B.B.A (B & I): 308 Management of Commercial Banks

Objective

The course aims to acquaint the student with a basic and elementary knowledge of the business and corporate laws.

Course Contents : Unit I

Commercial Banking-Structure, Operations, Asset Structure, Investment Policy, Changing Role, Social Responsibility of banks; Commercial banks and Economic development;

Nationalization of Banks. Unit II

Analysis of Assets & Liabilities of scheduled commercial banks; Efficiency of commercial

Banks; Internal performance and Appraising of Bank's condition; Non-Performing Assets;

Management of capital in commercial banks.

Unit III

Risks in commercial banking- Interest Rate Risk, Liquidity risk, Credit risk; Investment

Management; Foreign currency dealing; Foreign currency risk

Unit IV

Banking; Non-Banking Financial Institutions; Management of Foreign Exchange.

Unit 1

1.1Commercial banking:

In India the banks are being segregated in different groups. Each group has their own benefits and limitations in operating in India. Each has their own dedicated target market. Few of them only work in rural sector while others in both rural as well as urban. Many even are only catering in cities. Some are of Indian origin and some are foreign players.

All these details and many more is discussed over here. The banks and its relation with the customers, their mode of operation, the names of banks under different groups and other such useful information are talked about.

One more section has been taken note of is the upcoming foreign banks in India. The RBI has shown certain interest to involve more of foreign banks than the existing one recently. This step has paved a way for few more foreign banks to start business in India.A commercial bank (or business bank) is a type of bank that provides services, such as accepting deposits, giving business loans and basic investment products.

Commercial bank can also refer to a bank or a division of a bank that mostly deals with deposits and loans from corporations or large businesses, as opposed to individual members of the public .

Origin of the word

The name *bank* derives from the itallian word *banque* "desk/bench", used during the Renaissance era by Florentinre bankers, who used to

make their transactions above a desk covered by a green tablecloth However, traces of banking activity can be found even in ancient times.

Some have suggested, the word traces its origins back to the Ancient Roman Empire, where moneylenders would set up their stalls in the middle of enclosed courtyards called *macella* on a long bench called a *bancu*, from which the words *banco* and *bank* are derived. As a moneychanger, the merchant at the *bancu* did not so much invest money as merely convert the foreign currency into the only legal tender in Rome – that of the Imperial Mint.

The role of commercial banks

Commercial banks engage in the following activities:

- processing of payments by way of telegraphic transfer,EFTPOS,internet banking, or other means
- issuing bank drafts and bank cheques
- accepting money on term deposit
- lending money by overdraft, installment loan, or other means
- providing documentary and standby letter of credit, guarantees, performance bonds, securities underwriting commitments and other forms of off balance sheet exposures
- safekeeping of documents & other items in safe deposit boxes
- sales, distribution or brokerage, with or without advice, of: insurance, unit trusts and similar financial products as a "financial supermarket"

- cash management and treasury
- merchant banking and private equity financing
- traditionally, large commercial banks also underwrite bonds, and make markets in currency, interest rates, and credit-related securities, but today large commercial banks usually have an investment bank arm that is involved in the mentioned activities

Types of loans granted by commercial banks

Secured loans

It is a loan in which the borrower pledges some asset (e.g. a car or property) as secondary/collateral for the loan, which then becomes a secured debt owed to the creditor who gives the loan. The debt is thus secured against the collateral — in the event that the borrower defaults, the creditor takes possession of the asset used as collateral and may sell it to regain some or all of the amount originally lent to the borrower, for example, a portion of the bundle of rights to specified property. If the sale of the collateral does not raise enough money to pay off the debt, the creditor can often obtain a deficiency judgment against the borrower for the remaining amount. The opposite of secured debt/loan is unsecured debt, which is not connected to any specific piece of property and instead the creditor may only satisfy the debt against the borrower rather than the borrower's collateral and the borrower.

A mortgage loan is a very common type of debt instrument, used to purchase real estate. Under this arrangement, the money is used to purchase the property. Commercial banks, however, are given security – a lien on the title to the house - until the mortgage is paid off in full. If

the borrower default on the loan, the bank would have the legal right to repossess the house and sell it, to recover sums owing to it.

In the past, commercial banks have not been greatly interested in real estate loans and have placed only a relatively small percentage of assets in mortgages. As their name implies, such financial institutions secured their earning primarily from commercial and consumer loans and left the major task of home financing to others. However, due to changes in banking laws and policies, commercial banks are increasingly active in home financing.

Changes in banking laws now allow commercial banks to make home mortgage loans on a more liberal basis than ever before. In acquiring mortgages on real estate, these institutions follow two main practices. First, some of the banks maintain active and well-organized departments whose primary function is to compete actively for real estate loans. In areas lacking specialized real estate financial institutions, these banks become the source for residential and farm mortgage loans. Second, the banks acquire mortgages by simply purchasing them from mortgage bankers or dealers.

In addition, dealer service companies, which were originally used to obtain car loans for permanent lenders such as commercial banks, wanted to broaden their activity beyond their local area. In recent years, however, such companies have concentrated on acquiring mobile home loans in volume for both commercial banks and savings and loan associations. Service companies obtain these loans from retail dealers, usually on a nonrecourse basis. Almost all bank/service company agreements contain a credit insurance policy that protects the lender if the consumer defaults.

Unsecured loan

These are monetary loans that are not secured against the borrower's assets. There are small business unsecured loans such as credit cards and credit lines to large corporate credit lines. These may be available from financial institutions under many different guises or marketing packages:

- bank overdrafts
- corporate bonds
- credit card debt
- credit facilities or lines of credit
- personal loans

A corporate bond is a bond issued by a corporation. It is a bond that a corporation issues to raise money in order to expand its business. The term is usually applied to longer-term debt instruments, generally with a maturity date falling at least a year after their issue date. (The term "commercial paper" is sometimes used for instruments with a shorter maturity.)

Sometimes, the term "corporate bonds" is used to include all bonds except those issued by governments in their own currencies. Strictly speaking, however, it applies only to bonds issued by corporations, Corporate bonds are often listed on major exchanges (bonds there are called "listed" bonds) and ECNs like Bonds.com and MarketAxess and the coupon (or interest payment) is usually taxable. Sometimes, this coupon can be zero, with a high redemption value. However, despite being listed on exchanges, the vast majority of trading volume in

corporate bonds in most developed markets takes place in decentralized, dealer-based,over the counter markets.

Some corporate bonds have an embedded call options that allows the issuer to redeem the debt before its maturity date. Other bonds, known as convertible bonds, allow investors to convert the bond into equity.

Corporate credit spreads may alternatively be earned in exchange for default risk through the mechanism of credit default swaps, which give an unfunded synthetic exposure to similar risks on the same 'Reference Entities'. However, quite volatile credit default swaps 'basis' make the spreads on credit default swaps and the credit spreads on corporate bonds be significantly different.

1.2 Operations :

Commercial banks perform many functions. They satisfy the financial needs of the sectors such as agriculture, industry, trade, communication, so they play very significant role in a process of economic social needs. The functions performed by banks, since recently, are becoming customer-centred and are widening their functions. Generally, the functions of commercial banks are divided into two categories: primary functions and the secondary functions. The following chart simplifies the functions of commercial banks.

Commercial banks perform various primary functions, some of them are given below:

- Commercial banks accept various types of deposits from public especially from its clients, including saving account deposits,

recurring account deposits, and fixed deposits. These deposits are payable after a certain time period

- Commercial banks provide loans and advances of various forms, including an overdraft facility, cash credit, bill discounting, etc. They also give demand and demand and term loans to all types of clients against proper security.
- Credit creation is most significant function of commercial banks. While sanctioning a loan to a customer, they do not provide cash to the borrower. Instead, they open a deposit account from which the borrower can withdraw. In other words, while sanctioning a loan, they automatically create deposits, known as a credit creation from commercial banks.

Along with primary functions, commercial banks perform several secondary functions, including many agency functions or general utility functions. The secondary functions of commercial banks can be divided into agency functions and utility functions.

The agency functions are the following:

- To collect and clear cheque, dividends and interest warrant.
- To make payments of rent, insurance premium, etc.
- To deal in foreign exchange transactions.
- To purchase and sell securities.
- To act as trusty, attorney, correspondent and executor.
- To accept tax proceeds and tax returns.

The utility functions are the following:

- To provide safety locker facility to customers.
- To provide money transfer facility.
- To issue traveller's cheque.
- To act as referees.
- To accept various bills for payment: phone bills, gas bills, water bills, etc.
- To provide merchant banking facility.
- To provide various cards: credit cards, debit cards, smart cards, etc.

1.3 Asset Structure

Assets

According to Crowther, the assets side of the balance sheet is more complicated and interesting. Assets are the claims of the bank on others. In the distribution of its assets, the bank is governed by certain well defined principles.

These principles constitute the principles of the investment policy of the bank or the principles underlying the distribution of the assets of the bank. The most important guiding principles of the distribution of assets of the bank are liquidity, profitability and safety or security.

In fact, the various items on the assets side are distributed according to the descending order of liquidity and the ascending order of profitability. Now, we have to analyse the various items on the assets side.

Cash

Here we can distinguish cash on hand from cash with central bank and other banks cash on hand refers to cash in the vaults of the bank. It constitutes the most liquid asset which can be immediately used to meet the obligations of the depositors. Cash on hand is called the first line of defence to the bank.

In addition to cash on hand, the bank also keeps some money with the central bank or other commercial banks. This represents the second line of defence to the bank.

Money at Call and Short Notice

Money at call and short notice includes loans to the brokers in the stock market, dealers in the discount market and to other banks. These loans could be quickly converted into cash and without loss, as and when the bank requires. At the same time, this item yields income to the bank.

The significance of money at call and short notice is that it is used by the banks to effect desirable adjustments in the balance sheet. This process is called 'Window Dressing'. This item constitutes the 'third line of defence' to the bank.

Bills Discounted

The commercial banks invest in short term bills consisting of bills of exchange and treasury bills which are self-liquidating in character. These short term bills are highly negotiable and they satisfy the twin objectives of liquidity and profitability.

If a commercial bank requires additional funds, it can easily rediscount the bills in the bill market and it can also rediscount the bills with the central bank. Bills for Collection: As mentioned earlier, this item appears on both sides of the balance sheet.

Investments

This item includes the total amount of the profit yielding assets of the bank. The bank invests a part of its funds in government and non-government securities.

Loans and Advances

Loans and advances constitute the most profitable asset to the bank. The very survival of the bank depends upon the extent of income it can earn by advancing loans. But, this item is the least liquid asset as well.

The bank earns quite a sizeable interest from the loans and advances it gives to the private individuals and commercial firms.

Acceptances and Endorsements

As discussed earlier, this item appears as a contra item on both sides of the balance sheet.

Fixed Assets

Fixed assets include building, furniture and other property owned by the bank. This item includes the total volume of the movable and immovable property of the bank.

Fixed assets are referred to as 'dead stocks'. The bank generally undervalues this item deliberately in the balance sheet. The intention here is to build up secret reserves which can be used at times of crisis.

Balance sheet of a bank acts as a mirror of its policies, operations and achievements. The liabilities indicate the sources of its funds; the assets are the various kinds of debts incurred by a bank to its customers. Thus, the balance sheet is a complete picture of the size and nature of operations of a bank.

1.4 Investment policy of banks

Banks, savings & loans, credit unions, and other financial institutions are strictly regulated by RBI and They are required to have written investment policies that set forth the types and amount of loans they will make, and the size of their investment portfolio and permissible investment types Every one of the nation's 14,600 banks should have a written investment policy. A written investment policy integrates the bank's investment activity with its other activities. Significant changes in cash position, borrowed funds, the quality and maturity of loans, the nature and stability of deposits, capital position or dividend payout will often require corresponding changes in investment strategy. If too vague or general, a policy will not serve the purposes of bank managements, boards of directors and regulatory authorities, who prefer specific statements they hope will preclude unpleasant surprises. Bank investment officers, on the other hand, usually advocate general guidelines that permit wide latitude in carrying out their duties. The author presents a model investment policy that can be adapted to the specific needs of individual banks. It fixes responsibility for managing the investment portfolio and the broad limits of its composition, lists

acceptable securities and specifies their approximate quality, and suggests how the portfolio should evolve in successive phases of the interest rate cycle.

1.5 changing role

With years, banks are also adding services to their customers. The Indian banking industry is passing through a phase of customers market. The customers have more choices in choosing their banks. A competition has been established within the banks operating in India.

With stiff competition and advancement of technology, the services provided by banks has become more easy and convenient. The past days are witness to an hour wait before withdrawing cash from accounts or a cheque from north of the country being cleared in one month in the south.

This section of banking deals with the latest discovery in the banking instruments along with the polished version of their old systems.

1.6 Social Responsibility of banks:

Corporate social responsibility and banking often are at odds. The banking sector focuses primarily on profits in the financial area, while corporate social responsibility takes a broad overview of the needs of society in general and how the banking sector serves those needs. Many difficulties arise from combining corporate social responsibility and banking.

In the banking industry, corporate social responsibility might seem to be in short supply. It's every corporation's nightmare: a throng of rowdy activists gathers outside company buildings to demonstrate against alleged environmental and human-rights abuses. Part of the reason banks do not engage in massive corporate socially responsible behavior comes down to basic finances. Shareholders own shares of stock in the banks, which means banks must make as much profit as possible to keep the shareholders' trust. This means banks need to charge fees for various transactions and try to get as much for those fees as possible. This results in banks providing profits to the shareholders, but at a high cost to its customers. This is why some financial observers believe true CSR is unattainable in a capitalist system

Banks have impact on the environment directly and indirectly. Lending and investments activities have an indirect impact on the environment. Therefore, banks should be encouraged to consider environmentally-friendly purposes in their credit decisions. To this end, banks may offer incentives to credit facilities for “green” investments such as improving a buildings’ insulation or more efficient lighting systems which use alternative energy sources. They may apply less stringent rules in relation to collaterals or offer discounted loans to such clients for these types of investments.

There are approaches that explore how banks are linking the traditional credit risk assessment with the borrower’s environmental risk assessment. In other words a bank can assess the environmental credit risk of the borrowing customer and then factor in the results of this assessment at some stage of the creditworthy assessment process.

Community involvement

Community involvement is the basis of all accomplished CSR policy initiatives and extends far beyond the standard charitable measures. Banks should introduce innovative schemes such as:

- permanent learning programs for disadvantaged sectors of society;

- sponsorship of young entrepreneurs;

- provision of academic scholarships and research proposals;

- support environmental issues such as recycling and waste management;

- community support programs;

- health support programs;

- financial support for art and culture;

Banks may also support non-governmental organizations engaged in drug prevention measures for the youth with a mentorship and parental training programmes. Employees of banks can be mentors for pupils at the senior level of the compulsory school during one school year.

