branch expansion. They can open the different branches and other foreign countries, there are different ways the diversification can happen in terms of geographical way and the other kind of diversification they can made, that is basically called the portfolio diversification. So, this would have their portfolio investment portfolio in such a way, by that any kind of fluctuations with respect to this interest rate, with respect to exchange rate, with respect to other kind of risk, what basically they are exposed.

They can get rid of or they can hedge out that particular risk in the system. So, that is also another way, by that their objectives are written can be fulfilled. So, they can make their portfolio efficient. So, already you might have idea about the efficient portfolio. So, they can make at any circumstances, first of all they can hedge out all the risk or if they can target a particular level of risk. They can target a risk or they can target a retur.

So, if they are targeting a return, then to get that return, they want to basically minimize the risk. Minimize the risk or if they go for a target risk, then they want to maximize the return. So, with a given amount of risk if the return is maximized. We call it efficient portfolio or otherwise. If a given amount of return, your risk is minimized. That also can be called as an efficient portfolios.

So, first of all, the bank is trying to make an efficient portfolio, by that they can achieve their target, even if there are certain kind of fluctuations with respect to the other factors which are affecting their business in a particular point of time. They can have another way. Also, they can manage their risk or they can defend the kind of risk exposure that is basically deposit insurance. In USA and other developed countries, deposit insurance plays a significant role.

The banks pays the insurance premium against the deposits, whatever the customers have and if there is any kind of default or any kind of probability of failure for the commercial banks, then the depositors can get back their money from this insurance company. Because your deposit is completely insured. So, through that the bank is able to also minimize certain level of risk, which may arise because of certain failures in the loan business. A certain failures in the investment business.

Which may not be the case for India, because our deposit insurance is not very strong. The commercial banks pays very low level of premium for the insurance of the deposits and any kind of failure of the bank, maximum 1 lakh rupees can be received by the depositors. Even if your deposit amount is more than 1 lakh. So, because of that, the deposit insurance does not have that much significance, whenever we talk about the Indian commercial banking.

But it has a huge significance, whenever we talk about the banking sector in US and other developed economies, where the deposit insurance really plays a significant role in terms of the managing reducing the risk of commercial bank and another important thing is, they can also hedge out of the risk or minimize the risk by holding the adequate amount of capital. They can also hold the adequate amount of capital, because capital is basically work like a cushion. It will worked like a cushion against any kind of fluctuations any kind of losses, what they are going to face in the future.

So, that money can be the capital reserves whatever they have that basically can be utilized to compensate those kind of losses, whatever they have made. So, because of that, what basically we can say, bank capital is also one of the ways through which the interest rate risk or the other type of risk or the failure of the bank can be controlled or can be compensated. The losses can be compensated by utilizing the bank capital.

So, therefore the bank capital is very important. From the commercial banking perspective, the capital maintenance holding adequate amount of capital has lot of economic and as well as the operational significance of the commercial bank. Today, will be discussing about that what exactly the capital is and how this different components of the capital are designed or basically can be explored by that the bank capital can be robust.

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What is bank capital?

Capital or net worth equals the cumulative value of assets minus the cumulative value of liabilities and represents the ownership of the firm

It is traditionally measured on a book value basis where assets and liabilities are listed in terms of historical cost

In banking regulators include certain forms of debt and loan loss reserves while measuring capital adequacy ratio

Total Capital / Total Assets

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So, in actual sense, in a true sense if you define a capital, the capital is nothing but, it is a net worth. Which equals the cumulative value of the assets minus cumulative value of liabilities and which is nothing but, the owner's equity. The capital for a normal organization if you think about then the actual capital of that particular organization is nothing about the owner's equity, equity capital, your own net worth.

So, traditionally this is basically measured on a book value basis. We never consider the market value to find out the capital base of that particular company, whether it is financial or non-

financial. Where the assets and liabilities are listed in terms of the historical cost. So, we consider the book value measures to define the capital or to find out the capital of that particular entity.

But in banking, it is little bit different. In the banking sector, the regulators basically include certain forms of the depth and the loan loss reserves while measuring the capital adequacy ratio. The capital ratios are basically measured. There are two ways the capital sort of measured. One is your normal capital ratio. Another one is the capital adequacy ratio. We will detail, we will be discussing more on capital adequacy ratio.

But the capital ratio if you talk about capital ratio means your total capital upon total assets. It is the capital ratio. But whenever you talk about the capital adequacy ratio it is the capital, total capital divided by total risk weighted assets. So, how the risks the weights are given? What is the different ways the risk weighted assets are calculated and on what basis the weights are given?

