UNIT 7 BANK INVESTMENTS: AN OVERVIEW

Objectives

After studying this unit, you should be able to:

- Distinguish various type of investments made by Banks;
- Understand the investment decision making process in Banks; and
- Appreciate how treasury department functions in a bank.

Structure

7.1 Introduction

7.2 Treasury Function in Banks

7.3 Controls on the Treasury Department

7.4 Income from Investments

7.5 Investment Decision Making Process

7.6 Classification of Securities

7.7 Forms of Money Market Instruments

7.8 Summary

7.9 Self Assessment Questions

7.10 Further Readings

7.1 INTRODUCTION

As indicated in Block 2 of this course, this Block deals with management of investments in which Bank funds are invested. These investments are shown on the assets side of the Balance Sheet of a Bank. These investments are broadly divided into:

a) Cash and Balances with RBI

b) Balances with Banks and Money at Call and Short Notice

c) Investments

d) Loans and Advances

e) Fixed Assets, and

f) Other Assets.

Table 7.1 below presents a view of the assets investment-wise and Bank group-wise for the years 2002 and 2003. Of these types of assets, investments, and loans and advances occupied major proportions (about 40%) as a percentage of total assets.

As mentioned above, Banks invest the funds raised by them in different types of assets. Of these assets of the banks, Cash and Balances with RBI, and Balances with Banks and Money at Call and Short notice are the most liquid assets. These two groups of assets put together occupy about 10% to 12% of the total assets of banks, as can be seen from Table 7.1. The balances with banks include both the balances in India and abroad. Investments by banks in Government Securities, Other Approved Securities, and Non-Approved Securities. Banks invest about 40% of resources in

Table 7.1: Consolidated Assets of Public Sector Banks
(As at end of March……)

(Amount in Rs.crore)

Item	*Public Sector Banks*				*Nationalised Banks*				*State Bank Group*			
	2002		*2003*		*2002*		*2003*		*2002*		*2003*	
	Amount	*per cent to total*	*Amount*	*per cent to total*	*Amount*	*per cent to total*	*Amount*	*per cent to total*	*Amount*	*per cent to total*	*Amount*	*per cent to total*
1	2	3	4	5	6	7	8	9	10	11	12	13
1. Cash and balances with RBI	71,407.46	6.18	65,166.62	5.07	44,120.06	6.25	46,054.48	5.82	27,287.40	6.07	19,112.14	3.87
2. Balances with banks and money at call and short notice	79,460.86	6.88	57,156.91	4.45	31,891.35	4.52	21,888.90	2.77	47,569.51	10.59	35,268.01	7.14
3. Investments	4,54,509.00	39.34	5,45,668.10	42.46	2,68,890.48	38.08	3,22,301.60	40.73	1,85,618.52	41.31	2,23,366.50	45.22
3.1 In Govt. Securities (a+b)	3,44,691.30	29.83	4,32,243.28	33.63	1,93,179.88	27.36	2,44,174.79	30.86	1,51,511.42	33.72	1,88,068.49	38.07
a. In India	3,41,397.65	29.55	4,29,089.65	33.39	1,90,180.35	26.93	2,41,402.54	30.51	1,51,217.30	33.66	1,87,687.11	38.00
b. Outside India	3,293.65	0.29	3,153.63	0.25	2,999.53	0.42	2,772.25	0.35	294.12	0.07	381.38	0.08
3.2 In other approved Securities	20,460.80	1.77	18,164.82	1.41	13,815.13	1.96	12,367.80	1.56	6,645.67	1.48	5,797.02	1.17
3.3 In non-approved Securities	89,356.90	7.73	95,260.00	7.41	61,895.47	8.77	65,759.01	8.31	27,461.43	6.11	29,500.99	5.97
4. Loans and Advances	4,80,117.96	41.55	5,49,351.18	42.74	3,15,580.70	44.69	3,60,147.29	45.51	1,64,537.26	36.62	1,89,203.89	38.30
4.1 Bills purchased and discounted	36,579.34	3.17	41,897.95	3.26	20,833.59	2.95	24,273.05	3.07	15,745.75	3.50	17,624.90	3.57
4.2 Cash Credit, Overdrafts, *etc.*	2,67,855.32	23.18	2,91,680.92	22.69	1,77,169.90	25.09	1,94,231.10	24.55	90,685.42	20.18	97,449.82	19.73
4.3 Term Loans	1,75,683.30	15.21	2,15,772.31	16.79	1,17,577.21	16.65	1,41,643.14	17.90	58,106.09	12.93	74,129.17	15.01
5. Fixed Assets	10,440.08	0.90	10,592.98	0.82	7,551.19	1.07	7,667.66	0.97	2,888.89	0.64	2,925.32	0.59
6. Other Assets	59,462.32	5.15	57,299.91	4.46	38,075.24	5.39	33,221.50	4.20	21,387.08	4.76	24,078.41	4.87
Total Assets	**11,55,397.68**	**100.00**	**12,85,235.70**	**100.00**	**7,06,109.02**	**100.00**	**7,91,281.43**	**100.00**	**4,49,288.66**	**100.00**	**4,93,954.27**	**100.00**