Awareness and Transparency

It is essential that there should be a transparent and strong commitment to adoption of CSR practices. This can be reached through explicit reference to CSR activities adopted by banks through the following means:

- dedicating sections of Annual Reports to CSR matters;

- publishing of Sustainability Reports and/or policy statements on CSR; and web-based information.

It should be noted that corporate sustainability for banks is much more than mere charity. In this context, banks are encouraged to improve the future of the people in all communities they operate through CSR programmes, which in turn will sustain their business in the future.

In Europe, a dramatic change has been in the type of CSR reporting which has changed from simply environmental reporting to sustainability (social, environmental and economic reporting which has now become typical among top listed companies). There has been an increase in the number of companies publishing CSR information as part of their annual reports.

Banks and the Environment

Just like other business sectors, the business of banking has a direct impact on the environment through consumption of paper, energy, waste management and means of transport used. Direct environmental impact can be reduced by keeping environmental order in banks themselves, through limiting the consumption of energy and paper, ensuring good waste management and requiring suppliers' to conform to environmental standards. A bank can minimize the impact in a systematic manner through implementing an environmental policy; it can even go further and apply for environmental certification in accordance with ISO 14001.

The ISO 14001 is a standard for environmental management systems that is applicable to any business. It aims to reduce the environmental footprint of a business and to decrease the pollution and waste a business produces.

Financial inclusion

The market in which banks operate today requires new range of products targeting new customer segments including groups who are not yet fully integrated in society, and not dealing with banks such as temporary

workers, low-income families, and micro businesses operating in poor areas of the country.

This situation represents for banks a challenge in terms of designing suitable products for these distinct segments, and the opportunity to develop a new type of business beneficial to all. Some good examples of responding to the challenge would be microfinance and financial education.

Banks are encouraged to promote financial education projects involving different target groups. This is achieved in two ways. Firstly, by concluding agreements with strategic partners which are recognized by the target groups in order to inform them better on financial services and products which they will use in their daily life. Secondly, by developing contacts with the local authorities towards certain target groups. These target groups include primary schools, secondary schools, higher education, universities, and the general public world.

Some initiatives involve surveys which provide insight into the challenges and opportunities related to financial literacy in the target groups of children, teens, students and young adults. Another consists of developing new products, educational materials and events intended to stimulate financial skills and knowledge. Perhaps the best example is an educational website with fun, online exercises for children, tips and advice for parents on how to educate children financially.

The direct action and dialogue are paying off as banks begin to set green goals. HSBC has promised to cut carbon emissions, while Bank of America has pledged to shun investments in logging operations in the world's most sensitive forests. Even more important is the introduction of new industry standards, such as the Equator Principles, which "promote responsible environmental stewardship and socially

responsible development" by evaluating the threats that projects pose to forests, natural habitats and indigenous populations.

Thirty major private banks, including U.S. giants Citigroup, JPMorgan Chase and Bank of America, and European powerhouses ABN Amro, Barclays, HSBC and ING, have so far signed on to the principles. The guidelines cover some 80% of the global-project-financing market, according to Jon Williams, head of sustainability risk management at HSBC. "Everyone is interested in the balance between sustainability and economic development," says Williams. "We believe you can do well and do good.

The Reserve Bank of India (RBI) has asked the banks to pay special attention towards integration of social and environmental concerns in their business operations. Stressing the need for Corporate Social Responsibility (CSR), RBI pointed out that these initiatives by the banks are vital for sustainable development.

Issues such as global warming and climate change pose a great risk to the environment and can be quite damaging to the business models of companies. Asian companies are at present underestimating the impact of these calamities and a sense of urgency towards playing a meaningful role in tackling them.

Only a scenario in which the quality of environment and social systems synergize with business models, can lead to sustainable development. Many of the newly formed private and foreign banks are aware of the importance of such a step and therefore are having an active corporate social responsibility department.

RBI has asked the banks to start non-financial reporting, which will be used to audit their initiatives towards the corporate social responsibility (CSR). Such a reporting will cover the work done by the banks towards the social, economic and environmental betterment of society.

RBI has also stepped in to spread awareness about banking and other monetary practices to the common man. Recognizing its role as the central bank of the country, RBI is working towards empowering every individual, especially kids with information about mainstream banking activities and how they can preserve their wealth.

Social Responsibility efforts by banks:The recent effort towards financial inclusion where more and more people are being brought into mainstream banking and are made aware of various financial products to empower their life is also a big step in gearing up for rapid economic growth.

For close to a decade, Zenith Bank has instituted a full- blown corporate social responsibility orqan. "Zenith Philanthropy", through which it reaches out to touch its host communities and the larger society. Over the years, CSR initiatives have been driven by a significant understanding of our socio-economic environment and a strong knowledge of the resource gaps and pressing needs of communities and people around us. This has informed our focus on key need areas, including healthcare, education, ICT and youth empowerment, sports and public infrastructure development. Zenith Bank prides itself as one of the most decorated corporate organizations in Nigeria, in recognition of our robust CSR activities. We have achieved this feat, not only for the size and scope of our CSR investments but for their knowledge-driven focus and overwhelming impact. Numerous awards, accolades and laurels are there to show for this: This Day Award for Excellence as the "Most Socially Responsible Corporate Organization" in Nigeria; The African Banker (magazine) Award as the "Most Corporate Socially Responsible Bank in Africa"; University of Lagos Award as "a great supporter of educational development", among others,

Efforts of ICICI Bank for CSR:

Markets: The Foundation focuses on facilitating universal access to finance to make markets more responsive to the needs of the poor and to link with low-income households both as producers and consumers. This is done through developing appropriate channels, business models and back-ends for financial services access. It also supports research and model building for expanding financial services access. The Foundation works closely with and mentors the IFMR Foundation (www.ifmrfoundation.org.in) and its partners to fulfill its own mission of increasing the incomes of low income households in a sustainable manner. It is the Foundation's belief that addressing financial market failures substantively will have an impact on the access of low income households to a variety of other markets including healthcare, schooling and drinking water.

Human Capacity:

A focus on fundamental human capacities such as health and education is crucial for people to reach their full potential and lead productive lives. Child survival and early childhood development are amongst the most urgent development challenges facing India today.

. Working in partnership with governments, Civil Society Organisations (CSOs)/Non-Governmental Organisation (NGOs), research institutions and the private sector, ICCHN concentrates on developing, evaluating and mainstreaming a range of community based and health system strategies to achieve scaled and sustainable improvements in health and nutrition. A population of 2.7 million has been impacted through ICCHN's partners and interventions. Further, through its partnerships, ICCHN has supported state-wide public-health capacity building efforts in Chhattisgarh, Bihar, Jharkhand and Orissa for quality improvements

Under the National Rural Health Mission (NRHM), as well as a city-wide effort in Mumbai. ICCHN's support has enabled five of its partners to grow into important resource institutions for the health sector.

In the field of education the ICICI Foundation supports the ICICI Centre for Elementary Education (ICEE) (www.icee.org.in), which strives to play a catalytic role in improving the provision and quality of elementary education. It enters into partnerships with voluntary organisations working in education that have experience in teachers education, curriculum development, material development, educational research and running schools for marginalized communities and implementing large programmes. Working with these CSOs/NGOs, ICEE seeks to energise the existing government network of educational institutions at the district, state and national levels. Bodies like the State Councils of Educational Research and Training (SCERTs) and the District Institutes of Education and Training (DIETs) in several parts of the country form a part of this engagement. In its endeavour to improve the quality of elementary education, ICEE has reached out to nearly 6 million children through curricular reform. About 45,000teachers have been trained. It has partnerships with state governments of Bihar, Rajasthan, Chhattisgarh, Madhya Pradesh and Gujarat.

Sustainability:

Promoting environmental sustainability and the growth of a strong civil society are crucial requisites for inclusive growth. Towards this end, the Foundation has partnered with the Environmentally Sustainable Project Finance (ESPF)(http://ifmr.ac.in/cdf/project_finance.htm) research team at the Centre for Development Finance at IFMR, in order to foster markets for delivering high quality, environmentally sustainable infrastructure, goods and services. Its work is focussed on the areas of sustainable development, climate change, responsible investment and

accountability. Towards building an effective civil society, the Foundation is actively mentoring CSO Partners (www.csopartners.org.in), a resource centre to strengthen CSOs which includes NGOs engaged in the task of social change and economic development and local self government organizations such as Gram Panchayats. CSO Partners seeks to facilitate strategic partnerships between CSOs and experienced service providers with whomit is in the process of building partnerships, in various areas, including fund-raising, financial management, volunteering, organisational governance, communications, accounting, human resources, legal aid and accounting. Its current partners include: GiveIndia (www.giveindia.org), Mitra (www.mitra.org.in), Infochange(www.infochangeindia.org), Governance Matters (www.governancematters.in) and MAM movies(www.mammovies.com).

The ICICI Group believes that inclusive growth is essential to the sustainable and healthy growth of the economy. The ICICI Group is committed to create conditions for the empowerment of low-income Indians and to facilitate inclusive growth.

Corporate Social Responsibility& Union Bank of India:

Union Bank of India has well developed Corporate Social Responsibility inititatives in place. The focus on the Rural sector is through Village Knowledge Centres and Farmers' Clubs etc. We also have schemes for the girl child, where we take care of education expenses. Initiatives are in place in other areas such as providing drinking water for schools, setting up bus shelters etc. All our CSR initiatives have shown good results and they are an ongoing part of our contribution to the building of this nation

Conclusion

The key factors for a successful CSR policy can be summarized as follows: - Continuous support of senior management and all staff - Reporting CSR – internally and externally, on a long-term basis, with regular reviews- Include CSR as integral part of corporate strategy of the bank. The advantages for banks in adopting well-designed CSR initiatives lie in the following areas: - Encourages sustainable behavior by customers;- Supports development of separate business models for various segments;- Provides real benefits for the society as a whole;- creates higher employee motivation, and superior performance levels;- Makes banks more aware of their potential role in society;- Creates positive publicity and/or increased brand recognition.

1.7 Role of Commercial Banks in Economic Development

Commercial banks are one source of financing for small businesses.

The role of commercial banks in economic development rests chiefly on their role as financial intermediaries. In this capacity, commercial banks help drive the flow of investment capital throughout the marketplace. The chief mechanism of this capital allocation in the economy is through the lending process which helps commercial banks gauge financial risk.

Risk

- One of the most significant roles of commercial banks in economic development is as arbiters of risk. This occurs primarily when banks make loans to businesses or individuals. For instance, when individuals apply to borrow money from a bank, the bank examines the borrower's finances, including income, credit score and debt level, among other factors. The outcome of this analysis helps the

bank gauge the likelihood of borrower default. By weeding out risky borrowers, commercial banks lessen the risk of financial losses. As a result, loans that mature without any problems generate a larger pool of funds for the bank to lend, further supporting economic development.

Individuals

- When commercial banks assess risk, they help ensure that loans go to creditworthy borrowers. In turn, borrowers typically use loan proceeds to finance major purchases, such as homes, education and other consumer spending. The effect of commercial bank lending generates economic activity from individuals who now have the necessary funds to finance their own endeavors.

Small Business

- Commercial banks also finance business lending in a variety of ways. A business owner may solicit a loan to finance the start-up costs of a small business. Once funded, the small business may begin operations and embark on a growth plan. The aggregate effect of small business activity generates a significant portion of employment around the country. According to the U.S. Census Bureau, businesses employing between one and 19 people accounted for 4.4 million jobs in 2004. In contrast, businesses with more than 20 employees only accounted for 1.2 million in the same year.

Government Spending

- Commercial banks also support the role of the federal government as an agent of economic development. Generally, commercial banks help fund government spending by purchasing bonds issued by the Department of the Treasury. Both long and short term Treasury bonds help finance government operations, programs and support deficit spending.

Wealth

- Commercial banks also offer types of accounts to hold or generate individual wealth. In turn, the deposits commercial banks attract with account services are used for lending and investment. For example, commercial banks commonly attract deposits by offering a traditional menu of savings and checking accounts for businesses and individuals. Similarly, banks offer other types of timed deposit accounts, such as money market accounts and certificates of deposit. Some investors use these interest bearing, low risk accounts to hold money for investment purposes, waiting for attractive investment opportunities to materialize

1.8 Nationalization of banks

The nationalisation of banks in India took place in 1969 by Mrs. Indira Gandhi the then prime minister. It nationalised 14 banks then. These banks were mostly owned by businessmen and even managed by them.

- Central bank of India
- Bank of Maharashtra

- Dena Bank
- Punjab National Bank Syndicate Bank
- Canara Bank Indian Bank
- Indian overseas bank Bank of Baroda
- Union Bank
- Allahabad bank
- Union Bank of India UCO Bank
- Bank of India
  Before the steps of nationalisation of Indian banks, only State Bank of India (SBI) was nationalised. It took place in July 1955 under the SBI Act of 1955. Nationalisation of Seven State Banks of India (formed subsidiary) took place on 19th July, 1960.

  The State Bank of India is India's largest commercial bank and is ranked one of the top five banks worldwide. It serves 90 million customers through a network of 9,000 branches and it offers -- either directly or through subsidiaries -- a wide range of banking services.

  The second phase of nationalisation of Indian banks took place in the year 1980. Seven more banks were nationalised with deposits over 200 crores. Till this year, approximately 80% of the banking segment in India were under Government ownership.

  After the nationalisation of banks in India, the branches of the

public sector banks rose to approximately 800% in deposits and advances took a huge jump by 11,000%.

- 1955 : Nationalisation of State Bank of India.
- 1959 : Nationalisation of SBI subsidiaries.
- 1969 : Nationalisation of 14 major banks.
- 1980 : Nationalisation of seven banks with deposits over 200 crores.

UNIT 2

2.1 Analysis of Assets & Liabilities of scheduled commercial banks

The balance sheet of a commercial bank is a statement of its assets and liabilities. Assets are what others owe the bank, and what the bank owes others constitutes its liabilities. The business of a bank is reflected in its balance sheet and hence its financial position as well.