So, all those things will be discussing in the forthcoming session. So, that is why there is a difference in terms of the capital, whatever capital the banks basically hold, whatever way the capitals are defined by the, in banking sector is different from the capital, what we hold for a general, non-financial companies. So, now this is the way the capital is defined. So, let us see that how those different components are there in that particular capital or how the bank capital is constituted.

(Refer Slide Time: 13:48)

Constituents of Bank Capitals

- Common stocks equal the par value of common stock outstanding
- Preferred stocks measured by the par value of any shares outstanding that promise to pay a fixed rate of return
- Surplus equals the excess amount above each share of stock's par value paid
- Undivided profit is the net earnings that have been retained in the business rather than being paid out as dividend
- Equity reserves representing funds set aside for contingencies such as legal action against institution, expected dividends to be paid etc.

We said that bank capital is beyond the concept of the net worth or beyond the concept of the owner's equity. Then what are those? Obviously, the first one is common stock, which is the equity only.

Then we have the preferred stock, all of you know what is preferred stock, preferred stock is a combination of stock and bond characteristic because in the common stock there is no such guarantee that dividend will be paid or there is no fixed dividend but the preferred stock, we have a fixed rate of dividend, we have to pay in the periodical basis and at the time of failure those people will get back there money before the money goes to the common stockholders and but they do not have any voting rights.

The preferred stockholders do not have the voting rights. Then we have the surplus, if any surplus is existing with the bank. So, the surplus which basically equals the excess amount above the each share of stocks per value which is paid. Then we have undivided profits which is nothing but net earnings or the return earnings. That have been retained in the business rather than being paid out as the dividend.

So, instead of paying whole profit or net earnings or the dividend. The bank can keep certain kind of money as the, or every organization keep certain money as the return earning. So, therefore this is basically called the undivided profit or this is basically nothing but the return

earning and equity reserves which is representing the funds which set aside for contingencies such as legal action against the institutions expected dividends to be paid, etc.

That is not common, but there are some reserves the banks keep to avoid certain kind of unforeseen situations which may arise to the organization in the future, that maybe in terms of the legal issues or in terms of the payment of high more dividend in the future, whatever it may be. So, this is the way equity reserves, some equity reserves can be kept. So, that is another component of the bank capital in the commercial bank.

(Refer Slide Time: 16:25)

Constituents of Bank Capitals ...

- Subordinated debentures represent long-term debt capital contributed by outside investors. This instrument may carry a convertible feature, permitting their future exchanges for shares of stock.
- Minority interest in consolidated subsidiaries where the financial firm holds ownership shares in other businesses
- Equity commitment notes, which are debt securities repayable from the sale of the stock

Then already we have said, there are some debt components in the capital and that debt component is the subordinated debentures and you know that the debentures is basically what? Debentures are basically the long term debt, which are issued by the corporates or the companies and mostly the debentures are basically what? The debentures are basically the unsecured loans, unsecured debt. It is not backed by any kind of asset. So, it is a long term debt, contributed by the outside investors and this debentures can be also convertible.

So, there are two types of broadly, there are many types of debentures, but broadly there are convertible debentures and the non-convertible debentures and whenever you talk about the convertible debentures, this debentures after a period of time, after a point of time, can we convert it into equity.

After a point of time, the particular debentures can be converted into equity that is called the convertible debentures. Then we have, that is why long term debt is, there is subordinate debts in that debts which also part of the bank capital. We have minority interest in the consolidated subsidiaries where the financial firm holds ownership shares in other business.

If they have any subsidiarity and the financial firm of certain kind of business in that, so that can also be kept as a capital base for that particular bank. Minority interest in consolidated subsidiaries. Then some of the banks have equity commitment notes. Which are debt securities repayable from the sale of the stock. There is an equity commitment notes, which are debt securities, repayable from the sale of the stock.

So, this is the, these are the broad items which comes under the bank capital. But mostly if you want to define it, it is basically broadly defined as equity plus the long term debt, it is basically the capital. So, this is the core capital for the bank and this is basically the supplementary capital for the bank, which constitute the total capital base and that capital base is required to compensate any kind of losses, expected losses what the bank main incur in the future. So, because of that the capital base of the banks should be strong and next point is that.

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Why the bank capital, where we are concerned about the bank capital. Already I told you, it provides a cushion for banks to observe the losses and it will keep the bank remains solvent. The

probability of bankruptcy will be less and the failure of this particular banking system will be less or the probability of the failure will be less, if the particular bank is maintaining the adequate amount of capital because any kind of losses can be compensated by the capital base. Whatever they have.

