**Management of Commercial Banking**
**Professor Jitendra Mahakud**
**Department of Humanities and Social Sciences**
**Indian Institute of Technology, Kharagpur**
**Lecture - 42**
**Management Investment Portfolios – II**

Good morning. In the previous class we started the discussion on the management of the investment portfolios of the commercial banks and in that particular session we discussed about the certain instruments which are used for the investments by the banks to maximize their returns.

(Refer Slide Time: 00:40)

So, in this context what we have seen? There are two types of securities, one is your short-term securities and second one is the long-term securities. One is categorized as the money market instruments and other one is categorized as the capital market instruments or the long-term securities.

So, in this context we have already discussed about certain short-term securities which are issued by the commercial banks or which are used by the commercial banks for the investment that includes your treasury bills, commercial papers, certificate of deposits, et cetera.

And today we will be discussing about certain long-term securities or long-term investment what the commercial banks do and as well as what are those different securities which are used by the commercial banks in India and as well as US. And also we will talk about certain investment guidelines what the banks usually follow whenever they formulate their portfolios for managing the risk and as well as to maximize the return.

In this context, the basic objectives of today's discussion is to understand the different type of long-term securities which are used by the commercial banks for the investment. And what are those investment guidelines or investment philosophy the commercial banks always follow whenever they construct the portfolio or they want to maximize their return by using different kind of instruments?

And during the backdrop of that, what kind of policy guidelines they should always have, or what kind of investment guidelines they always should have to formulate their portfolios to maximize the return? So, this is the concept what we are going to discuss in today's session.

(Refer Slide Time: 02:23)

Compositions of Investment Portfolio: Long-term Securities (India)

- Central Government Dated Securities
  - Dated Government securities are longer term securities and carry a fixed or floating coupon (interest rate) paid on the face value, payable at fixed time periods (usually half-yearly)
  - The share of investments in these securities by the commercial banks is the highest
- State Government Securities
- Investments in other Trustee Securities
- Shares
  - Highly regulated
- Debentures (Corporate Bonds)
- PSU Bonds

Let us see that whenever we talk about the long-term securities, apart from the money market instruments or the short-term securities what the commercial banks use. So,

whenever we talk about the long-term securities, the long-term securities part while discussing this, if you see with reference to the Indian commercial banks the most used long-term security is the central government dated securities.

The central government issues different type of securities to the commercial banks and commercial banks invest in those securities are the part of the SLR investments. And those securities include, already we have discuss about the treasury bills, the treasury bills are the most used short-term instrument which are issued by the commercial, which are used by the commercial banks.

So, those are basically 91 days treasury bills, you have 182 bills, then we have the 364 days treasury bills. So, on the basis of maturity, the treasury bills are basically defined. And both treasury bills and government securities, these are dated securities in particular, these are issued by the Reserve Bank of India and mostly the commercial banks participate in that particular investment process. So, whenever we talk about the dated securities, the maturity period is relatively long, it goes maximum up to 30 years. The 30 years period is the maximum term to maturity.

So, here if you see that the dated government securities are longer-term securities and they carry a fixed or floating coupon, coupon rates because these are coupon bearing government securities of the government bonds. And they are generally always payable at the fix time periods and mostly the coupons have paid semi annually. The frequency of the payment of the coupon for the government securities, they are semi annually.

And the share of investments in these securities by the commercial banks if you observe the data, it is the highest among all type of alternatives which are available for the investments for the commercial banks. So, in this context, generally those securities are issued through an auction process.

One auction process is followed to issue the securities and there are two types of auctions we generally they follow, one is yield-based auction and another one is the price-based auction. So, whenever we go for the yield-based auction, in the yield-based auction all

those bids which are made by the commercial banks, these are arranged in the ascending order.

And on the basis of the cut-off yield, the particular securities are issued to the different commercial banks. And if it is a price-based auction, then it is basically arranged in the descending order and wherever the cut-off price will be decided, accordingly the securities will be issued to the different type of banks.

Whenever first time this particular security is issued, we generally use the yield-based auction and whenever the reissuance is happening by the Reserve Bank of India to the different kind of commercial banks in terms of so and so securities, we can go for the price-based auction. So, if you take an example, how basically it works? It works in this particular context.