The balance sheet is issued usually at the end of every financial year of the bank. The balance sheet of the bank comprises of two sides; the assets side and the liabilities side. It is customary to record liabilities on the left side and assets on the right

Balance Sheet of the Bank

Liabilities	Assets
1. Capital	1. Cash
a. Authorised capital	a. Cash on hand
b. Issued capital	b. Cash with central bank and other banks
c. Subscribed capital	
d. Paid-up-capital	

Liabilities	Assets
2. Reserve fund	2. Money at call and short notice
3. Deposits	3. Bills discounted
4. Borrowings from other banks	4. Bills for collection
5. Bills payable	5. Investments
6. Acceptances and endorsements	6. Loans and advances
7. Contingent liabilities	7. Acceptances and endorsement
8. Profit and loss account	8. Fixed assets
9. Bills for collection	

Liabilities

Liabilities are those items on account of which the bank is liable to pay others. They denote other's claims on the bank. Now we have to analyse the various items on the liabilities side.

Capital

The bank has to raise capital before commencing its business. Authorised capital is the maximum capital upto which the bank is empowered to raise capital by the Memorandum of Association. Generally, the entire authorised capital is not raised from the public.

That part of authorised capital which is issued in the form of shares for public subscription is called the issued capital. Subscribed capital represents that part of issued capital which is actually subscribed by the public. Finally, paid-up capital is that part of the subscribed capital which the subscribers are actually called upon to pay.

Reserve Fund

Reserve fund is the accumulated undistributed profits of the bank. The bank maintains reserve fund to tide over any crisis. But, it belongs to the shareholders and hence a liability on the bank. In India, the commercial bank is required by law to transfer 20 per cent of its annual profits to the Reserve fund.

Deposits

The deposits of the public like demand deposits, savings deposits and fixed deposits constitute an important item on the liabilities side of the balance sheet. The success of any banking business depends to a large extent upon the degree of confidence it can instill in the minds of the depositors.

The bank can never afford to forget the claims of the depositors. Hence, the bank should always have enough cash to honour the obligations of the depositors.

Borrowings from Other Banks

Under this head, the bank shows those loans it has taken from other banks. The bank takes loans from other banks, especially the central bank, in certain extraordinary circumstances.

Bills Payable

These include the unpaid bank drafts and telegraphic transfers issued by the bank. These drafts and telegraphic transfers are paid to the holders thereof by the bank's branches, agents and correspondents who are reimbursed by the bank.

Acceptances and Endorsements

This item appears as a contra item on both the sides of the balance sheet. It represents the liability of the bank in respect of bills accepted or endorsed on behalf of its customers and also letters of credit issued and guarantees given on their behalf.

For rendering this service, a commission is charged and the customers to whom this service is extended are liable to the bank for full payment of the bills. Hence, this item is shown on both sides of the balance sheet.

Contingent Liabilities

Contingent liabilities comprise of those liabilities which are not known in advance and are unforeseeable. Every bank makes some provision for contingent liabilities.

Profit and Loss Account

The profit earned by the bank in the course of the year is shown under this head. Since the profit is payable to the shareholders it represents a liability on the bank.

Bills for Collection

This item also appears on both the sides of the balance sheet. It consists of drafts and hundies drawn by sellers of goods on their customers and are sent to the bank for collection, against delivery documents like railway receipt, bill of lading, etc., attached thereto.

All such bills in hand at the date of the balance sheet are shown on both the sides of the balance sheet because they form an asset of the bank, since the bank will receive payment in due course, it is also a liability because the bank will have to account for them to its customers.

Assets

According to Crowther, the assets side of the balance sheet is more complicated and interesting. Assets are the claims of the bank on others. In the distribution of its assets, the bank is governed by certain well defined principles.

These principles constitute the principles of the investment policy of the bank or the principles underlying the distribution of the assets of the bank. The most important guiding principles of the distribution of assets of the bank are liquidity, profitability and safety or security.

In fact, the various items on the assets side are distributed according to the descending order of liquidity and the ascending order of profitability. Now, we have to analyse the various items on the assets side.

Cash

Here we can distinguish cash on hand from cash with central bank and other banks cash on hand refers to cash in the vaults of the bank. It constitutes the most liquid asset which can be immediately used to meet the obligations of the depositors. Cash on hand is called the first line of defence to the bank.

In addition to cash on hand, the bank also keeps some money with the central bank or other commercial banks. This represents the second line of defence to the bank.

Money at Call and Short Notice

Money at call and short notice includes loans to the brokers in the stock market, dealers in the discount market and to other banks. These loans could be quickly converted into cash and without loss, as and when the bank requires. At the same time, this item yields income to the bank.

The significance of money at call and short notice is that it is used by the banks to effect desirable adjustments in the balance sheet. This process is called 'Window Dressing'. This item constitutes the 'third line of defence' to the bank.

Bills Discounted

The commercial banks invest in short term bills consisting of bills of exchange and treasury bills which are self-liquidating in character.

These short term bills are highly negotiable and they satisfy the twin objectives of liquidity and profitability.

If a commercial bank requires additional funds, it can easily rediscount the bills in the bill market and it can also rediscount the bills with the central bank. Bills for Collection: As mentioned earlier, this item appears on both sides of the balance sheet.

Investments

This item includes the total amount of the profit yielding assets of the bank. The bank invests a part of its funds in government and non-government securities.

Loans and Advances

Loans and advances constitute the most profitable asset to the bank. The very survival of the bank depends upon the extent of income it can earn by advancing loans. But, this item is the least liquid asset as well.

The bank earns quite a sizeable interest from the loans and advances it gives to the private individuals and commercial firms.

Acceptances and Endorsements

As discussed earlier, this item appears as a contra item on both sides of the balance sheet.

Fixed Assets

Fixed assets include building, furniture and other property owned by the bank. This item includes the total volume of the movable and immovable property of the bank.

Fixed assets are referred to as 'dead stocks'. The bank generally undervalues this item deliberately in the balance sheet. The intention here is to build up secret reserves which can be used at times of crisis.

Balance sheet of a bank acts as a mirror of its policies, operations and achievements. The liabilities indicate the sources of its funds; the assets are the various kinds of debts incurred by a bank to its customers. Thus, the balance sheet is a complete picture of the size and nature of operations of a bank.

Asset-Liability Management (ALM) is concerned with strategic management of assets (uses of funds) and liabilities (sources of funds) of banks, against risks caused by changes in the liquidity position of the bank, interest rates, and exchange rates, and against credit risk and contingency risk. An effective ALM technique aims to manage the volume, mix, maturity, rate sensitivity, quality and liquidity of the assets and liabilities as a whole so as to attain a predetermined acceptable risk/reward ratio. The purpose of ALM is to enhance the asset quality, quantify the risks associated with the assets and liabilities and further manage them, in order to stabilize the short-term profits, the long-term earnings and the long-run sustenance of the bank.
The Reserve Bank of India (RBI) has implemented the Basel II norms for the regulation of Indian banks, providing a framework for banks to develop ALM policies. Asset-Liability Management (ALM) is concerned with strategic management of assets (uses of funds) and liabilities (sources of funds) of banks, against risks caused by changes in the liquidity position of the bank, interest rates, and exchange rates, and against credit risk and contingency risk. ALM has gained significance in the financial services sector in recent years

due to the dramatic changes that have occurred in the post-liberalization period. There has been a vast shift in the borrowers' profile, the industry profile and the exposure limits for the same, interest rate structure for deposits and advances, and so on. This has been accompanied by increased volatility of markets, diversification of bank product profiles, and intensified competition between banks on a global scale, all adding to the risk exposure of banks. Thus, banks increasingly need to match the maturities of the assets and liabilities, balancing the objectives of profitability, liquidity, and risk. To this end, the Bank of International Settlements (BIS) has suggested a framework for the banks to tackle the market risks that may arise due to rate fluctuations and excessive credit risk. The Reserve Bank of India (RBI) has implemented the Basel II norms for the regulation of Indian banks, providing a framework for banks to develop ALM policies. At the macro-level, ALM leads to the formulation of critical business policies, efficient allocation of capital, and designing of products with appropriate pricing strategies, while at the micro-level, the objective of the ALM is two-fold: it aims at profitability through price matching while ensuring liquidity by means of maturity matching. Price matching basically aims to maintain spreads by ensuring that the deployment of liabilities will be at a rate higher than the costs. Working towards this end, banks generally maintain profitability/spreads by borrowing short (lower costs) and lending long (higher yields). Though price matching can be done well within the risk/exposure levels set for rate fluctuations, it may, however, place the bank in a potentially illiquid position. Liquidity is ensured by grouping the assets/liabilities based on their maturing profiles. The gap is then assessed to identify the future financing

requirements to ensure liquidity. The inter-linkage between the interest rate risk and the liquidity of the firm highlights the need for maturity matching. The underlying threat of this inter-linkage is that rate fluctuations may lead to defaults severely affecting the asset-liability position, and, in a highly volatile situation, it may lead to a liquidity crisis forcing the closure of the bank. Thus, price matching should be coupled with proper maturity matching. However, maintaining profitability by matching prices and ensuring liquidity by matching the maturity levels is not an easy task; in fact they contradict each other to some extent because a spread is possible when a mismatch of maturity is taken up. Thus, a trade-off has to be maintained between profitability and liquidity. Banks generally aim to eliminate liquidity risk while managing interest rate risk. The differential approach is primarily based on the fact that elimination of interest rate risk is not profitable, while elimination of liquidity risk does result in long-term sustenance. An effective ALM technique aims to manage the volume, mix, maturity, rate sensitivity, quality and liquidity of the assets and liabilities as a whole so as to attain a predetermined acceptable risk/reward ratio. The purpose of ALM is to enhance the asset quality, quantify the risks associated with the assets and liabilities and further manage them, in order to stabilize the short-term profits, the long-term earnings and the long-run sustenance of the bank.Asset-Liability Management has evolved as a vital activity of all financial institutions and to some extent other industries too. It has become the prime focus in the banking industry, with every bank trying to maximize yield and reduce their risk exposure. The Reserve Bank of India has issued guidelines to banks operating in the Indian environment to regulate their asset-liability positions in order to

maintain stability of the financial system. Maturity-gap analysis has a wide range of focus, not only as a situation analysis tool, but also as a planning tool. Banks need to maintain the maturity gap as low as possible in order to avoid any iquidity exposure. This would necessarily mean that the outflows in different maturity buckets need to be funded from the inflows in the same bucket. As per the RBI's guidelines, banks have to maintain a stable liquidity position in the short term duration, including both 1-14 days and 15-28 days time buckets, to ensure the stability and credibility of the banking system of the country. overall, public sector banks had a better short-term liquidity position than the private sector banks and foreign banks. Overall, the public sector banks were very conservative in their liquidity risk management. With the opening of banking domain to global players in Indian environment and increasing penetration of private sector banks, such a high short-term liquidity would be adverse for the public sector banks in terms of profitability, since the yield in this maturity bucket is lower than the yield in higher period maturity buckets, while the cost of the funds invested in the shorter period maturity buckets are higher, as they are sourced from higher period maturity buckets. There is great scope for the public sector banks to improve their profitability by reducing their short-term liquidity. Dash and Pathak (2011) have shown this scope using a linear programming model for asset-liability management. Overall, the private sector banks also had a comfortable short-term liquidity position. They have managed their short-term liquidity better than the public sector banks. This could be a major factor contributing to the higher overall profitability of the private sector banks. Dash and Pathak's (2011) model can also be applied to further improve the

profitability and liquidity of the private sector banks. Overall, the foreign banks did not have a comfortable liquidity position. The foreign banks have primarily focused on corporate lending, with a tenure range of 1-5 years. However, they have slowly started tapping the opportunities in retail banking and slowly moving towards it. Again, there is great scope for improvement in profitability and liquidity for the foreign banks. There are some limitations inherent in the present study. The actual maturity profiles of some of the balance sheet items were not available from the secondary sources. These balance sheet items were distributed in a pre-determined proportion for all the banks, based on overall demand patterns, as expressed by RBI. Also, the sample size was relatively small, and contained only ten foreign banks. In particular, some of the foreign and private banks are yet to scale up its retail banking division, and hence the comparison with public banks is problematic.

The problems with commercial bank stability are related to macroeconomics, the policy of the central bank and government as well as with the finance management of the specific commercial bank. The commerce bank system is in continuous development and interaction with the external environment, its operations must not be separated from the economic operations in the particular country. The crisis in 2008 – 2010 demonstrated the problems of Indian commercial banks which could have been averted by thoughtful control of the economic situation by commercial banks and supervisory institutions as well as control of asset quality and profitability.

Present Scenarion of Analysis of Assets & Liabilities of Banks:

The recent global financial turmoil demonstrated that maintenance of adequate liquidity is a *sine qua non* for the uninterrupted functioning of the banking system. This is reflected in the proposed advancements to the existing Basel II framework in terms of two new liquidity ratios, *viz*., 'liquidity coverage ratio' and 'net stable funding ratio'. While the liquidity concerns in the wake of the global financial turmoil was, mainly, a result of the net outflow of foreign capital, a liquidity crisis may also arise owing to the pattern of maturity profile of assets and liabilities, *i.e*., if the maturity of liabilities is shorter than the maturity of assets. However, it has to be kept in mind that this maturity mismatch is an inherent byproduct of credit intermediation whereby short-term liabilities are transformed into long-term assets. Regulators also encourage this pattern of financing of long-term assets to an extent as retail funding (demand and current deposits placed mostly in the short-term buckets) is more stable since it is coming from the household savings. On the other hand, experience shows that wholesale funding evaporates quickly during the time of crisis. *Albeit*, there may be a need to limit the size of ALMi in the larger interest of the financial soundness of the banking sector.

In the Indian context, the rapid growth observed in banks' lending to the infrastructure sector which are long-term in nature coupled with dependence of the banking system on short-term deposits raises concerns with regard to ALMi (RBI, 2010).[4] According to the Planning Commission estimates, the funding requirements of the infrastructure sector during the 12th plan period are one trillion US dollar. Though the Government is making concerted efforts to develop other avenues of financing arrangements for the infrastructure sector, the indirect and direct involvement of banks would not be negligible. In this background,

the present study attempts to analyse the nature, extent and factors leading to ALMi of the Indian banking sector in the context of huge infrastructure requirements of a growing economy.

Data: Data on asset liability mismatches are sourced from the Off-site Monitoring and Surveillance (OSMOS) returns submitted by banks to the Reserve Bank. Asset-liability mismatches are analysed in various maturity buckets in which data are reported by banks to the Reserve Bank. ALMi in each bucket is calculated as assets minus liabilities. Thus, a positive number of ALMi indicates that banks have created more assets than liabilities in a particular time bucket, thus, imply the existence of ALMi problems on the liquidity front. While arriving at ALMi of the banking sector in various time buckets, the maturity profile of loans and advances, investments, deposits and borrowings in Indian rupee were considered. Assets and liabilities in various foreign currencies were not considered.