It provides the ready access to the financial market because they have the enough capital with them. They can utilize their capital for the investment in other things in the market and high capital ratio also gives a kind of signal to the market that the bank is in a good position. That is why any kind of raising the funds or any kind of other activities what the bank is trying to make that is also easy for the banks to carry out in the system.

So, because of that it helps to, it helps to get a better access to the financial system. It also consider as a guard against liquidity problems caused by the deposit outflows. If there are unexpected deposit outflows can happen, then all of sudden that liquidity can be maintained or can be, we can say that adjusted with respect to the capital base, whatever the commercial banks are holding.

So, then it also has a significant role in terms of the maintaining liquidity for the commercial banks. Obviously, it helps to reduce the failure of the risk. So, if there is any kind of failure of the risk, which is going to happen or may happen for the banks, then the enough of capital base with the system can help the commercial banks to get rid of that kind of failure and if your capital base is quite strong and there is adequacy of the capital which is maintained in the bank, then which increases the confidence level of the public.

So, this is a positive signal, signalling it gives a positive signal. So, in this positive signal can attract more customers and give certain kind of confidence in the mind of the stakeholders who are related to that particular bank and by that the bank will not have enough problem in terms of the deposit and lending activities.

So, because that basically consider as a stability of the banking. So, if your stability of the banking is maintained, that means everybody will be interested or everybody will be inclined to go for this kind of bank, which is really a stable bank, considered to be stable bank and the bank is able to generate certain revenue by attracting more business in terms of more clients. So, these

are, this is the way the, the bank capital is quite important from the commercial bank point of view.

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Relative importance of Different Sources of Capital

- Surplus market value of common and preferred stocks
- Retained earnings
- Long term debt
- The relative importance of different components varies across the size of banks

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But if you see the different sources of the bank capital whatever we have seen. There is a relative importance. The relative importance in the sense. What are those different kinds of components the banks should hold or the bank is giving more priority to what kind of components whenever they want to hold the capital with them. Although, all those things are regulated, but still the bank has some kind of inclination to hold this kind of. So, historical if you see that mostly the banks prefer to have the common stocks as a surplus market value of common and preferred stocks.

It is a share of the capital always. If you consider the banks, always wants to have more share in terms of the equity. Then they can go for the return earnings, which is nothing but the internal equity. So, first source is the common stocks. Second source is our return earnings and third source is the long term debt. So, in general in aggregate, we can say the bank always has a preference to maintain a core capital with them. To maintain the core capital with them.

By that it can create certain kind of stability within the banking system and as well as because the debt instruments also as consider as the constituents of the capital. They also hold something, but their preference always to hold more capital in terms of the equity which is nothing but the

core capital for them and which has been observed that, this particular preferences may vary across the size of the banks.

Why it vary across the size of the banks? Because sometimes may not be, it is possible for the small sized banks to have n of equity capital with them and to maintain that particular level of equity capital is difficult for them. Because they are not getting it. Even if their preference is that, but still they are not able to get that n of capital in terms of equity because of that. They may not maintain that particular hierarchy or preference pattern.

So, that is why that is an investigating matter. We have to understand that there is a differences in terms of the preference pattern. Whenever we analyse this capital ratio across the different types of banks, which is categorized on the basis of the size. So, these are basically shows the relative importance.

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Then how much capital banks would hold? There is a very important question. That how much capital a bank should hold. Who should set the capital standards, how much capital the banks would hold, whether the bank will decide or the market will decide or any regulatory bodies will decide, who will decide that how much capital the banks would have.

That is basically number one question or what is a reasonable standard for the proper amount of capital, a particular ratio, what ratio? Out of the total what ratio banks basically, the banks would

have always as the capital base. So, that is basically the question, always we have anybody, who does this banking activity or who are interested to know about the banking, they always have this question that how much should be kept to overcome on this kind of problems in the system.

So, considering this things, what basically always we have seen the bank capital is highly regulated. That means the regulatory body will decide the minimum ratio. The bank can have more than that. But a particular amount of ratio, particular amount of capital adequacy ratio has to be maintained. That means the bank capital is regulated.

Why it is regulated? Already we know that our objective is to limit the risk of failures. Number one, because capital is working as a cushion against that. To preserve the public confidence at any point of time, the public should not feel that this particular bank stability is not there. That is why the business of that particular bank is going to decline. So, to preserve, perseverance of the public confidence is very much required.