(Refer Slide Time: 05:56)

Compositions of Investment Portfolio: Long-term Securities (India)

- Central Government Dated Securities
  - Dated Government securities are longer term securities and carry a fixed or floating coupon (interest rate) paid on the face value, payable at fixed time periods (usually half-yearly)
  - The share of investments in these securities by the commercial banks is the highest
- State Government Securities
- Investments in other Trustee Securities
- Shares
  - Highly regulated
- Debentures (Corporate Bonds)
- PSU Bonds

NPTEL Online Certification Courses

For example, we have 1000 crore which has to be issued, so in that context, for example bank A has gone for a bidding of 7.5 percent yield then bank, and he has asked for 300 crore, and the bank B has gone for a bidding of 7.9 percent then we can go, they have asked for 200 crore, bank C has asked for 8.01 percent and they have asked for 400 crore then bank D has asked for that 7.7 percent, he has asked for let the 100 crore then bank E has asked for let 7.56 percent and he has asked for let 100 crore.

So, in this particular fashion, first of all what the reserve bank basically does, the reserve bank arrange this particular securities in the ascending order. So, the lowest one is the 7.5, then they has asked for 300 crore then the second one is 7.56, they have asked for the 100 crore then they have 7.7, they have asked for the 100 crore then the next one is basically 7.9, 7.9 they have asked for 200 crore then the last one is 8.81, 8.01, they have asked for the 400 crore.

So, in this context what happens that, for example, 300 plus 100, 400, 500 then 700, now it is 1100, but only this 100 crore has to be issued. So, in that context this 8.01 percent will be getting only the 300 crore and the cut-off will be decided as 8.01. So, if it is a uniform yield-based auction, then everybody will be basically getting 8.01, but if it is a multiple yield-based auction then on the basis of the yield whatever they have quoted, this particular yield will be given to them.

But if it is a price-based auction then it will be reversed that means they will arrange it on the basis of the descending order and wherever the price will be exhausted, the cumulative allocations will be made, then accordingly the cut-off price of that particular security so and so will be taking place. And commercial banks is very much inclined to invest in those kind of securities, the reason is basically, these are very safe securities and the probability of default of those kind of securities are totally 0 and that means the credit risk is 0.

So, in this context, we consider those securities are the risk-free securities and the commercial banks can always use it as a kind of a prefer investment, although the return is not that much high but still that kind of securities are most preferred securities by the commercial banks while making the investments in the different kind of financial assets.

Then in Indian context also, there is the state government also has issued some of the securities and the commercial banks are allowed to invest in those securities. That is also applicable for the Indian commercial banks. Then there are some securities or some investments also commercial banks made where the securities are issued by the different other trustees. So, that particular percentage is not very high, but those kind of securities are also used by the commercial banks for investments.

(Refer Slide Time: 10:02)

Compositions of Investment Portfolio: Long-term Securities (India)

- Central Government Dated Securities
  - Dated Government securities are longer term securities and carry a fixed or floating coupon (interest rate) paid on the face value, payable at fixed time periods (usually half-yearly)
  - The share of investments in these securities by the commercial banks is the highest
- State Government Securities
- Investments in other Trustee Securities
- Shares
  - Highly regulated
- Debentures (Corporate Bonds)
- PSU Bonds

NPTEL Online Certification Courses

Then if you talk about the shares or the equities, the share or equity is consider as a risky investments in the market. The shares are basically are equity, equity is consider as a risky alternatives. So, whenever we talk about the risky alternatives so that is why the capital market exposure towards the investment in the equity is basically regulated or we can restricted.

So, in the restriction in the sense what basically we mean that a certain percentage of the total investments they are allowed to make it in the equity market because the particular commercial banks use the public money or the deposit money for the different kind of financial activities and the public interest should be always considered. That means all type of risk investment should not be considered in an unlimited amount of way, by that the public money should be hampered in terms of realizing the return from the market.

So, that is why the capital market exposure in terms of the positions in the equity market is highly regulated and they are restricted in the Indian context. That means unlimited amount of money they cannot invest in the equities even if the equity market is reasonably well but still the banks are not allowed to freely choose or freely decide that what percentage of the total money they have to invest in the equity market.

Then we have the debentures or the corporate bonds. The corporate bonds can be many types but debentures are basically the long-term in nature and these are basically the unsecured securities, unsecured bonds. So, that means it is not backed by any kind of assets. So, the investment in the debentures also is relatively a risky investments which generally we consider but still those investments are also taken by the commercial banks to extract the return and to maximize their portfolio values or portfolio returns.