Further, the maturity profile of capital funds raised by the banking sector was also not considered for arriving at ALMi as capital funds are primarily meant for absorbing credit risk, market risk and operational risk. Thus, it may not be prudent to ignore ALMi in other assets and liabilities by leveraging on the available total long-term capital funds. Hence, liquidity management on an 'on-going entity' basis, may not depend too much on the capital funds. However, capital funds may play an important role when the entity faces solvency.

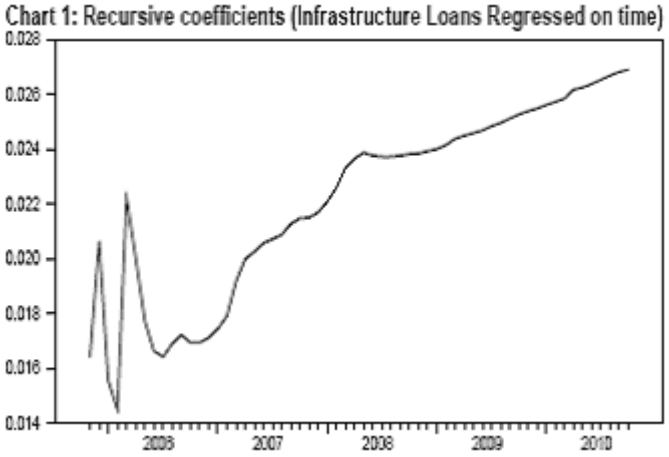
Data on bank credit to infrastructure sector has been sourced from the monthly returns submitted by banks to the Reserve Bank. Sectoral composition of long-term loans is sourced from the Basic Statistical

Returns. Quarterly data on GDP is sourced from the Central Statistical Organisation.

Trends in Infrastructure Financing

It has been estimated that the infrastructure lending requirements during the 12th Five year plan period (2012-17) would be approximately USD 1 trillion.[5] The higher plan expenditure towards infrastructure coupled with lack of alternative sources of funding indicates that banks may have to finance infrastructure in a much bigger way. Infrastructure financing of banks witnessed an increasing trend during the recent years raising some concerns with regard to the ALMi position of the banking sector. The share of bank credit to the infrastructure sector in the total non-food credit increased from 8.18 per cent in September 2005 to 14.54 per cent in December 2010. The increase in the share of the infrastructure loans was mainly due to a significantly higher growth observed since January 2008 .The CUSUM statistic obtained by regressing time on banks' lending to infrastructure sector along with the upper and lower critical levels at 95 per cent significance level is provided in Chart 2. It can be discerned from Chart 2 that till January 2008, lending to infrastructure was stable with the CUSUM statistic lying between the band provided by the upper and lower critical values. However, since then the CUSUM statistic crossed the upper critical value and witnessed an accelerating trend. This indicates a structural break in the growth rate of banks' lending to the infrastructure sector since January 2008. Or in other words, since January 2008, banks' lending to infrastructure sector witnessed a statistically significant higher growth rate as compared with its growth during the period prior to it.

Chart 1: Recursive coefficients (Infrastructure Loans Regressed on time)



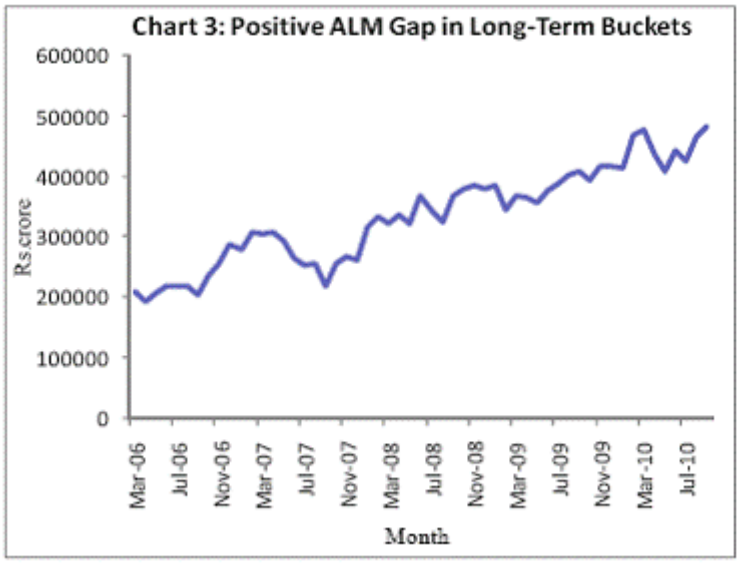
The stationary properties of the data series may reveal whether this sudden increase in banks' lending to infrastructure sector is transient or permanent in nature. In the case of banks' lending to the infrastructure sector, a structural break is quite possible as evident from Thus, the Andrews-Zivot unit root test was applied on the series. The results are provided in. The test results indicate that banks' lending to the infrastructure sector is stationary (significant at five per cent level) with one structural break.

Table 1: Stationarity of Banks' Lending to Infrastructure Sector – Andrews-Zivot Test Results

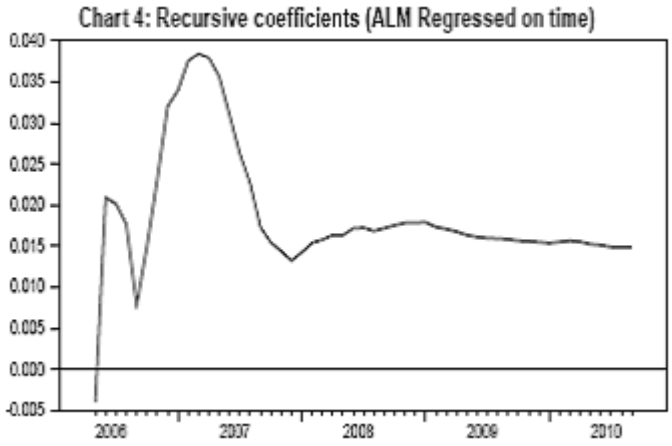
Long-term buckets

The analysis of the maturity profile of long-term assets and liabilities indicates that at the aggregate level, the long-term assets are more than the mobilised long-term liabilities. The ALMi calculated as long-term assets minus long-term liabilities never turned out to be negative during the recent years implying that the higher growth observed in the long-

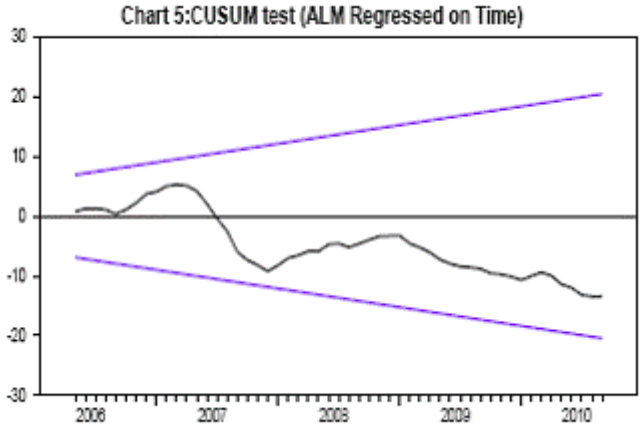
term loan segment of the Indian Banking sector is leading to asset liability mismatches in the banking sector. Further, the ALMi position witnessed a continuous deterioration during the recent years as the positive gap between long-term assets and long-term liabilities got widened



During the period from March 2006 to December 2010, the ALMi positive gap in the Indian banking sector witnessed a statistically significant trend growth of 1.49 per cent. The analysis of recursive coefficients did not indicate any structural break in the series. Rather, the recursive coefficients exhibited a stabilising trend with the progressive expansion of the data sample



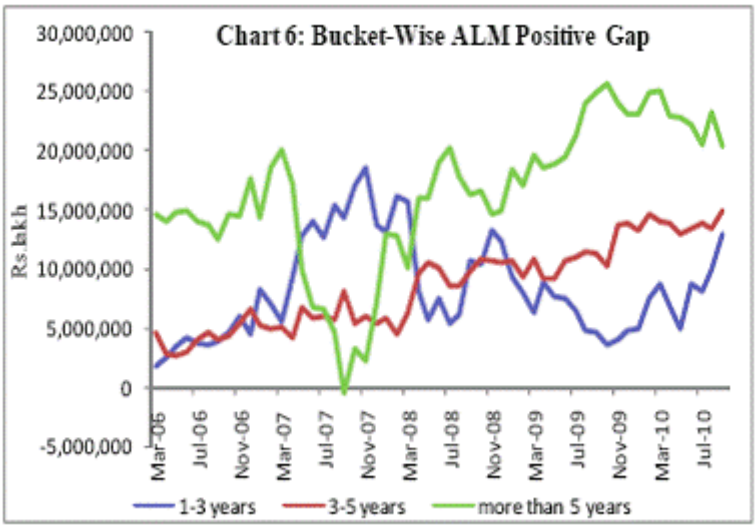
The results of CUSUM test also confirmed the absence of structural break in the ALMi positive gap in the Indian banking sector and the test statistic did not show a statistically significant instability throughout the sample



Bucket-wise Analysis of ALMi Positive Gap

A bucket-wise break-up of ALMi positive gap shows that the banking sector has the highest ALMi positive gap in the bucket 'more than five years' followed by '3-5 years' and '1-3 years'. As at end-September 2010, ALMi positive gap in the 'more than five years' bucket

constituted 42.1 per cent of the total ALMi positive gap, followed by 3-5 years bucket (31.0 per cent) and 1-3 years bucket (26.9 per cent)



The movements in the bi-annual mean values of the ALMi positive gaps in various long-term buckets show that in the '3-5 years' bucket as well as in the 'beyond 5 years' bucket, the mean value of ALMi positive gap exhibited an increasing trend during the recent period. In '1-3 years' bucket, though the mean value of ALMi positive gap declined from the level reported during 2007-08, witnessed an increase during the first half of the 2010-11. The mean value of ALMi positive gap in the 'beyond five years' category is substantially higher in comparison with other long-term buckets during the period

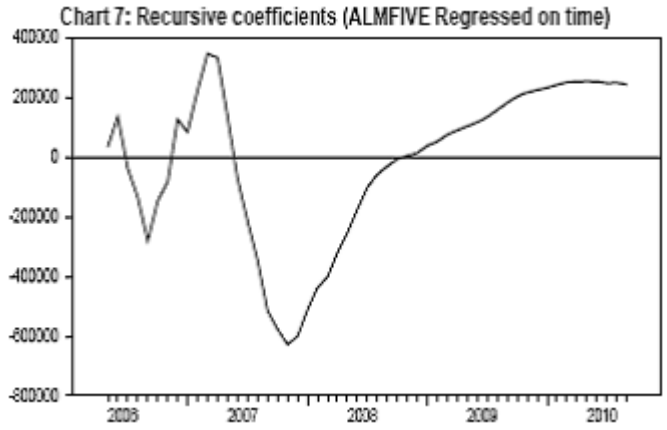
Table 2: Bi-Annual Mean values of ALMi Positive Gaps in Various Long-term Buckets

(Rs. crore)

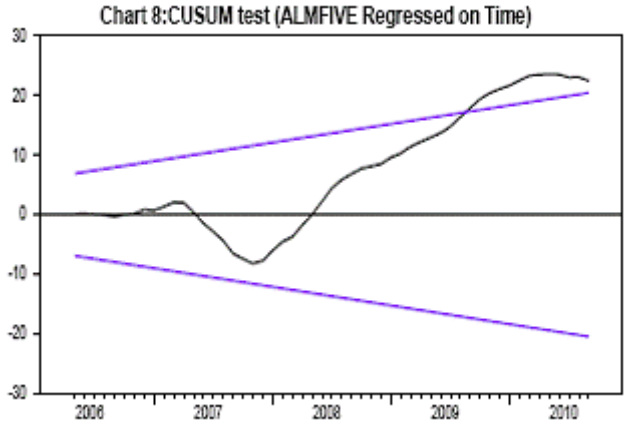
Time Period	1-3 Years	3-5 Years	Beyond 5 Years

April-September 2006-07	35,359	34,451	1,39,495
October-March 2006-07	59,752	52,386	1,65,550
April-September 2007-08	1,30,147	60,669	73,994
October-March 2007-08	1,56,696	55,242	80,791
April-September 2008-09	72,480	95,285	1,75,271
October-March 2008-09	99,606	1,04,663	1,68,442
April-September 2009-10	66,124	1,04,634	2,11,550
October-March 2009-10	55,513	1,32,805	2,42,811
April-September 2010-11	86,039	1,37,493	2,19,859

An analysis of the recursive coefficients of ALMi positive gap in the 'beyond five years' category shows that the estimates are not stabilising through the whole sample, instead witnessed an increasing trend with the progressive expansion of the sample size



Further, the CUSUM test statistic indicates that during the second half of 2009 there was a structural break in the ALMi positive gap in the 'more than five years' category. Thus, even though the overall ALMi positive gap has not grown into alarming heights, the increasing ALMi positive gap in the 'more than five years' category raises some concern



Section V: Persistence of ALMi Positive Gap in the Long-term Buckets

Absence of Mean Reversion

An analysis of persistence of the ALMi positive gap is carried out following the methodology developed by Marques (2004). Accordingly,

the persistence of ALMi positive gap is estimated on the basis of absence of mean reversion, that is

$$\gamma = 1 - \left(\frac{n}{T}\right)$$

Where n stands for the number of times the series crosses the mean during a time interval with T+1 observations. It is theoretically proved that for a symmetric zero mean white noise process E (γ) = 0.5. Thus, if the value of γ is close to 0.5, it means that there is no significant persistence. On the other hand, if the value of γ is significantly above 0.5 it signals the existence of significant persistence. Under the assumption of a symmetric white noise process (zero persistence), the statistic

$$\left[\frac{\gamma - 0.5}{\frac{0.5}{\sqrt{T}}}\right] \cap N(0,1)$$

is used for testing the statistical significance of the measure of persistence γ.

The value of γ for the ALMi positive gap during the entire sample period, *i.e.*, March 2006 to September 2010 for all SCBs is 0.47, which is slightly lower than 0.5. This indicates that there is no significant persistence in the ALMi positive gap during the period under study at the aggregate level.