That is why the bank capital should be regulated and to limit the losses to the government, which is arising from the deposit insurance claim. If the bank is going to lose, then the insurance company will pay that money. Which is nothing but the government's money which is going to be lost. So, the banks stability has to be maintained. So, because of that, the bank is not free to decide that how much capital they will keep. They can free to decide, but that particular capital should be above the minimum regulatory capital.

So, therefore the concept of the minimum regulatory capital came into the picture and every bank has to follow that and in that context, what we can say the bank capital is really highly regulated. With this basically what we can say, BIS international bank for settlement has developed certain kind of criteria in their form of Basel norms, which gives the idea that how much capital we should, the banks should hold and in what percent different types of capital should be kept.

So, all kinds of regulations they have defined, in their periodical basis they are revising again and again and they are also trying to always have certain kind of pressure on the different kind of commercial banks that if they will maintain this, then the probability of failure will be less.

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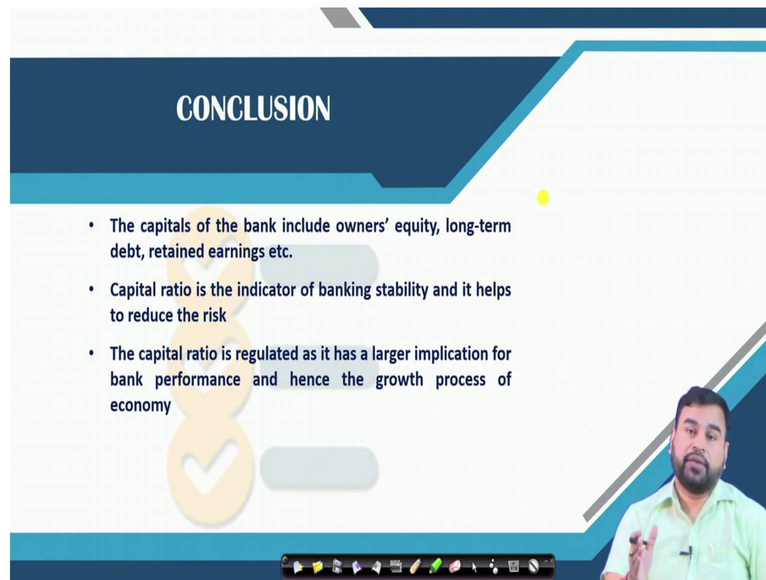

So, those things will be discussing in the forthcoming sessions. Then what basically we have discussed today the capital of the bank includes the owner's equity, long term debt, return earnings etc. Capital ratio is the indicator of the banking stability and it helps to reduce the risk in the banking system and the capital ratio is regulated because it has a larger implication for the bank performance and hence the growth process of the economy.

So, because of that, the bank capital ratio is regulated. So, as per the regulations, how much capital should be kept and how the capital ratio is calculated and how the weights are given on the basis of the different level of risk. So, these are the questions, what will be addressing in the fourth coming sessions.

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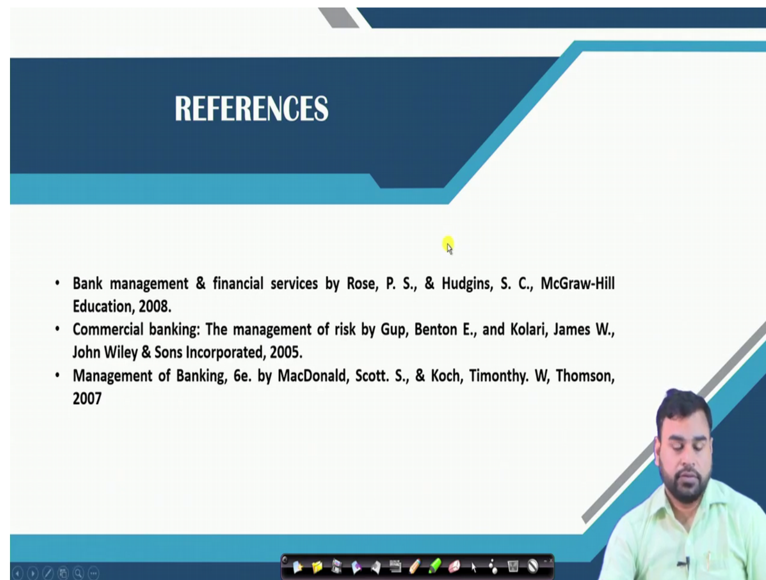

So, these are the references what you can go through for the detailed discussion. Thank you.