Then also there are PSU bonds, PSU bonds in the sense the public sector unit bonds and those bonds are mostly issued by the companies which are owned by the government and mostly those securities are also used for the investment alternatives by the commercial banks in Indian context because the probability of default or credit risk of this kind of securities are relatively less.

Although this probability of default if higher than the government-dated securities but the probability of default for the PSU bonds are relatively lower than the debentures and all. So, these are the different type of long-term securities which are considered for the investments by the commercial banks while analyzing or while taking the positions in the different type of long-term securities in the market.

(Refer Slide Time: 13:07)

Compositions of Investment Portfolio: Capital Market

Treasury Notes and Bonds

- Long-term Treasury securities differ from Treasury bills in terms of original maturity and the form of interest payment
- Notes have original maturities of 1 to 10 years
- Bonds can carry any original maturity but typically are issued to mature well beyond 10 years
- Most notes and bonds pay coupon interest semi-annually
- T-bills, Treasury notes and bonds are sold via closed auctions with buyers submitting competitive or non-competitive bids

Then we can see that whenever we talk about this, we can have some other kind of securities which are used in the US market and other markets. More or less there are a synonyms characteristics we can observe in terms of the different instrument what basically used by the US commercial banks or the Indian commercial banks. But in terms of their nomenclature or the names, the characteristics in all these things are little bit deviated from the securities what basically we consider.

So, whenever we talk about the US market, their security called the treasury notes and the bonds and the long-term securities defer from the treasury bills in terms of the original maturity and the interest payment that already we know. And the notes, generally whenever the treasury or the Federal Reserve Bank basically issues, their maturity period varies between 1 to 10 years.

So, that means it is reasonably long period of bond, so long period of securities or the long-term securities. And commercial banks can take the position in the treasury notes if they want to invest in the long-term instruments. So, the bonds can carry any kind of maturity but typically issued to maturity beyond 10 years.

Like in India our government-dated securities maturity period is going up to 30 years. So, in that context the treasury bonds which were issued by the Federal Reserve Bank basically it goes up to, it starts generally from 30 years, from 10 years and it can go up to a very high long period of time.

And mostly there are also the interest payments, the coupon payments are made semi annually or the frequency of the payment is basically semi annually. And again, the T bills and treasury notes and bonds in US market also closed, always sold through the auctions where basically buyers go for competitive and non-competitive bids.

Now, I want to say one thing that the competitive bidding is basically where, where the commercial banks directly participate in the bidding process what example we have taken just now. But in the non-competitive bids, there the commercial banks generally do not go for the bidding process, whatever yield or price will be decided the non-competitive bidders can be allotted to those securities on that particular price or on that particular

yield which is decided by the competitive bidding process. So, therefore both competitive and non-competitive bidding process can be worked out whenever the particular security issuance is done or the investments are made by the commercial banks in this particular segment.

(Refer Slide Time: 15:54)

Compositions of Investment Portfolio: Capital Market Cont..

U.S. Government Agency Securities

- Federal agencies can be separated into two groups
- Group one:
  - Represents organizations that are formally part of federal government
  - Obtain operating funds from the Treasury and borrow from the Federal Financing Bank, a political subdivision of the Treasury that borrows from the Treasury and lends to selected agencies
  - This intermediation function enables agencies to borrow at Treasury rate but also raises total Treasury financing requirements
  - These agencies, including the Federal Housing Administration, Export-Import Bank, and the Government National Mortgage Association (GNMA) (Ginnie Mae), are effectively owned by the U.S. government

NPTEL Online Certification Courses

Then we have another type of security which is issued or which is used by the Indian, US commercial banks that is called US government agency securities. And here there are two groups, there are two government agencies which work on behalf of the Federal Reserve Bank and the US government, so on the basis of their association or on the basis of their characteristics those kind of organizations can issue some of the securities and which are used by the Indian and US commercial banks for their investments.

So, whenever we talk about let there is a group one. The group one basically represents the organizations that are formally part of the federal government. They obtain the operating funds from the treasury like from the Federal Reserve Bank and borrow from the federal financing bank, which is a political subdivision of the treasury and that borrows from the treasury and lends the selected agencies.

This intermediation function enables the agencies to provide the treasury rate but also raises total security treasury financing requirements. These agencies include the Federal

Housing Administration, Export-Import Bank, Indian contest we have the EXIM Bank, then the Government National Mortgage Association, then we have the, these are the different agencies which also issue the securities which are considered as the government agencies and their issuance is also done through the different commercial banks and commercial banks participate in those kind of bonds or the securities which are issued by these kind of agencies in the market.