The bucket-wise analysis of persistence shows that in none of the time buckets, the persistence is significant at five per cent level. However, at ten per cent level, it is persistent in the 'one to three years' time bucket

Growth Rates

An ALMi positive gap in the long-term buckets arises when the growth rate of long-term liabilities lags behind the growth rate of long-term assets. The compound growth rate of long-term liabilities for the period March 2006 to September 2010 at 1.305 per cent is marginally lower than the compound growth rate of long-term assets during the same period at 1.337 per cent. This means that on an average in every month, while the long-term assets are growing at 1.337 per cent, the growth in long-term liabilities is lagging behind by 0.032 per cent. Notably, the compound growth rate of long-term deposits at 1.306 per cent lagged behind the compound growth rate of long-term loans at 1.503 per cent

Table 4: Compound Growth rates of Long-term Assets and Liabilities

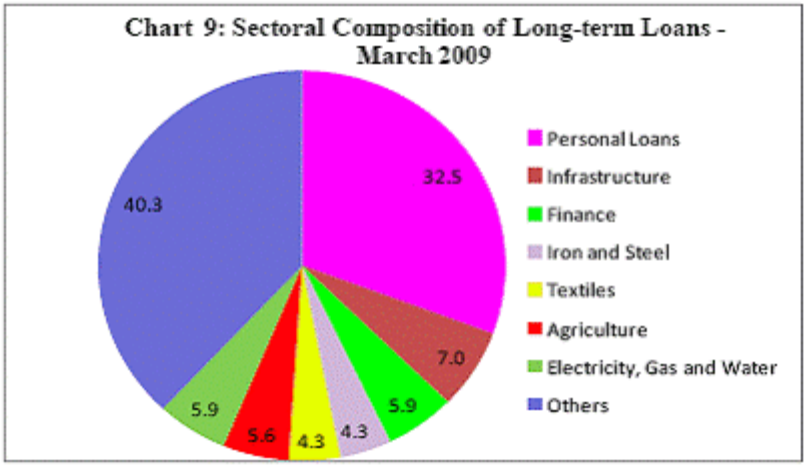
(Sample: March 2006 to September 2010)

Item	Compound Growth Rates
Long-term Assets	1.337
Long-term Liabilities	1.305
Long-term Loans	1.503
Long-term Investments	1.074
Long-term Deposits	1.306
Long-term Borrowings	1.289

Thus, it is clear that low growth observed in long-term deposits coupled with high growth observed in the long-terms loans segment is one of the important reasons for ALMi in the banking sector.

Sector-wise Analysis

An analysis of sector-wise composition of outstanding long-term loans was attempted to identify the major sectors contributing to ALMi in the banking sector. As is evident from Chart 9, 32.5 per cent of the outstanding long-term loans are personal loans. Infrastructure loans constituted 7.0 per cent of the total outstanding long-term loans as at end-March 2009. Other major components are finance, agriculture, iron and steel, and textiles



Thus, it is not only infrastructural loans, but also the increase in personal loans that (exclusive of amount outstanding against credit cards) can result in ALMi of the banking sector. Further, the percentage of long-term loans to total loans outstanding in each sector is provided

Table 5: Share of Long-term Loans in the Outstanding Loans of Various Sectors

(as at end-March 2009)

Per cent

Sector	Long-term Loans as a per cent of

	total Loans Outstanding
Total personal loans	83.4
of which: Housing	99.8
Education	83.6
Vehicles	68.8
Consumer Durables	50.3
Others	42.1
Non-conventional Energy	66.3
Tourism, Hotels and Restaurants	64.0
Infrastructure	52.4
Iron and Steel	44.3
Agriculture	34.3
Finance	33.8
Total Bank Credit	42.4

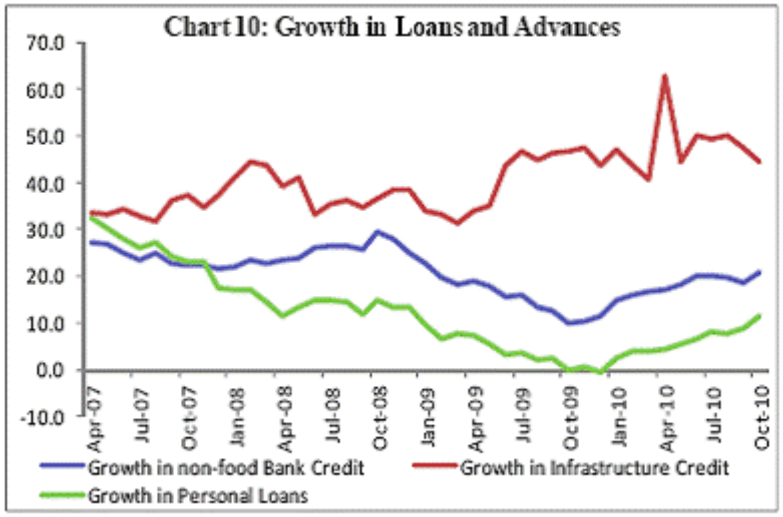
Source: Basic Statistical Returns, 2009.

Percentage of long-term loans in the total outstanding loans of the various sectors reveals that the housing sector has the highest per cent of long-term loans in the total loans outstanding at 99.8 per cent as at end-March 2009. Further, out of the education loans, 83.6 per cent and out of total vehicle loans 68.8 per cent are of long-term in nature. Accordingly, as at end-March 2009, 83.4 per cent of the total personal loans belonged

to the long-term category. Notably, 52.4 per cent of infrastructure loans are also long-term in nature.

An analysis of growth rates of total non-food credit, infrastructure credit and personal loans reveals that infrastructure credit witnessed higher growth as compared to growth in total non-food credit during the period March 2007 to October 2010. However, during the same period, the growth in personal loans was less than the growth in overall non-food credit

In sum, two loans segments, *viz.*, infrastructure loans and personal loans, are leading the long-term loans segment of the banking sector, thus, could be one of the contributing factors of the ALMi positive gap in the long-term buckets.



Responsiveness of the Banking Sector to Output Gap

The analysis of growth rates indicated that the divergent pattern of behavior of long-term deposits and long-term loans is one of the contributing factors of the ALMi positive gap in the long-term buckets.

In this context, it may be interesting to understand whether this divergent pattern of growth rates is a natural byproduct of the general pro-cyclical behavior of the banking sector as it is well established in the literature that banking sector behaves in a pro-cyclical way (Borio *et.al*, 2001). Thus, it may be important to examine whether the differences in responses of different components of assets and liabilities of the banking sector to the output gap is leading to ALMi positive gap. Output gap is calculated by decomposing the cyclical and trend component of log GDP using Hodrick-Prescott Filter.

The responsiveness of various components of assets and liabilities to output gap was established by estimating the following equation:

$$logdY = \alpha + \beta\ Output\ Gap + \sum_{k=1}^{n} \gamma_k Z_k + \varepsilon$$

Where Y represents the dependant variable and Z_k represents a set of K explanatory variables other than output gap. The coefficient of output gap shows the responsiveness of the dependant variable to the output gap (Alesina, *et.*al, 2005). The regression results are provided in. In each column represents an estimated equation.

In general, the responsiveness of deposits to output gap is lower as compared to the responsiveness of loans to output gap. This may be quite natural as in an upturn of economic growth, the demand for loans and advances from the real sector also goes up sharply owing to the widespread optimism.

Financing of Long-Term Loans and Maintenance of Profitability

This section examines whether financing long-term loans is a good option for maintaining profitability of the banking sector. Thus, an attempt has been made to understand the response of gross income of the banking sector with the increase in short and long-term loans. Panel data analysis was employed to understand the relationship between gross income of the banking sector and, short and long-term loans. The analysis was undertaken at the bank level, taking data for twenty nationalised banks for the period 2006 to 2010, as they account for a sizable portion of the total assets of the banking sector. Symbolically, the model used in the study can be written as:

$$g_{it} = c + \sum_{k=1}^{K} \beta_k X_{it}^k + \varepsilon_{it}$$

Where

$$\varepsilon_{it} = v_i + u_{it}$$

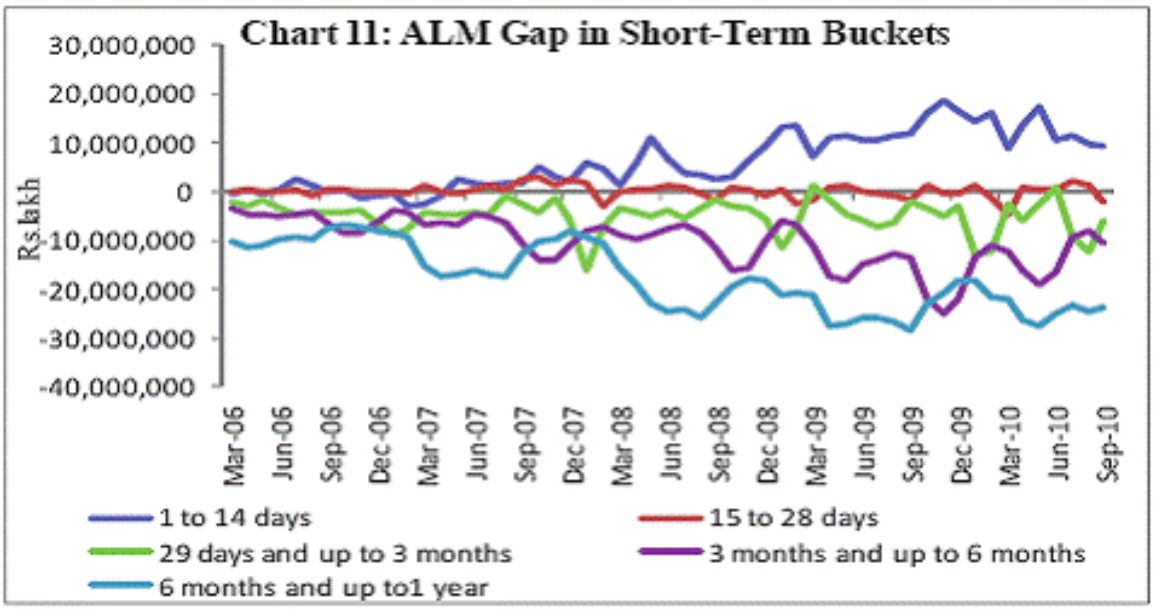
g_{it} is the gross income of bank i at time t, with $i = 1,\ldots,N$; $t = 1,\ldots, T$, c is a constant term, X_{it}s are k explanatory variables and ε_{it} is the disturbance with v_i the unobserved bank-specific effect and u_{it} the idiosyncratic error. As the Hausman test was significant at one per cent level, the results of fixed effects model are reported .

Section VII: Financing of ALMi Positive Gap in the Long-term buckets

After understanding the probable reasons for the ALMi positive gap, this section examines the financing pattern of ALMi positive gap of the Indian banking sector.

Analysis of Ratios

An analysis of ALMi gap (assets minus liabilities) in the short-term buckets shows that there exists a negative ALMi gap at the aggregate level indicating that the excess short-term liabilities are used to finance the ALMi positive gap in the long-term buckets. At the aggregate level, 13-15 per cent of total long-term assets are financed by short-term liabilities during the recent years. In other words, during the period Bucket-wise decomposition of the ALMi gap in the short-term buckets shows that highest negative ALMi gap exists in the time bucket 'six months and up to one year' followed by 'three months and up to six months' and '29 days and up to three months'. On an average, liabilities falling in the time bucket 'six months and up to one year' financed around 50 per cent of the ALMi positive gap in the long-term buckets. Similarly, the negative ALMi gap in the time buckets 'three months and up to six months' and '29 days and up to three months' financed around 20 per cent and 10 per cent, respectively of the ALMi positive gap in the long-term buckets



Section VIII: Policy Implications

It may not be prudent to eliminate ALMi positive gap in the long-term buckets as credit intermediation is essentially the transformation of maturity and liquidity. However, there is a need to limit the ALMi positive gap in the long-term buckets in the larger interest of financial stability. In this context, this section discusses certain policy implications of ALMi positive gap.

In terms of RBI's Asset Liability Management(ALM) guidelines dated October 24, 2007, Savings Bank and Current Deposits may be classified into volatile and core portions. Savings Bank (10 per cent) and Current (15 per cent) Deposits are generally withdrawable on demand and these proportions may be treated as volatile. While volatile portion can be placed in the Day 1, 2-7 days and 8-14 days time buckets, depending upon the experience and estimates of banks, core portion may be placed in '1- 3 years' bucket. The above classification of Savings Bank and Current Deposits is only a benchmark. Banks which are better equipped to estimate the behavioral pattern, roll-in and roll-out, embedded options, on the basis of past data / empirical studies could classify them in the appropriate buckets, *i.e.*, behavioural maturity instead of contractual maturity, subject to the approval of the Board / Asset Liability Committee (ALCO). Thus, as the banks gain experience and gain expertise in assessing behavioural patterns of deposits, larger portions of demand deposits may be placed in long term buckets, which will reduce the ALMi in the long-term buckets.

Further, with implementation of Basel III, banks will be required to raise higher equity capital and more perpetual capital instruments, which will be invariably placed in the last bucket of the Statement of Structural

liquidity (SSL). Thus, Asset Liability Mismatch is expected to reduce gradually as a result of increase in longer term liabilities.

The analysis has shown that the involvement of the banking sector in financing the long-term requirements of a growing economy is also an avenue for maintaining profitability. The ALMi created in this growth financing process may have to be managed with the help of the financial markets. On in other words, banking sector is able to run large ALMi positive gap in the long-term buckets on an on-going basis, only because of the short-term funds available from the financial markets. In a globalised environment, domestic financial markets are highly integrated with the global financial markets. Thus, any disturbance in any part of the world may also accentuate the liquidity risks of the domestic banking sector through the financial markets channel.

Developing adequate other avenues for long-term financing may also be important to reduce burden on banks from long-term financing such as infrastructure loans. Notably, there are already some initiatives to develop other funding sources for infrastructure loans. Some of the initiatives taken in this regard include allowing banks to issue long-term bonds with a minimum maturity of 5 years to the extent of their exposure of residual maturity of 'more than 5 years' to the infrastructure sector and the institution of infrastructure debt funds (IDFs). IDFs will be able to take the debt of infrastructure projects from the banks after completion of the projects and commencement of their commercial operations. Meanwhile, banks should also try to mobilise more long-term resources to expand their lending limit for long-term loans.

Section IX: Concluding Observations

The study analysed the asset liability mismatches in the Indian banking sector and tried to understand the possible reasons of it. The recent concerns with regard to the higher growth observed in the infrastructure loans prompted the study to undertake a detailed analysis of the ALMi of the Indian banking sector. The analysis showed that over a period of time the financing of long-term assets by short-term liabilities has increased in the Indian banking sector leading to ALMi positive gap. Thus, there may be a need to tailor long-term loans with long-term deposits on the one hand and to develop other avenues for the long-term funding needs of the economy such as infrastructure.