Source: www.rbi.org.in

these assets. Investments of banks have been classified into three categories, viz., 'Held to Maturity', 'Available for Sale', and 'Held for Trading'. Banks earn good returns from these investments. Another most important head of bank assets is Loans and Advances. This relates to the main business of banks i.e., lending the funds to various groups of borrowers. These loans and advances could be in the form of bill purchasing and discounting, cash credits and overdrafts, and terms-loans. These loans and advances could be secured, or guaranteed by banks/ Government, or unsecured.

Fixed Assets of the banks are usually to the tune of 1% of the total assets. These include premises and other fixed assets. Under the head 'Other Assets', inter-office adjustments, interests accrued, Tax paid in advance, stationary and stamps and such other items are included. Usually these are less than 5% of the total assets. A detailed discussion on these groups of assets or investments is carried out in the remaining units of this Block. Let us now discuss about the treasury function of the bank, investment decision process, money market investments, etc. in some detail in this unit.

7.2 TREASURY FUNCTION IN BANKS

The competition in the financial services industry exerts a downward pressure on the banks' profits. It is therefore necessary to see that utmost care is taken to ensure that bank investments are managed well, so that:

- Liquidity of the bank is ensured,
- Right amounts of cash resources are available in the right place, at the right time and in such a way as to minimize exposure to interest/exchange risks,
- Returns on surplus funds are maximized, and
- Financial costs are minimized.

As a result of the liberalization, banks are paying far greater attention to exchange rate volatility and interest rate volatility. Obviously, such a task which is going to play a crucial part in determining the success or otherwise of the banks will have to be the prime concern of the managements of banks. Somehow, this aspect has not received the attention that it should have. However banks have started establishing separate treasury departments. This organisational aspect needs to be dealt with on an urgent basis, as neglect of this activity could well turn out to be a major hurdle in their dealing with the problems likely to emerge in a deregulated environment. Let us begin with a list of some of the functions to be undertaken by the Treasury Department of a Bank.

The centralised treasury department of a bank is concerned with the following functions:

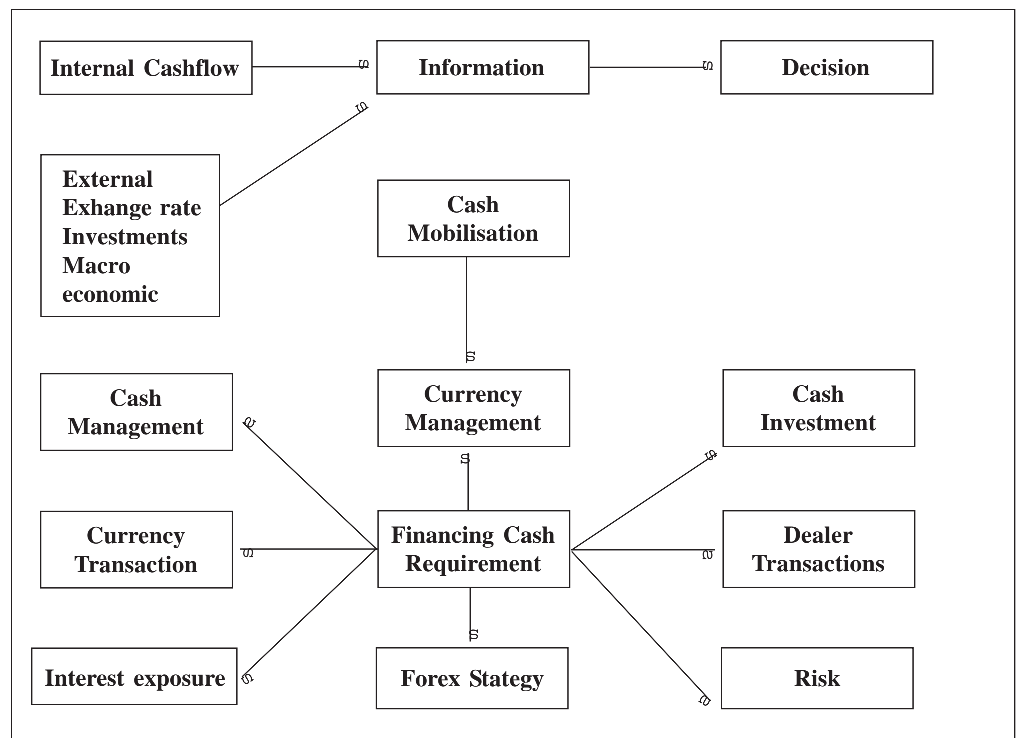
- *Risk exposure management*, which embraces credit, country, liquidity and interest rate risk considerations together with those risks associated with dealing in foreign exchange
- *Asset and liability management*, where liquidity, interest rate structures and sensitivity, together with future maturity profiles, are the major considerations in addition to managing day-to-day funding requirements
- Control and development of dealing functions
- Funding of investments in subsidiaries and affiliates
- Capital debt/loan stock raising
- Fraud protection
- Control of investments

We have so far seen a very broad outline about the treasury management function. The following steps need to be undertaken by the treasury department in consultation with key departments:

- cashflow forecasting
- year's general forecasts
- year's rolling forecast
- month's rolling forecast
- daily cash surplus/deficit
- verify the reliability of forecasts
- assumptions
- investment decisions
- mismatched currencies
- actuals compared with forecasts and variance identification
- consistency of assumptions

Figure 7.1: Presents a picture of the cashflows and their management in a Bank.

Figure 7.1: Cashflow Management



Managers need to be closely involved in this exercise and they must ensure that such forecasts are used for investment decisions. It would be prudent to use computers for such exercises. It might be a good idea if these exercises were taken in hand along with corporate planning.

Another question often raised is if all the functions need' to be performed centrally. The answer depends on the particular problems, including availability of suitable manpower in a given bank. However, it is advisable to have the function located at the head office and activities carried out centrally. Very few banks have the required expertise, and the available scarce manpower with experience and training should be used to safeguard the banks' interest.

The organisational structure and the reporting levels for the treasury department will have to be decided on by the banks themselves. The person selected to head the treasury function will have to be a top management functionary with a very thorough understanding of the operations in their myriad forms.

Requirements for Treasury Departments

Since all these years the sole endeavour used to be on rigidly adhering to SLR and CRR, not much attention was paid to formalising the procedures. It is desirable to set the overall strategy and policy guidelines in writing. To illustrate, we might say that banks should lay down prudential norms even for SLR securities.

Limits on counterparty exposures also need to be set. Since the public sector banks were the major players, considerable laxity/dilution in such transactions crept in since there was no possibility of counterparty failure. This needs to be corrected. Dealing room procedures have to be in place, with detailed instructions for recording procedures for settlement and their observance, ensuring collection of income relating to instruments, and reporting results of operation.