(Refer Slide Time: 17:39)

Compositions of Investment Portfolio: Capital Market Cont..

U.S. Government Agency Securities

- Group two:
  - Government agencies are Government Sponsored Enterprises (GSEs) that are quasi-public entities
  - Even though the agencies are federally authorized and chartered, they are privately owned and often have publicly traded stock ; operate like any private corporation
  - The U.S. government sponsors agencies by encouraging and often subsidizing activities in favoured markets such as housing and agriculture
  - GSE securities are not direct obligations of the Treasury ; NOT explicitly backed by the Treasury's tax and credit authority
  - Default risk is considered to be low, because investors believe that the U.S. Congress has a moral obligation to provide financial aid
  - Are active in the areas of housing, agriculture, education, and small business
  - Generally borrow in both the money and capital markets

NPTEL Online Certification Courses

Then in the group two category, we have some of the government-sponsored enterprises that are quasi-public enterprises, it is totally completely not owned by the government. That is why they are called the quasi-public entities and even though the agencies are federally authorized, they are privately owned and often have publicly-traded stock, operate like any private corporation or the private company which is existing in the market.

The US government sponsors agencies, these agencies by encouraging and often subsidizing the activities in favor of the market such as housing and agriculture. And the government-sponsored enterprises are not directly obligations of the treasury, they are not explicitly backed by the treasury's tax and the credit authority. But there are some support basically they get from the treasury in terms of their operations and these ones of the securities.

The default risk is considered as low because the investors believe that the US government or US congress has a moral obligation to provide the financial aid in terms of this kind of securities which are issued by the different agencies and they are active in the areas of housing, agriculture, education and the small business. And generally borrow in both money and capital markets. So, these are the different characteristics of the US government agency securities which is considered in the category of the group two.

(Refer Slide Time: 19:08)

Compositions of Investment Portfolio: Capital Market Cont..

Callable Agency Bond

- One of the most popular bank investments
- Exhibit both call risk and market risk
  - ✓ While these are securities issued by GSEs such that credit risk is low, they have call risk because the issuer has the option to call, or redeem, the bonds prior to final maturity
  - ✓ The issuer offers a higher promised yield relative to comparable non-callable bonds; rate differential essentially represents call premium -the premium reflects call risk
  - ✓ Like other fixed-income securities, callables exhibit market risk by which the market value of the securities varies over time with changes in market interest rates.

NPTEL Online Certification Courses

Then we have the callable agency bonds. It is one of the most popular bank investment alternatives which are issued by the US commercial banks which exhibit both call risk and the market risk, because market risk can be arisen due to the fluctuations in the interest in the particular market.

And the call risk arises due to the call feature involved in that particular bond issuance. And while the securities issued by these government-sponsored agencies where the credit risk is low, they can have a call risk because there is a provision of the call feature at a particular point of time, the particular bond can be called back by the issuer as per these provisions which is made in the beginning of the issuance of that particular security.

And the issuer has that is why the issuer has the option to the call or the redeem prior to the final maturity, so that kind of risk is involved in that particular bond and the issuer

basically offers a higher yield because there is a risk involved in comparison to the non-callable bonds which are existing in the market. And this rate difference shall basically essentially represents the premium, the premium which is basically arises due to the call risk.

Like other fixed income securities, the callable bonds basically exhibit the market risk by which the market value of the securities varies overtime with change in the market interest rate. Because all of you know that whenever there is a change in the market, if the market interest rate is going down the price of the bond will go up.

So, for example if the price is going down and the price of the bond will go up, in that particular point of time the bond can be easily sold in the market at a higher rate but if the bond has a call feature and the call price is always mentioned at what price the bond will be called back, then there is a risk that the particular investor may not get the extra return what they could have got if they would have directly invested that particular money in the market.

So, instead of that the issuer can call back that particular bond and by calling back basically they are restricting that particular investor to extract the maximum return what they should have received if they would have invested in the market directly. So, that is why there is a risk involved in that particular context.

(Refer Slide Time: 21:29)

Compositions of Investment Portfolio: Capital Market Cont..