Reserve Bank of India (2010), 'Financial Stability Report'.

Government of India, Planning Commission, 'Faster, Sustainable and More Inclusive Growth – An Approach to the Twelfth Five Year Plan'

Assets and liabilities whose maturity is more than a year.

2.2 Efficiency of commercial banks

Commercial banks—assaulted by the pressures of globalization, competition from non-banking financial institutions, and volatile market dynamics—are constantly seeking new ways to add value to their services. The question"What drives performance?" is at the top of the minds of managers and policy makers alike, as the first step in understanding superior performance and, hence, striving for it. Substantial research efforts have gone into addressing this question, starting from the strategic level and going down to operational details. Efficiency measurements, of course, imply an a priori knowledge of the

inputs and outputs of a bank. For example, research on operational efficiency—the most widely studied efficiency issue—assumes as inputs the resources of a bank (e.g., personnel, technology, space etc) and as output some measurable form of the services provided (e.g., number of accounts serviced, or loans and other transactions processed etc). More recent innovative studies benchmark the effects of human resource management practices look into the efficiency of alternative delivery processes and investigate the effects of the environment. These efficiency benchmarks are constructive: not only they identify the most efficient unit—bank, branch or delivery process—but they also aid in explaining efficiency differences, see, e.g., How does *strategic benchmarking* relate to *efficiency benchmarks?* Simply put, strategic benchmarking identifies the links of the service-profit chain, while efficiency benchmarks focus on one link at a time, and ask which units in the benchmarking set have the most efficient link. For instance, efficiency benchmarks tell us how to do these things well. We hasten to add that the interplay between strategic and efficiency benchmarks has not been made formal. True that most questions on efficiency benchmarks are based on our understanding developed from strategic bench marks, but no scholarly work has been done in formally linking the two.

efficiency benchmarks have appeared at many different levels. Our study is focused on the network of branches. Branches remain the major delivery vehicle of banking services in Europe and the performance of the branch network is bound to have a significant impact on the bank as a whole.

2 Drivers of performance of bank branches: Some links in the chain. Today the focus has been on customer perceived quality, especially when dealing with service operations. The Bank Administration Institute project (Roth and van der Velde 1991)proclaimed customer-perceived quality as the driver of retail banking in the1990s. The service-profit chain of Heskett et al. (1994) clarifies the role of quality, and its inter-relationships with operational aspects of a service organization. The arguments in Heskett et al. proceed as follows: *(i)* profit and growth are stimulated primarily by customer loyalty; *(ii)* loyalty is a direct result of customer satisfaction; *(iii)* satisfaction is largely influenced by the

value of services provided to customers; *(v)* value is created by satisfied, loyal and productive employees; *(vi)* employee satisfaction results primarily from high-quality support services and policies that enable employees to deliver results to customers. While this service-profit chain is yet to be validated using empirical data, it does provide the framework for efficiency benchmarking models. We develop in this section three models that can be used to benchmark the three links of the service-profit chain captured in the C-SQ-P triad. The firstmodel deals predominantly with operations; the second deals with quality;the third deals with profitability.It is important to notethat there is not a unique way for building thesemodels. For example, when we talk about service quality (SQ) do we referto customer perceived quality, or quality as determined by some objectivemeasures (e.g., queue length and waiting time), or quality as perceived by thebranch's management (internal customer perceptions)? When we refer toprofitability do we measure the efficiency with which costs are transformedto profits, or do we consider revenue growth as well? Answers to thesequestions, and details on the inputs and outputs of each model, can bedetermined based on the

specific question at hand, and the availability ofdata. The next subsections describe in detail the three models—operationalefficiency, quality efficiency, and profitability efficiency—as used to carry theempirical work in Section 4. The models are based on DEA, see Appendix A,and each one is specified simply by determining its inputs and outputs.

2.1 Operational efficiency model

There is a vast literature on models for benchmarking operational efficiencyof bank branches. The literature, broadly speaking, adopts either a productionapproach or an intermediation approach. In the former case the branchis considered as a "factory" delivering services to its clients in the form oftransactions. Benchmarking models examine how well different branches

5combine their resources (personnel, computers, space etc) to support thelargest possible number of transactions. The intermediation approach considersvarious types of costs as the inputs, and those are combined to supportthe largest possible number of revenue generating accounts. Sherman andGold (1985) motivate most of the research on the production approach, andBerger, Leusner, and Mingo (1994) proposed the intermediation model. Themodel described here does not differ in any essential way from other productionmodels in the literature. See Zenios et al. (1995)nociteZZAS95 forfurther discussion of this model, its novelties and its use in practice.

Quality efficiency model

The importance of achieving high levels of quality has been discussed extensively in the literature, especially when dealing with the service

industry,importance for the Banking industry, in particular, has been documented the operational efficiency of a branch.

The importance of deliveringhigh volume of output of superior quality, although recognized, has notbeen incorporated in any benchmarking model in the literature. Branchesignoring service quality may report high volume of products and servicesoffered, as well as profits, but lose their advantage in the long-run due toeroding service quality. The DEA model of this section benchmarks branchesto identify those that utilize in the most efficient way their resources todeliver high quality to their clients.

Profitability efficiency model

the final link of the chain and address directly the issue ofprofitability efficiency. Substantial research has been done on this key issue,specifically for banks. Depending on the economic foundation assumed—cost minimization or profit maximization—alternative models have appearedin the literature, but they are all of the econometric type aiming at the calibration of cost or profit functions. These functions can then be used to assess whether a given bank (or branch) is operating at the most profitable(or least costly) point.

Conclusions

We have developed a general framework for combining strategic benchmarking with efficiency benchmarking. In particular, the service-profit chain has been cast as a cascade of efficiency benchmarking models. Several models—based on Data Envelopment Analysis (DEA)—have been developed in order to operationalize the framework, and their use has been illustrated using data for the branches of a commercial Bank. Empirical results indicate that superior insights can

be obtained by analyzing simultaneously operations, service quality and profitability simultaneously, than the information obtained from benchmarking studies of these three dimensions separately. Actual profits and target profits estimated by the profitability efficiency model. service quality efficiency. Specific insights have also been reported for the analysis of the branches of the commercial bank that provided the data, although these insights are not necessarily generalizable due to the unique nature of the Bank we deal with.

A Benchmarking of Decision Making Units using

Data Envelopment Analysis

Accounting and financial ratios are in those cases of little value, multiple outputs are produced using multiple inputs and the production transformations are neither known nor easily identified. DEA has been applied to the measurement of the operating efficiency of schools, hospitals, police districts, mines, the U.S. Airforce, and so on. Simply put, DEA is a modeling concept via which several decision making units are mapped on to a space of inputs *versus* outputs. It then uses linear programming formulations to fit the envelopment surface. Units on the envelopment surface are efficient. Inefficient units can be projected onto the efficient frontier either by reducing their inputs or augmenting their outputs, thus creating *virtual* units that are close to the real ones but lie on the efficient frontier. DEA models that project units on the efficient frontier by reducing resources are termed *input minimization* models, and those that augment outputs are termed *output maximization* models. A DEA benchmarking

2.3 Internal performance & appraising of banks condition

Presently, performance appraisal is one of the most active areas under discussion in theory and practice of bank management, from which various methods and theories have been put forward one after another. Face the complicated internal and external bank environment, how to make performance appraisal fair and impartial, meanwhile to avoid the unilateral pursuits for indexes and ignorance of total benefit, become a key to succeed in competition. In this paper, contingency theory is adopted in analyzing the performance appraisal system, and bank performance appraisal process is proposed based on environment analysis, and think that only in this way could structural differences in competitiveness be constructed accordingly

Measuring Bank Performance To understand how well a bank is doing, we need to start by looking at a bank's , the description of the sources of income and expenses that affect the bank's profitability. Bank's Income end-of-year 2005 income statement for all federally insured commercial banks appears in Table 1.Operating Income. *Operating income* is the income that comes from a bank's ongoing operations. Most of a bank's operating income is generated by interest on its assets particularly loans. As we see in Table 1, in 2005 interest income represented 68.3% of

commercial banks' operating income. Interest income fluctuates with the level of interest rates, and so its percentage of operating income is highest when interest rates are at peak levels. That is exactly what happened in 1981, when interest rates rose above 15%and interest income rose to 93% of total bank operating income. Noninterest income is generated partly by service charges on deposit accounts, but the bulk of it comes from the off-balance-sheet activities, which generate fees or trading profits for the bank. The importance of these off-balance-sheet

activities to bank profits has been growing in recent years. Whereas in 1980 other noninterest income from off-balance-sheet activities represented only 5% of operating income, it reached31.7%

in 2005.Operating Expenses. *Operating expenses* are the expenses incurred in conducting the bank's ongoing operations. An important component of a bank's operating expensesis the interest payments that it must make on its liabilities, particularly on its deposits. Just as interest income varies with the level of interest rates, so do interest expenses. Interest expenses as a percentage of total operating expenses reached a peak of 74% in1981, when interest rates were at their highest, and fell to 35.3% in 2005 as interestrates moved lower. Noninterest expenses include the costs of running a banking business: salaries for tellers and officers, rent on bank buildings, purchases of equipment such as desks and vaults, and servicing costs of equipment such as computers.

The final item listed under operating expenses is provisions for loan losses. When a bank has a bad debt or anticipates that a loan might become a bad debt in the future, it can write up the loss as a current expense in its income statement under the "provision

for loan losses" heading. Provisions for loan losses are directly related to loan loss reserves. When a bank wants to increase its loan loss reserves account by, say, $1 million, it does this by adding $1 million to its provisions for loan losses. Loan loss reservesrise when this is done because by increasing expenses when losses have not yet occurred, are being set aside to deal with the losses in the future. Provisions for loan losses have been a major element in fluctuating bank profits in recent years. The 1980s brought the third-world debt crisis; a sharp decline in energy prices in 1986, which caused substantial losses on loans to

energy producers; and a the real estate market. As a result, provisions for loan losses were particularly high in the late 1980s, reaching a peak of 13% of operating expenses in 1987. Since then, losses on loans have begun to subside, and in 2005, provisions for loan losses dropped to 5.7% of operating expenses. *Measuring Bank Performance* 35Share of Operating Amount Income or($ billions) Expenses (%)Operating Income

Interest income 434.6 68.3

Interest on loans 326.2 51.3

Interest on securities 67.2 10.6

Other interest 41.2 6.5

Noninterest income 201.4 31.7

Service charges on deposit accounts 33.8 5.3

Other noninterest income 167.6 _____ 26.4 _____

Total operating income 636 100.0

Operating Expenses

Interest expenses 165.1 35.3

Interest on deposits 106.1 22.7

Interest on fed funds and repos 20.4 4.4

Other 38.6 8.2

Noninterest expenses 276.2 59.0

Salaries and employee benefits 122.9 26.3

Premises and equipment 34.9 7.5

Other 118.4 25.3

Provisions for loan losses _2_6_._6_ __5_._7_

Total operating expense 467.9 100.0

Net Operating Income 168.1

Gains (losses) on securities 20.16

Extraordinary items, net 0.24

Income taxes 254

Net Income 114.2

Source: www.fdic.gov/banks/statistical/statistics/0106/cbr

TABLE 1 Income Statement for All Federally Insured Commercial Banks, 2005

Income. Subtracting the $467.9 billion in operating expenses from the $636 billion of operating income in 2005 yields net operating income of $168.1 billion. Net operating income is closely watched by bank managers, bank shareholders, and bank regulators because it indicates how well the bank is doing on an ongoing basis. Two items, gains (or losses) on securities sold by banks (2$157 million) and net extraordinary items, which are events or transactions that are both unusual and infrequent(insignificant), are added to the $168.1 billion net operating income figure to get the $168.2 billion figure for net income before taxes. Net income before taxes is more commonly referred to as profits

before taxes. Subtracting the $54 billion of income taxes then results in $114.2 billion of net income. Net income, more commonly as profits after taxes, is the figure that tells us most directly how well the bank is doing because it is the amount that the bank has available to keep as retained earnings or to pay out to stockholders as dividends of Bank Performance Although net income gives us an idea of how well a bank is doing, it suffers from one

major drawback: It does not adjust for the bank's size, thus making it hard to compare how well one bank is doing relative to another. A basic measure of bank profitability that corrects for the size of the bank is the return on assets (*ROA*), mentioned earlier in the chapter, which divides the net income of the bank by the amount of its assets. a useful measure of how well a bank manager is doing on the job because it indicate show well a bank's assets are being used to generate profits. At the beginning of 2006,the assets of all federally insured commercial banks amounted to $9,040 billion, so

using the $114.2 billion net income figure from Table 1 gives us a return on assets of:*ROA*5 50.0126 5 1.26%

Although *ROA* provides useful information about bank profitability, we have already seen that it is not what the bank's owners (equity holders) care about most. They are more concerned about how much the bank is earning on their equity investment,

an amount that is measured by the return on equity (*ROE*), the net income per dollar of equity capital. At the beginning of 2006, equity capital for all federally insured was $912.7 billion, so the *ROE* was therefore:5 0.1251 5 12.51%Another commonly watched measure of

bank performance is called the *net interest-margin* (*NIM*), the difference between interest income and interest expenses as a percentage of total assets: As we have seen earlier in the chapter, one of a bank's primary intermediation to issue liabilities and use the proceeds to purchase income-earning assets. If a bank manager has done a good job of asset and liability management such that the bank earns substantial income on its assets and has low costs on its liabilities, profits will . How well a bank manages its assets and liabilities is affected by the spread between *NIM* 5

Measuring Bank Performance

Return on Return on Net Interest

Year Assets (*ROA*) (%) Equity (*ROE*) (%) Margin (*NIM*) (%)

1980 0.77 13.38 3.33

1981 0.79 13.68 3.31

1982 0.73 12.55 3.39

1983 0.68 11.60 3.34

1984 0.66 11.04 3.47

1985 0.72 11.67 3.62

1986 0.64 10.30 3.48

1987 0.09 1.54 3.40

1988 0.82 13.74 3.57

1989 0.50 7.92 3.58

1990 0.49 7.81 3.50

1991 0.53 8.25 3.60

1992 0.94 13.86 3.89

1993 1.23 16.30 3.97

1994 1.20 15.00 3.95

1995 1.17 14.66 4.29

1996 1.19 14.45 4.27

1997 1.23 14.69 4.21

1998 1.18 13.30 3.47

1999 1.31 15.31 4.07

2000 1.19 14.02 3.95

2001 1.13 12.45 3.28

2002 1.27 13.91 3.34

2003 1.35 14.81 3.16

2004 1.24 12.25 2.97

2005 1.26 12.51 2.98

Source: www2.fdic.gov/qbp

TABLE 2 Meaures of Bank Performance, 1980–2005

banks remained fairly stable in the 1980s, both the *ROA* and *ROE* measures of bank performance move closely together and indicate that

from the early to the late 1980s, there was a sharp decline in bank profitability. The rightmost column, net interest margin, indicates that the spread between interest income and interest expenses remained fairly stable throughout the 1980s and even improved in the late 1980s and early 1990s, which should have helped bank profits. The *NIM* measure thus tells us that the poor bank performance in the late 1980s was not the result of interest-rate movements. The explanation of the weak performance of commercial banks in the late 1980s is that they had made many risky loans in the early 1980s that turned sour. The resulting huge increase in loan loss provisions in that period directly decreased net income and hence caused the fall in *ROA* and *ROE*. (Why bank profitability deteriorated and the consequences for the economy are discussed in Chapters 9 and 11.)Beginning in 1992, bank performance improved substantially. The return on equity rose to nearly 14% in 1992 and remained above 12% in the 1993–2005 period. Similarly, the return on assets rose from the 0.5% level in the 1990–1991 period to around the 1.2% level in 1993–2005. The performance measures in Table 2 suggest that the banking industry has returned to health

2.4 Non-performing asset (NPA)

It is defined as a credit facility in respect of which the interest and/or installment of principal has remained 'past due' for a specified period of time.