The Policy will necessarily have to be approved at the Board level. Continuous review and monitoring of policy are a must.

7.3 CONTROLS ON THE TREASURY DEPARTMENT

At this stage, it is necessary to indicate the various controls that need to be in place if we want the treasury department to be more efficient and effective.

***Exchange* Rate Exposure**

- Develop formal exposure management process
- Use of hedging techniques (internal/external)
- Adequate controls on execution of forex transactions
- Adequate control over settlement

Dealing Controls

- Realistic and up-to-date country limits
- Realistic and up-to-date authority limits

Confirmation Procedures

- Confirmation of the deal not the instruction
- Confirmation independent of the dealer
- Confirmation by telex/fax the same day
- Adequate segregation of duties between dealers and persons producing
- Transaction confirmation slips, accounting records, settling transactions and exception reports

Interest Exposure

- Identify exposures
- List available hedging options
- Evaluate hedging options
- Record and report on hedges undertaken
- Determine a policy towards risk exposure

Information and Reporting

- Internal information, normally cashflow forecasts
- Macro economic data
- External information, including strategic, that centres around historical and forecast time scales, tactical, that centres around short-term forecasts for up to one year, and operational, that centres around current online data.

Table 7.2 : Summary of Reporting Requirements

Item to be Reported	*Type of Reports*	*Frequency*
Forecasts	Long-term cash by flow management Months rolling cash flow forecast increasing plans	As required
Framework to list and Evaluate option	For short-terms investments Long-term investments Hedging	Daily Monthly Weekly
Information control Reports	Investment summary report Lending borrowing Summary	Daily Daily
Forex	Exposure reports Hedging	Daily Daily

We have already noted to the projections to be made by the Banks. Many banks prepare profit plans but no cash flow projections. The preparation of such information and its systematic reporting as shown earlier is crucial to successful invest the funds. The system must indicate:

- cash flows
- identification of exposures
- evaluation and choice of appropriate transactions for investment
- hedging (outstanding and closed hedge)
- assessing treasury function as a whole

Limitations on Operational Flexibility

It is not surprising that these aspects of investment decisions have not received the attention that would have been accorded to these in normal circumstances. After all, investments in government securities, etc., are normally made to ensure liquidity and stability to the operations. However, in India, banks' operational flexibility was largely restricted by the Cash Reserve Ratios (CRR) and Statutory Liquidity Ratios (SLR). In 1991, SLR was 38 per cent of the net demand and time liabilities while the variable CRR was at a basic figure of 15 per cent plus 10 per cent incremental ratio, making for a 63.5 per cent at the margin plus somewhat lesser percentage on average.

The present rate of CRR is 4.5 per cent and that of SLR is 25 per cent of Net Demand and Time Liabilities.

Normally, the ratios would be used to restrict credit flows towards general use. However, the banks were used quite indiscriminately as a captive market for public borrowings. The impounded cash balances and government securities carried considerably lower interest rates than were available 'on commercial advances. Table 7.3 is an example of the yields on investments for a bank with a portfolio stretching over quite a few years. These investments were made over a period of time

and were always looked on as permanent. With the RBI gradually treating more and more securities as 'current', a bank is required to provide against them and is forced to be content with low yields.

Table 7.3 Typical Yields and Income from Securities

Yield on securities	*Income (Rs. Crore)*
Zero Coupon	64.38
6.50%	233.48
7.50%	328.00
8.50%	151.00
9.50%	686.00

Banks have very little maneuverability in this behalf. It is just not possible for the banks to unload government securities. The debt market does not have the depth wherein it would be possible for banks to sell these securities even at a discount, with the possibility of making up the loss amount.