Conventional Mortgage-Backed Securities

- Banks have been aggressive buyers of mortgage-backed securities (MBSs)
  - ✓ Default risk is generally low
  - ✓ Offer higher promised yields than other instruments with comparable average maturities
- Problem: MBSs exhibit prepayment risk - underlying borrowers may choose to prepay their mortgages at far different speeds than anticipated at purchase

NPTEL Online Certification Courses

Then we have the mortgage-backed securities, the banks have been aggressive buyers of the mortgage-backed securities which is relatively new. Default risk is generally low and they offer higher promised yields than the other instruments with comparable average maturities. Here the problem is the mortgage-backed securities exhibit the prepayment risk. There is a chance that the prepayment can be made in this particular context. That means the underlying borrower may choose to prepay their mortgages at far different speeds than anticipated at the purchase.

So, if they are going for the prepayment issue, then the commercial banks are exposed to certain kind of prepayment risk that means they can have some kind of losses which is not expected from the beginning whenever this particular securities are basically used for the investment in their particular portfolio.

So, but those kind of securities are quite popular in the US market because of the development in the mortgage-backed securities in the current era. So, these are the different kind of characteristics of this mortgage-backed securities which is also issued by the US commercial banks for the investment.

(Refer Slide Time: 22:45)

Compositions of Investment Portfolio: Capital Market Cont..

- Types of mortgage banked securitized assets
  1. Pass through securities:
     ✓Lenders pool a group of similar home mortgages appearing in balance sheet, removes them from B/S into an account controlled by a legal trustee
     ✓Issue securities using mortgage loans as collaterals
     ✓As mortgage loan pool generates principal and interest payments, there payments "pass through" to investors holding mortgage backed securities
  2. Collateralized mortgage obligation:
     ✓Pass through security divided into multiple "tranches" or classes; each with different coupon rate & level of risk exposure
  3. Mortgage backed bonds:
     ✓Unlike pass through and CMOs, it remains in B/S

NPTEL Online Certification Courses

So, if you talk about the different type of the mortgage-backed securities if you consider that if you see that there are pass through securities, so one thing you keep there is a pass through securities on the basis of the pass through security, that lenders pool a group of similar home mortgages appearing in the balance sheet, removes them from the balance sheet into account controlled by the legal trustee and issues the securities using the mortgage loans as a collateral because the mortgage loans are consider as the collateral in this case.

As the mortgage loan pool generates principal and interest payments, their payments pass through to the investors holding mortgage-backed securities. So, that is why there is some kind of risk involved in that particular context because the mortgage loans basically is used as a collateral in this particular process.

Then we have collateralized mortgage obligations, so in this case the pass through securities can be divided into multiple tranches or the classes and each with different coupon rate and level of risk exposure. Instead of talking about one portfolio which comes under mortgage-backed securities, we can have a portfolio of the different type of securities.

So here, one thing you keep in the mind, this is not banked, this is basically mortgage-backed, this is basically mortgage-backed securities that you keep in the mind. Then we have another thing is the mortgage-backed bonds, the mortgage-backed bonds are basically like, unlike the pass through, the mortgage-backed bonds it remains in the balance sheet as an item which does not comes under your balance sheet item or a pass through securities what already just now we have discussed. So, this is another type of security which is issued by the commercial banks or maybe used as an instrument for the commercial banks in the market.

(Refer Slide Time: 24:59)

Compositions of Investment Portfolio: Capital Market Cont..

Stripped Securities:

- Hybrid instrument; Treasury security with an original maturity of at least 10 years to be "stripped" into its component interest and principal pieces and traded via the Federal Reserve wire transfer system.
- Each component interest or principal payment thus constitutes a separate zero coupon security and can be traded separately from the other payments
  - ✓ Claims against only the principal payments are called PO(Principal Only) securities
  - ✓ Claims against only stream of promised interest payments are IO(Interest Only ) securities
- Display a markedly different behavior from underlying securities
- Offer interest rate hedging possibilities to help protect an investment portfolio against loss from interest rate changes

NPTEL Online Certification Courses

Then we have the stripped securities. It is kind of hybrid instrument and the treasury security with an original maturity can be stripped into different components like interest and principal pieces and traded through the Federal Reserve Bank wire transfer system. And each component interest or principal constitute basically a separate zero coupon security and can be treated separately from the other payments.

So, here in this context the claims against only the principal payments are called the PO, PO securities are the principal-only securities. And the claims against only the stream of the promised interest payments are called the IO which is called the interest-only securities.