Identification

NPA is a classification used by financial institutions that refer to loans that are in jeopardy of default. Once the borrower has failed to make interest or principal payments for 90 days the loan is considered to be a

non-performing asset. Non-performing assets are problematic for financial institutions since they depend on interest payments for income. Troublesome pressure from the economy can lead to a sharp increase in non performing loans and often results in massive write-downs.

With a view to moving towards international best practices and to ensure greater transparency, it has been decided to adopt the '90 days' overdue' norm for identification of NPA, from the year ending March 31, 2004. Accordingly, with effect from March 31, 2004, a non-performing asset (NPA) shall be a loan or an advance where;

- Interest and/or installment of principal remain overdue for a period of more than 90 days in respect of a term loan,
- The account remains 'out of order' for a period of more than 90 days, in respect of an Cash Credit (OD/CC),
- The bill remains overdue for a period of more than 90 days in the case of bills purchased and discounted,
- Interest and/or installment of principal remains overdue for two harvest seasons but for a period not exceeding two half years in the case of an advance granted for agricultural purposes, and
- Any amount to be received remains overdue for a period of more than 90 days in respect of other accounts.

Classification

Banks are required to classify non-performing assets further into the following three categories based on the period for which the asset has remained non-performing and the realisability of the dues:

1. Sub-standard assets: a sub standard asset is one which has been classified as NPA for a period not exceeding 12 months.
2. Doubtful Assets: a doubtful asset is one which has remained NPA for a period exceeding 12 months.
3. Loss assets: where loss has been identified by the bank, internal or external auditor or central bank inspectors but the amount has not been written off, wholly or partly.

Sub-standard asset is the asset in which bank have to maintain 15% of its reserves. All those assets which are considered as non-performing for period of more than 12 months are called as Doubtful Assets. All those assets which cannot be recovered are called as Loss Assets.

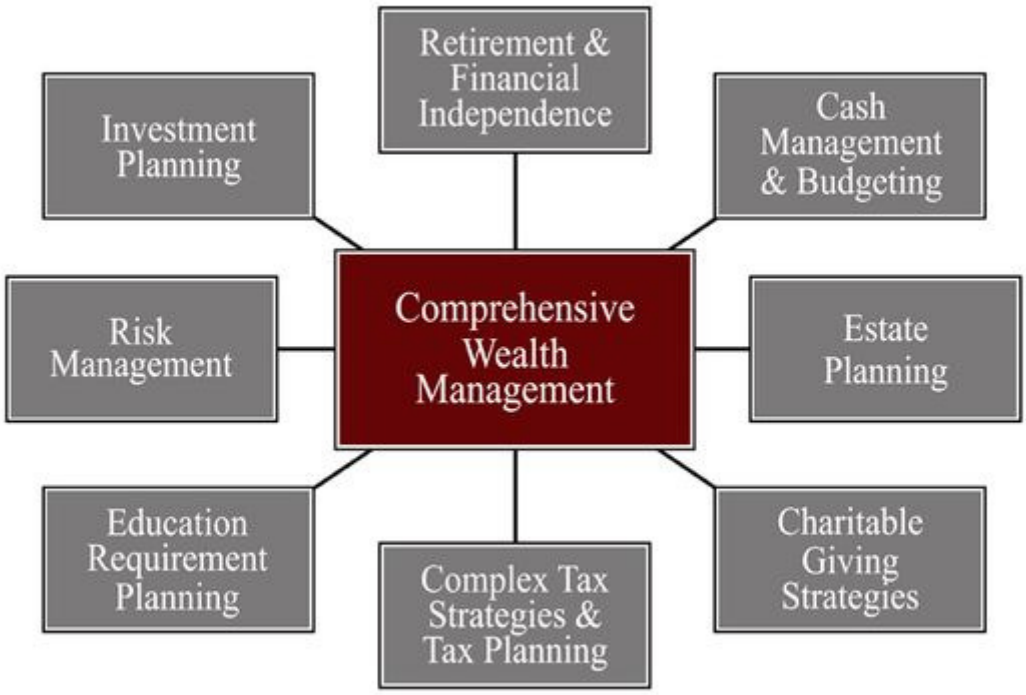
2.5 MANAGEMENT OF CAPITAL

At Capital Management, LLC, our goal is to simplify your financial life and protect your wealth for future generations. We believe that the best way to do that is by surrounding you with a team of professionals, working together in a coordinated effort to help you achieve your goals. We integrate all of your financial needs into a comprehensive wealth management plan.

IT INCLUDES the following areas:

- Comprehensive financial plans.
- Asset allocation strategies built around your risk tolerance.
- Investment management based on your individual goals.

- Succession plans and exit strategies for your business or private investments.
- Insurance solutions that protect against risk.
- Estate plans to preserve your legacy.
- Tax management.
- Services to assist our senior clients with the monitoring of their finances.



UNIT 3

3.1 Risks in commercial banking:

Banks have been making great advancements in terms of technology, quality, as well as stability such that they have started to expand and diversify at a rapid rate. However, such expansion brings these banks into the context of risk especially at the onset of increasing Globalization and Liberalization. In banks and other financial institutions, risk plays a major part in the earnings of a bank. The higher the risk, the higher the return, hence, it is essential to maintain a parity between risk and return. Hence, management of Financial risk incorporating a set systematic and professional methods especially those defined by the Basel II becomes an essential requirement of banks. The more risk averse a bank is, the safer is their Capital base.

Risk Ratio

Risk ratio would be defined as the ratio of the probability of an issue occurring as against to an issue not occurring

$$RR = \frac{p_{\text{issue occurring}}}{p_{\text{issue not occurring}}}$$

Total Impact of Risk

Total impact of the risk (TIR) occurring would entail as the impact (I), the risk would cause multiplied by the Risk Ratio. It is essentially how much a bank would be impacted in the chance that the risk did occur. This essentially helps ascertain what is the total value of their investments that may be subject to risk and how it would impact them

$$TIR = I \times RR$$

Risk and Reward

The ratio is in simplest terms calculated by dividing the amount of profit the trader expects to have made when the position is closed (i.e. the reward) by the amount he or she stands to lose if the price moves in the unexpected direction (i.e. the risk).

To calculate the total risk ensuing with the total expected return, a favored method is the use of variance or standard deviation. The larger the variance, the larger the standard deviation, the more uncertain the outcome. The standard deviation, E is a measure of average difference between the expected value and the actual value of a random variable (or unseen state of nature).

$$E = \sqrt{\sum P(n - X)^2}$$

Here, n stands for a possible outcome, x stands for the expected outcome and P is the probability (or likelihood) of the difference between n and X occurring

Types of Risk

Types of Risks in Banking

The term *Risk* and the types associated to it would refer to mean financial risk or uncertainty of financial loss. The RBI guidelines issued in Oct. 1999 has identified and categorized the majority of risk into three major categories assumed to be encountered by banks. These belong to the clusters: Credit Market & Operational Risk

The type of risks can be fundamentally subdivided in primarily of two types, i.e. Financial and Non-Financial Risk. Financial risks would

involve all those aspects which deal mainly with financial aspects of the bank. These can be further subdivided into Credit Risk and Market Risk. Both Credit and Market Risk may be further subdivided.

Non-Financial risks would entail all the risk faced by the bank in its regular workings, i.e., operational risk

1.Credit Risk:

Credit risk refers to the risk that a borrower will default on any type of debt by failing to make payments which it is obligated to do The risk is primarily that of the lender and include lost principal and interest, disruption to cash flows, and increased collection costs. The loss may be complete or partial and can arise in a number of circumstances. For example:

- A consumer may fail to make a payment due on a mortgage loan, credit card, line of credit, or other loan
- A company is unable to repay amounts secured by a fixed or floating charge over the assets of the company
- A business or consumer does not pay a trade invoice when due
- A business does not pay an employee's earned wages when due
- A business or government bond issuer does not make a payment on a coupon or principal payment when due
- An insolvent insurance company does not pay a policy obligation
- An insolvent bank won't return funds to a depositor
- A government grants bankruptcy protection to an insolvent consumer or business

To reduce the lender's credit risk, the lender may perform a credit check on the prospective borrower, may require the borrower to take out appropriate insurance, such as mortgage insurance or seek security or guarantees of third parties, besides other possible strategies. In general,

the higher the risk, the higher will be the interest rate that the debtor will be asked to pay on the debt.

2. Market risk is the risk of losses in positions arising from movements in market prices. Some market risks include:

- *Equity risk*, the risk that stock or stock indexes (e.g. Euro Stoxx 50, etc.) prices and/or their implied volatility will change.
- *Interest rate risk*, the risk that interest rates (e.g. Libor, Euribor, etc.) and/or their implied volatility will change.
- *Currency risk*, the risk that foreign exchange rates (e.g. EUR/USD, EUR/GBP, etc.) and/or their implied volatility will change.
- *Commodity risk*, the risk that commodity prices (e.g. corn, copper, crude oil, etc.) and/or their implied volatility will change.

Measuring the potential loss amount due to market risk

As with other forms of risk, the potential loss amount due to market risk may be measured in a number of ways or conventions. Traditionally, one convention is to use Value at Risk. The conventions of using Value at risk is well established and accepted in the short-term risk management practice.

However, it contains a number of limiting assumptions that constrain its accuracy. The first assumption is that the composition of the portfolio measured remains unchanged over the specified period. Over short time horizons, this limiting assumption is often regarded as reasonable. However, over longer time horizons, many of the positions in the portfolio may have been changed. The Value at Risk of the unchanged portfolio is no longer relevant.

The Variance Covariance and Historical Simulation approach to calculating Value at Risk also assumes that historical correlations are stable and will not change in the future or breakdown under times of market stress.

In addition, care has to be taken regarding the intervening cash flow, embedded options, changes in floating rate interest rates of the financial positions in the portfolio. They cannot be ignored if their impact can be large.

Risk management

All businesses take risks based on two factors: the probability an adverse circumstance will come about and the cost of such adverse circumstance.

3. Operational Risk

An operational risk is defined as a risk incurred by an organisation's internal activities. Operational risk is the broad discipline focusing on the risks arising from the people, systems and processes through which a company operates. It can also include other classes of risk, such as fraud, legal risks, physical or environmental risks.A widely used definition of operational risk is the one contained in the Basel II [1] regulations. This definition states that operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events.

Operational risk management differs from other types of risk, because it is not used to generate profit (e.g. credit risk is exploited by lending institutions to create profit, market risk is exploited by traders and fund managers, and insurance risk is exploited by insurers). They all however manage operational risk to keep losses within their risk appetite - the amount of risk they are prepared to accept in pursuit of their objectives. What this means in practical terms is that organizations accept that their

people, processes and systems are imperfect, and that losses will arise from errors and ineffective operations. The size of the loss they are prepared to accept, because the cost of correcting the errors or improving the systems is disproportionate to the benefit they will receive, determines their appetite for operational risk.

3.2 Interest rate risk

Interest rate risk is that which exists in an interest-bearing asset, such as a loan or a bond, due to the possibility of a change in the asset's value resulting from the variability of interest rates. Interest rate risk management has become very important, and assorted instruments have been developed to deal with interest rate risk. This article examines the management of interest rate risk with the use of various interest rate derivative instruments. so it can be said that Interest rate risk is the risk that arises for bond owners from fluctuating interest rates. How much interest rate risk a bond has depends on how sensitive its price is to interest rate changes in the market. The sensitivity depends on two things, the bond's time to maturity, and the coupon rate of the bond. The assessment of interest rate risk is a very large topic at banks, thrifts, saving and loans, credit unions, and other finance companies, and among their regulators. The widely deployed CAMELS rating system assesses a financial institution's:

(C)apital adequacy,

(A)ssets,

(M)anagement Capability,

(E)arnings,

(L)iquidity, and

(S)ensitivity to market risk.

A large portion of the (S)ensitivity in CAMELS is *interest rate risk*. Much of what is known about assessing interest rate risk has been developed by the interaction of financial institutions with their regulators since the 1990s. Interest rate risk is unquestionably the largest part of the (S)ensitivity analysis in the CAMELS system for most banking institutions. When a bank receives a bad CAMELS rating equity holders, bond holders and creditors are at risk of loss, senior managers can lose their jobs and the firms are put on the FDIC problem bank list.

In addition to being subject to the CAMELS system, the largest banks are often subject to prescribed stress testing. The assessment of interest rate risk is typically informed by some type of stress testing.

Why Interest Rate Risk Should Not Be Ignored
As with any risk management assessment, there is always the option to do nothing, and that is what many people do. However, in circumstances of unpredictability, sometimes not hedging is disastrous. Yes, there is a cost to hedging, but what is the cost of a major move in the wrong direction?