They thus find themselves in a peculiar bind. The time has come when RBI needs to consider refinancing such banks at concessional rates. They may restrict such facilities to those banks that are considered weak or are not in a position to shore up their capital by recourse to the market. The other alternative is to allow banks to strip some of the securities and issue these to investors. Banks have not shown much initiative either in financial engineering or in the other aspects that have a bearing on their investment portfolio. The portfolio is looked on in a very passive manner and is treated as something not very amenable to management control. Such a view is no longer justifiable from the banks' point of view. Unless steps are taken to ensure adequate returns on these investments, these will act as a drag on the overall performance of banks.

7.4 INCOME FROM INVESTMENTS

A redeeming feature, however, is the increase in income from dividends. There was, in the early 1990s a belief that banks normally made profits from operations in the debt market. With the reforms, however, one notices a new phenomenon. The dividend earnings of banks have become the important contributors to profit.

The income on investments of SBI for the year ending 31st March 2003 was Rs. 15257.64 crores and it has increased to 15,715.51 crores by 31st March 2004. The significance of this income can be noted from the Table 7.4 presented below.

Table 7.4 Audited Financial Results of STATE BANK OF INDIA for the Year ended 31st March, 2004

Rs. Crores

Sr. No.	Particulars	Nine Month Ended 31.12.03	Quarter 31.03.04	Ended 31.03.03	Year 31.03.04	Ended 31.03.03	Consolidated Year 31.03.04	Consolidated Ended 31.03.03
1	**Interest Earned (a+b+c+d)**	22821.64	7638.84	8020.67	30460.48	31087.02	41356.06	41027.50
	a) Interest/discount on advances/bills	8451.30	2815.87	2752.78	11267.17	11229.10	16454.25	16171.11
	b) Income on Investments	11613.16	4102.35	4073.47	15715.51	15257.64	21108.81	19971.64
	c) Interest on balance with RBI and other inter-bank funds	2179.19	320.20	709.72	2499.39	3273.67	2731.34	3478.08
	d) Others	577.99	400.42	484.70	978.41	1326.61	1061.66	1406.67
2	**Other Income**	5529.92	2082.53	2206.40	7612.45	5740.26	11128.10	8227.04
	A TOTAL INCOME (1+2)	28351.56	9721.37	10227.07	38072.93	36827.28	52484.16	49254.54

For quite some time now, the Reserve Bank of India has directed banks to consider their investment portfolios in two parts, classifying their securities into permanent and current. Permanent investments are those which banks intend to hold till their maturity, while current investments are those which banks intend to deal in i.e., buy and sell on a day-to-day basis. Banks are expected to reduce the percentage of permanent investments and increase the current ones.

The depreciation in respect of permanent investments is not likely to affect their realisable value and therefore need not be provided for. The depreciation on current investments will have to be provided for. Permanent investments have to be valued at cost unless it is more than the face value, in which case the excess has to be amortised over the remaining maturity period of the security. Banks are normally not expected to sell securities in the permanent category, but if they do so losses have to be written off. Gains, if any, have to be taken to the capital account.

The implications of these directions are that henceforth the balance sheet would record assets and liabilities that are measured at appropriate current value, in particular at value to the business or deprival value. The sum total of these net assets from the beginning to the end of the period is the income or profit for the period, the basic indicator of performance. Strictly speaking, the changes in the purchasing power of money should also be reflected to give a better-off news in real terms, i.e., real financial capital maintenance.

The argument to use current values is at its strongest in the case of listed investments. There was a danger that profits would be manipulated and would not be comparable if carried at cost (or even at lower of cost or market). Marking to market is the term used for accounting for investments at market price and treating the changes in those prices as part of profit and loss.

Measures of Market Value

What is the appropriate measure of market value? The normal practice is to value long positions at bid price (price at which dealers will buy the investments) and short positions at offer price (at which dealers will sell investments to the buyer).

Are the changes in the values of these securities is an income? A considerable conceptual wrangling takes place when discussing these issues. However, in accounting standards one finds that income is treated as being equal to changes in value. We must, however, add that to ignore the effects of changes in the rate of interest is not only conceptually incorrect but probably has the effect of underestimating the problem. In the case of Indian banks the problem is to an extent simplified. RBI advises the market prices to be chosen. By and large one may conclude:

- Knowledge of the market value of all investments is useful to the users of accounts.
- The relevant concept for valuation is deprival value.
- Economic analysis of the concept of income suggests that whether all changes in the value of a security should be treated as income or not, is left to the investor and the institution's preference. Certain conventions need to be developed to operationalise the concept of income.