So, these are two different kind of components are involved in this case. And a display market, markedly different behavior from the underlying securities which is used in this case. And the other interest rate hedging possibilities to help the protect an investment portfolio against loss from the interest rate changes whenever this kind of securities are issued in the market.

(Refer Slide Time: 26:07)

Compositions of Investment Portfolio: Capital Market Cont..

Municipal Notes and Bond:

- Long term debt obligations issued by state, cities, and other local government units
- Interest on majority of bonds is exempted from federal income tax provided they are issued to fund public, rather than private projects
- Capital gains on municipals are fully taxable, except for bonds sold at discounted price
- Two major categories of Municipal bonds:
  - ✓ General Obligations (GO) bonds: backed by full faith and credit of issuing government; they may be paid from any available sources of revenue
  - ✓ Revenue Bonds : used to fund long term revenue raising projects and payable only from stipulated sources of funds

NPTEL Online Certification Courses

Then another very important security which is used by the commercial banks for their investments in US market that is called municipal bonds or municipal notes. And it is basically issued by the states, cities and other local government units and the interest on majority bonds is exempted from the federal income tax, that is why it is quite popular.

And capital gain on municipal bonds are fully taxable, except for the bonds sold at discount price. And to measure categories which are issued or which are used in that particular market as general obligation bonds, which is backed by full faith and credit of issuing government and they maybe paid from available resources of revenue whatever they have.

And another one, revenue bonds, these are basically used to fund the long-term revenue raising projects and payable only from stipulated sources of the funds. So, these are to measure categories but mostly the municipal bonds are quite popular. The reason is

basically those bonds are not basically taxable and only the capital gains are taxable but the interest received from this particular bonds are not taxable by the US law.

(Refer Slide Time: 27:21)

Compositions of Investment Portfolio: Capital Market Cont..

Corporate Notes and Bond:

- Long term debt securities issued by corporations are usually corporate notes when they mature within 5 years or *corporate bonds*, when they carry longer maturities
- Generally more attractive to insurance companies and pension funds than to banks because of their higher credit risk relative to government securities and limited resale market
- Offer significantly higher yields than government securities of the same maturity
- Yield spread over government securities widens when investors become more concerned about corporate credit quality

NPTEL Online Certification Courses

Then we have the corporate bonds, already there is something which is used by the Indian market, there is something can be used also in the US market. So, these are issued by the corporations, usually corporate notes and their maturity within 5 years. When they mature within 5 years when they carry the longer maturities, if that maturity period is 5 years we call it the corporate notes, if it has a longer maturity, we call it the corporate bonds.

They are generally more attractive to insurance companies and pension funds than to the banks because of their higher credit risk relative to the government securities and limited resale market. But the commercial banks exposure towards the corporate notes and bonds and relatively less.

Significantly higher yields because the risk is relatively higher, so as per the risk return trade off we can always expect that a high return from that particular type of investments and yield spread over government securities widens when the investor become more concerned about the corporate credit quality.

These interest rates are the yield of that particular bond, also depends upon the rating of that particular company rating of that particular bond. The high rated bonds provide less return and the low rated bonds provide more return.

(Refer Slide Time: 28:40)

**Establishing Investment Policy Guidelines**

- Each bank's asset and liability or risk management committee (ALCO) is responsible for establishing investment policy guidelines
- These guidelines define the parameters within which investment decisions help meet overall return and risk objectives
- Investment guidelines identify specific goals and constraints regarding the composition of investments, preferred maturities or durations, quality ratings, pledging requirements, and strategies underlying any portfolio adjustments

NPTEL Online Certification Courses

Then establishment of the investment policy guidelines if you talk about that each bank's asset and liability risk management committee is responsible always for investment policy guidelines by considering all those assets, the available assets whatever it is there and these guidelines basically define the parameter within which the investment decisions basically help to meet the overall risk and return objectives of that particular investment.

And this investment guidelines basically identify the specific goals and what are those constraints we are going to face and what are those preferred maturities or the durations, what kind of quality ratings, or what kind of bonds we should target? What are those pledging requirements are involved in that particular investments, and the different kind of strategies which are used for any portfolio adjustment or the portfolio formation?

So, considering all those aspects, the investment policy guidelines always designed by the commercial banks or the asset and liability risk management committee before the investments in this particular type of securities what already we have discussed just now.

(Refer Slide Time: 29:50)

Establishing Investment Policy Guidelines Cont..