We have already mentioned that a distinction between dealing (current) and investment (permanent) securities needs to be made. Dealing securities are those that are held for a relatively short period with a view to earning profit from their purchase, sale and movements in prices. Investment securities are longer-term assets held in order to profit from the receipt of income, such as dividends and long-term appreciation in value.

Long-term investments can be valued at cost or cost adjusted to amortise any premium or discount. The controversy exists over the basis of valuation of short-term positions. In the normal course of events, the market value of an instrument is based on long at bid or short at offer. Conceptually there are problems for using these prices in the case of market makers or for using small-lot sale prices. These problems will get accentuated when an active debt market develops and dealing securities are sold/ bought almost continuously.

Activity 1

a) Take a balance sheet of a bank and identify the broad groups under which assets are classified.

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b) why do you think treasury management is important in a bank? List out the reasons.

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c) Distinguish between a 'Dealing' and an 'Investment'.

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7.5 INVESTMENT DECISION MAKING PROCESS

The investment decisions in the banks are normally vested in the Chairman, assisted by an investment committee comprising senior general managers and others.
The decisions are normally reported to the Board for confirmation/information.

Like any other commercial entity, banks have both long-term and short-term investment decisions to make. Short-term decisions relate to periods from overnight to 12 months. The processes involved for making an investment decision are:

- identifying cash surplus/deficit
- listing available options
- evaluating alternative instruments
- executing/financing investment decisions
- recording/reporting action taken

The evaluation of alternative instruments involves:

- evaluation in terms of security, term, yield and minimum sizes required to obtain market rates, transaction costs and accessibility to market.
- financing of cash requirements in terms of security, total costs and flexibility.

7.6 CLASSIFICATION OF SECURITIES

The RBI has given guidelines for the classification and evaluation of investments by banks (RBI-DBOD. No. BP. BC. 32/21. 048/2000-2001). The classification of securities for balance sheet purposes is under six groups:

1. Government securities
2. Other approved securities
3. Shares
4. Debentures and bonds
5. Subsidiaries/joint ventures
6. Others (CP, mutual funds, etc.)

The RBI had appointed a committee and based on the report of the committee it issued the following guidelines:

- Banks are required to classify their entire portfolio under three categories, viz., 'Held to Maturity', 'Available for Sale'. 'Held for Trading'.
- In the balance sheet, investments will continue to be disclosed as per the six fold classification mentioned earlier.
- The investments under the Available for Sale and Held for Trading categories should be marked to market periodically.
- Investments under Held to Maturity need not be marked to market.
- RBI guidelines regarding classification, shifting of investments, the methodology for booking profit/loss on sale ofinvestments, and providing for depreciation should be in accordance with the guidelines issued.
- Risk weights assigned to various securities are to remain unchanged for the time being.

It is worth noting that the RBI had to once again ask banks to 'formulate an Investment Policy with the approval of their Board of Directors to take care of the requirements on classification, shifting and valuation of investments under the revised guidelines. Besides the policy should adequately address risk management aspects, ensure that the procedures to be adopted by the Banks under the Guidelines are consistent, transparent, and well documented to facilitate easy verification by inspectors and statutory auditors.

Funds Management

The strategies to be adopted by the fund manager will necessarily have to be in tune with the corporate objectives, be they short, medium or long term. Obviously, the strategies are to be determined from time to time depending on market conditions, perception of likely changes and the bank's own position. Objectives for funds management would centre on:

- raising of resources at lowest/optimum cost.
- deployment of funds in the best possible manner to secure higher yields.
- consistency with the bank's policy on liability management.

The day-to-day funds management has direct correlation with net demand and time liabilities as reported to RBI under Section42(2)of the RBI Act. The present ratio of CRR is 4.5.per cent on all net Demand and Time Liabilities (DTL). It is to be maintained on the DTL as reported on the immediate preceding reporting Friday. The CRR is to be maintained on fortnightly basis.

The important aspect from our point of view is the yield on CRR.

First 3% of DTL	No interest
Balance 12% of DTL up to the cut-off date	10.5%
Balance on incremental DTL	Nil

The effective yield works out to 4.5 to 5 per cent.

It is pertinent to mention that balances in all accounts make up for CRR level. The call money market is the most commonly used route to even out the variations and to:

- maintain the required CRR level for the fortnight on average basis.
- to maintain 85 per cent of CRR on the first 13 days of the fortnight.

7.7 FORMS OF MONEY MARKET INSTRUMENTS

Following is a brief account of money market instruments:

- *Call Money:* Money traded over night, i.e., amounts borrowed today have to be returned the very next day.
- *Notice Money:* Money traded for 2 to 14 days.
- *Term Money :* Money traded for 15 days to 3 months.
- *Bills Rediscounting:* The banks' bills discounted portfolio(built up at various branches) can be rediscounted by drawing a derivative pronote supported by a signed declaration that the bank is holding discounted bills of amount at least equivalent to the amount of pronote and that the bills arise out of bonafide commercial transactions. The derivative pronote should be drawn for a period of 15 days and up to a maximum of 90 days.
- Other commonly used instruments are treasury bills with maturity of 91 and 364 days. They are the most liquid money market instruments and are regularly traded in the inter bank market.

Some of the arbitrage opportunities available to dealers are:

- *Time arbitrage:* Borrowing under call at one time and lending at another time
- *Place arbitrage:* Borrowing at a place, say Bangalore, and lending at Mumbai or Kolkata.
- *Instrument arbitrage:* Borrowing under notice and lending under call or *vice versa*, or borrowing under bills rediscounting or carry Forward and lending under call/notice or Bills Rediscounting Scheme or carry Forward deals at different rates.

Banks are also expected to keep cash in hand and balance with the RBI in current account. Further under schedule 9 banks also make advances in the form of bills discounted, cash credit, overdrafts, terms loans, secured loans and loans to priority sectors and public sectors. A good part of investment also goes in to creating own premises and other fixed assets.

7.8 SUMMARY

The primary business functions of the banks is to raise funds and to invest them profitably. In the process of investment of funds, the banks have to generate income which should be more than the costs they incur in raising the funds. This excess income so generated is essential to meet the bank's operational expenses and to pay

the shareholders some profit. This excess income is called the 'spreed'. Banks invest the funds so raised in various forms like; Cash and Balances with RBI, Balances with banks and money at call and short notice, investments, loans and advances, fixed assets and other assets. Of these assets, major part are invested in the form of investments and Loans and Advances. Treasury department plays a critical role in investing these funds.

There is a need to make a distinction between dealing (current) in securities and investing in securities. Dealing securities are those that are held for a relatively short period with a view to earning profit by buying and selling them in tune with their price movement. Investment securities are those that for longer period with a motive of getting the income regularly by way of dividends/interest and by way of long-term capital appreciation in value. RBI has classified the securities into broad groups, such as; govt. securities, other approved securities, shares, debentures and bonds, subsidiaries and joint ventures, etc.

7.9 SELF-ASSESSMENT QUESTIONS

1) Discuss investment decision-making process followed by banks in allocating funds.
2) What are functions performed by the officials of treasury department in banks?
3) State the classification of securities for balance sheet purposes.
4) What are the major forms of banks investments?

7.10 FURTHER READINGS

Website of Reserve Bank of India, *www.rbi.org.in*

Annual Reports of Commercial Banks

Banking Regulation Act,1949

Managing Indian Banks, Vasant C.Joshi and Vinay V.Joshi, Response books, 2002.

Money, Baking and Finance, N.K.Sinha, BSC Publishing Company.