Return Objectives

- Specifies overall return objectives in terms of return on equity, return on assets, and net interest margin
- Establish targets for the contribution of both taxable interest and tax-exempt interest to net income
- Guidelines also outline the potential costs and benefits of taking tax losses or gains on security sales

NPTEL Online Certification Courses

So, on the basis of this, they have a return objectives. They specify the overall return objectives in terms of return on equity, return on asset, net interest margin. These are different profit measures, profitability measures of the commercial banks. They set a certain target, on the basis of the target the positions always they make, why that so the total objectives can be fulfilled. Establish the target for the contribution of both taxable interest and the tax-exempt interest to net income.

And the guidelines also outline the potential cost and benefits of taking the tax losses or gains on the security sales. So, all those considerations they keep whenever there are objectives defined on the basis of the returns what they want to extract from their particular portfolio investments.

(Refer Slide Time: 30:37)

Establishing Investment Policy Guidelines Cont..

Portfolio Composition

- Address the bank's targeted liquidity, credit risk, and interest rate risk position
- Specify the types of securities that can be purchased, target mix by security type, credit risk objectives (by rating and due diligence), acceptable maturity ranges at different stages of the interest rate cycle, and those securities that should be pledged as collateral against public deposits

NPTEL Online Certification Courses

Then we have the composition we have to keep in the mind, they address the bank's targeted liquidity, credit risk and the interest rate risk positions. There are other risk also they consider. Specify the type of securities that can be purchased, target the mix of security type, credit risk objectives, acceptable maturity range at different stages of interest rate cycle, and those securities should be placed as collateral against the public deposits.

That means whenever we go for the portfolio management process, we have to consider that what are those different securities should we consider for the portfolio construction and after deciding this we have to also understand that how the allocations can be made against the different kind of or what kind of fund allocations have to be made for maximizing the return with a given amount of the risk or minimizing the risk with a given amount of return.

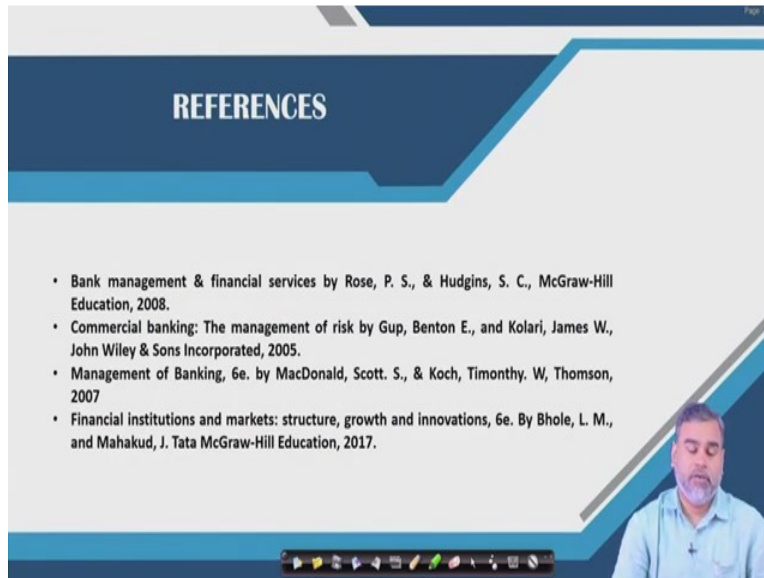
So, that is why the portfolio compositions always made by the commercial banks whenever they design their optimal portfolio to maximize their return. So, this is about the policy guidelines or the objectives what they basically consider whenever the policy guidelines are formulated by the commercial banks.

(Refer Slide Time: 31:50)

So, what basically we have discussed that the investment portfolios of the commercial banks in India include government dated securities, state government securities, debentures, PSU bonds and the stock. For US, the instruments used in the investment portfolio of the banks include treasury notes or the bonds, US government agency securities, callable agency bonds, stripped securities, municipal notes and bonds and corporate bonds.

And they also participate in the equity market and already again and again we are discussing that the exposure towards the equity market is relatively restricted. And each bank forms an investment policy guidelines for optimizing the return from the portfolio. And on the basis of their objectives, this particular composition of the portfolio will be designed. By that the total return of the particular commercial bank can be increased or can be optimized.

(Refer Slide Time: 32:42)




So, these are the references you can go through for the detailed analysis about these issues. Thank you.