One need only look to Orange County, California, in 1994 to see evidence of the pitfalls of ignoring the daunting threat of interest rate risk. In a nutshell, County Treasurer Robert Citron borrowed money at lower short-term rates and lent money at higher long-term rates. The strategy was great - short-term rates fell and the normal yield curve was maintained - but, when the curve began to turn and approach inverted yield curve status, things got ugly. Losses to Orange County and the almost 200 public entities for which Citron managed money were estimated at $1.6 billion and resulted in the bankruptcy of the

municipality - a hefty price to pay for ignoring interest rate risk. Luckily, those who do want to hedge their investments against interest rate risk have many products to choose from. These will be examined in turn below.

Investment Products

Forwards

A forward contract is the most basic interest rate management product. The idea is simple, and many other products discussed in this article are based on this idea of an agreement today for an exchange of something at a specific future date.

- *Forward Rate Agreements (FRAs)*
  An FRA is based on the idea of a forward contract, where the determinant of gain or loss is an interest rate. Under this agreement, one party pays a fixed interest rate and receives a floating interest rate equal to a reference rate. The actual payments are calculated based upon a notional principal amount and paid at intervals determined by the parties. Only a net payment is made - the loser pays the winner, so to speak. FRAs are always settled in cash.

  FRA users are typically borrowers or lenders with a single future date on which they are exposed to interest rate risk. A series of FRAs is similar to a swap (discussed below); however, in a swap all payments are at the same rate. Each FRA in a series would be priced at different rates, unless the term structure is flat.

Futures

A future contract is similar to a forward, but provides the counterparties with less risk than a forward contract, namely a lessening of default and liquidity risk, due to the inclusion of an intermediary.

Swaps

Swap is an exchange. More specifically, an interest rate swap looks a lot like a combination of FRAs and involves an agreement between counterparties to exchange sets of future cash flows. The most common type of interest rate swap is plain vanilla swap, which involves one party paying a fixed interest rate and receiving a floating rate and the other party paying a floating rate and receiving a fixed rate.

Options

Interest rate management options are option contracts whose underlying security is a debt obligation. These instruments are useful in protecting the parties involved in a floating rate loan, such as adjustable rate mortgages (ARMs). A grouping of interest rate calls is referred to as an interest rate cap; a combination of interest rate puts is referred to as an interest rate floor. In general, a cap is like a call and a floor is like a put.

- *Swaptions*
  A *Swaptions*, or swap option, is simply an option to enter into a swap.

- Embedded options
  Many investors encounter interest management derivative instruments via Embedded options. If you have ever bought a bond with a call provision, you too are in the club. The issuer of your callable bond is insuring that if interest rates decline, they can call in your bond and issue new bonds with a lower coupon

- *Caps*
  A cap, also called a ceiling, is a call option on an interest rate. An example of its application would be a borrower going long, or paying a premium to buy a cap and receiving cash payments from the cap seller (short)when the reference interest rate exceeds the strike rate of the cap. The payments are designed to offset interest rate increases on a floating-rate loan.

If the actual interest rate exceeds the strike rate, the seller pays the difference between the strike and the interest rate multiplied by the notional principal. This option will "cap", or place an upper limit, on the interest expense of the holder.

Floors

Floors is the mirror image of the cap. The interest rate floor, like the cap, is actually a series of component options, except that they are put options and the series components are referred to as "floorlets". Whoever is long the floor is paid upon maturity of the floorlets if the reference rate is below the strike price of the floor. A lender uses this to protect against falling rates on an outstanding floating-rate loan.

- *Collars*

  Protective Collars can also be used in the management of interest rate risk. Collaring is accomplished by simultaneously buying a cap and selling a floor (or vice versa), just like a collar protects an investor who is long a stock. A zero cost collar can also be established in order to lower the cost of hedging, but this lessens the potential profit that would be enjoyed by a movement in interest rates in your favor, as you have placed a ceiling on your potential profit.
- Conclusion

  These products all provide ways to hedge interest rate risk, with different products being appropriate for different scenarios. There is, however, no free lunch. With any of these alternatives, one gives up something - either money Calculating interest rate risk

There are a number of standard calculations for measuring the impact of changing interest rates on a portfolio consisting of various assets and liabilities. The most common techniques include:

1. Marking to market, calculating the net market value of the assets and liabilities, sometimes called the "market value of portfolio equity"
2. Stress testing this market value by shifting the yield curve in a specific way.
3. Calculating the value at risk of the portfolio
4. Calculating the multi period cash flow or financial accrual income and expense for N periods forward in a deterministic set of future yield curves
5. Doing step 4 with random yield curve movements and measuring the probability distribution of cash flows and financial accrual income over time.
6. Measuring the mismatch of the interest sensitivity gaps of assets and liabilities, by classifying each asset and liability by the timing of interest rate reset or maturity, whichever comes first.
7. Analyzing duration

3.3 Liquidity risk

All firms, particularly financial institutions, require access to borrowed funds to carry out their operations, from paying their near-term obligations to making long-term strategic investments. An inability to acquire such funding within a reasonable timeframe could place a firm at risk, as graphically shown by the recent demise of certain investment banks and other financial institutions. While such risks are endemic to financial institutions, increased financial globalization, the development of new financial instruments, and changing macroeconomic conditions have led to a renewed emphasis on the measurement and management of liquidity risk. In particular, the Basel Committee on Banking Supervision (BCBS) recently reviewed and expanded its survey of sound practices for liquidity risk management by both banking organizations

and their supervisors. This *Economic Letter* reviews and highlights key elements of liquidity risk measurement and management

Liquidity risk is the current and prospective risk to earnings or capital arising from a bank's inability to meet its obligations when they come due without incurring unacceptable losses. Liquidity risk includes the inability to manage unplanned decreases or changes in funding sources. Liquidity risk also arises from the failure to recognize or address changes in market conditions that affect the ability to liquidate assets quickly and with minimal loss in value.so it can be said that Liquidity risk is the risk that a given security or asset cannot be traded quickly enough in the market to prevent a loss (or make the required profit)

Definition

Liquidity is generally defined as the ability of a financial firm to meet its debt obligations without incurring unacceptably large losses. An example is a firm preferring to repay its outstanding one-month commercial paper obligations by issuing new commercial paper instead of by selling assets. Thus, "funding liquidity risk" is the risk that a firm will not be able to meet its current and future cash flow and collateral needs, both expected and unexpected, without materially affecting its daily operations or overall financial condition. Financial firms are especially sensitive to funding liquidity risk since debt maturity transformation (for example, funding longer-term loans or asset purchases with shorter-term deposits or debt obligations) is one of their key business areas.

In response to this well-known risk, financial firms establish and maintain liquidity management systems to assess their prospective

funding needs and ensure the funds are available at appropriate times. A key element of these systems is monitoring and assessing the firm's current and future debt obligations and planning for any unexpected funding needs, regardless of whether they arise from firm-specific factors, such as a drop in the firm's collateral value, or from systemic (economy-wide) factors. To balance its funding demand, both expected and unexpected, with available supply, a firm must also incorporate its costs and profitability targets.

Financial firms can meet their liquidity needs through several sources ranging from existing assets to debt obligations and equity. The most readily available is operating cash flows arising from interest and principal payments from existing assets, service fees, and the receipt of funds from various transactions. For example, active management of the timing and maturity of firms' asset and liability cash flows can enhance liquidity. In addition, firms may sell assets that are near-term cash equivalents, such as government securities. This is typically done on a contingency basis to meet unexpected cash needs, and such liquidity reserves must be actively managed, since the assets must be unencumbered (that is, not pledged as collateral for any other transaction) and easy to liquidate under potentially adverse market conditions.

An important alternative to an outright asset sale is entry into a repurchase agreement with a willing counterparty. In such a "repo" transaction, the owner of an asset sells it to the buyer, but also enters into a separate agreement to buy the asset back at a specified time for a set price. From a funding perspective, the repo provides the seller with a short-term loan that is collaterized using the asset in question. The

Federal Reserve's discount window is a venue for such repos based on specific asset types as collateral. Access to the discount window has historically been limited to depository institutions. However, in light of the ongoing liquidity challenges in the financial markets, the Federal Reserve has instituted a variety of additional collateralized lending facilities, such as the Term Auction Facility and the Primary Dealer Credit Facility, that extend its ability to provide liquidity to a broader set of financial institutions based on a broader set of collateral types for a greater variety of maturities.

Asset securitization is a form of liquidity management carried out using asset sales, but it is different from the use of liquidity reserves. Securitization refers to the transformation of portfolios of on-balance-sheet loans, such as mortgages or credit card debt, into securities that are sold to outside investors. Depending on the business model, securitization proceeds can be used for ongoing funding of a business line or as a way to meet future funding needs. For example, a firm may view the potential securitization of a pool of mortgages as a method for funding its origination of new mortgages or as a way to raise funds for the firm more generally. The sharp drop in investor demand for asset-backed securities since August 2007 has caused this potential source of funding to become more scarce and costly.

The next funding source is the issuance of debt obligations, which range from short-term repos or commercial paper to longer-term bank borrowing or bond issuance and which include access to central bank liquidity facilities. This funding source is highly dependent on the firm's perceived financial condition. Hence, a firm's public credit standing, whether measured via a credit rating or the credit default swap market, is

a key component of the firm's liquidity management system. Finally, the issuance of equity or related capital instruments is an established funding source, but it is much more costly and longer-term than the others discussed.

Financial market events since mid-2007, particularly the contraction of liquidity in certain structured product and interbank markets, have strained the liquidity management systems of all financial firms. According to a BCBS survey of recent liquidity practices (BCBS 2008a), many financial firms have discovered that their liquidity management systems did not adequately account for the aggregate effect of differing liquidity risks across individual products and business lines. In response, the BCBS issued expanded guidance on liquidity management (BCBS 2008b) that focuses on several topics, particularly internal governance issues, liquidity measurement issues, and supervisory response.

Quantity of Liquidity Risk Indicators

The following indicators, as appropriate, should be used when assessing the quantity of liquidity risk. It is not necessary to exhibit every characteristic, or a majority of the characteristic, to be accorded the rating.

Low: Funding sources are abundant and provide a competitive cost advantage. Funding is widely diversified. There is little or no reliance on wholesale funding sources or other credit-sensitive funds providers. Market alternatives exceed demand for liquidity, with no adverse changes expected.

Capacity to augment liquidity through asset sales and/or securitization is strong and the Bank has an established record in accessing these markets.

The volume of wholesale liabilities with embedded options is low. The Bank is not vulnerable to funding difficulties should a material adverse change occur in market perception.

Support provided by the parent company is strong.

Earnings and capital exposure from the liquidity risk profile is negligible.

Moderate

Sufficient funding sources are available which provide cost-effective liquidity.

Funding is generally diversified, with a few providers that may share common objectives and economic influences, but no significant concentrations. A modest reliance on wholesale funding may be evident. Market alternatives are available to meet demand for liquidity at reasonable terms, costs, and tenors. The liquidity position is not expected to deteriorate in the near term. The Bank has the potential capacity to augment liquidity through asset sales and/or securitization, but has little experience in accessing these markets. Some wholesale funds contain embedded options, but potential impact is not significant.

The Bank is not excessively vulnerable to funding difficulties should a material adverse change occur in market perception.

The parent company provides adequate support. Earnings or capital exposure from the liquidity risk profile is manageable.

High Funding sources and liability structures suggest current or potential difficulty in maintaining log-term and cost-effective liquidity. Borrowing sources may be concentrated in a few providers or providers with common investment objectives or economic influences. A significant reliance on wholesale funds is evident. Liquidity needs are increasing, but sources of market alternatives at reasonable terms, costs, and tenors are declining. The Bank exhibits little capacity or potential to augment liquidity through asset sales or securitization. A lack of experience accessing these markets or unfavorable reputation may make this option questionable. Material volumes of wholesale funds contain embedded options. The potential impact is significant. The Bank's liquidity profile makes it vulnerable to funding difficulties should a material adverse change occur. There is little or unknown support provided by the parent company. Potential exposure to loss of earnings or capital due to high liability costs or unplanned asset reduction may be substantial.

Quality of Liquidity Risk Management

The following indicators, as appropriate, should be used when assessing the quality of liquidity risk management.

Strong: Board approved policies effectively communicate guidelines for liquidity risk management and designate responsibility. The liquidity risk management process is effective in identifying, measuring, monitoring, and controlling liquidity risk. Reflects a sound culture that has proven effective over time. Management fully understands all

aspects of liquidity risk. Management anticipates and responds well to changing market conditions. The contingency funding plan is well-developed, effective and useful. The plan incorporates reasonable assumptions, scenarios, and crisis management planning, and is tailored to the needs of the institution. Management information systems focus on significant issues and produce timely, accurate, complete, and meaningful information to enable effective management of liquidity. Internal audit coverage is comprehensive and effective. The scope and frequency are reasonable.

Satisfactory: Board approved policies adequately communicate guidance for liquidity risk management and assign responsibility. Minor weaknesses may be present. The liquidity risk management process is generally effective in identifying, measuring, monitoring, and controlling liquidity. There may be minor weaknesses given the complexity of the risks undertaken, but these are easily corrected. Management reasonably understands the key aspects of liquidity risk. Management adequately responds to changes in market conditions. The contingency funding plan is adequate. The plan is current, reasonably addresses most relevant issues, and contains an adequate level of detail including multiple scenario analysis. The plan may require minor refinement.

Management information systems adequately capture concentrations and rollover risk, and are timely, accurate, and complete. Recommendations are minor and do not impact effectiveness. Internal audit is satisfactory. Any weaknesses are minor and do not impair effectiveness or reliance on audit findings

Weak: Board approved policies are inadequate or incomplete. Policy is deficient in one or more material respects. The liquidity risk management process is ineffective in identifying, measuring, monitoring, and controlling liquidity risk. This may be true in one or more material respects, given the complexity of the risks undertaken. Management does not fully understand, or chooses to ignore, key aspects of liquidity risk. Management does not anticipate or take timely or appropriate actions in response to changes in market conditions. The contingency funding plan is inadequate or nonexistent. Plan may exist, but is not tailored to the institution, is not realistic, or is not properly implemented. The plan may not consider cost-effectiveness or availability of funds in a non-investment grade or CAMEL "3" environment. Management information systems are deficient. Material information may be lacking or inaccurate, and reports are not meaningful. Internal audit coverage is nonexistent or ineffective due to one or more material deficiencies.

Types of liquidity risk

Market liquidity – An asset cannot be sold due to lack of liquidity in the market – essentially a sub-set of market risk. This can be accounted for by:

- Widening bid/offer spread
- Making explicit liquidity reserves
- Lengthening holding period

Funding liquidity – Risk that liabilities:

- Cannot be met when they fall due
- Can only be met at an uneconomic price

- Can be name-specific or systemic

Causes of liquidity risk

Liquidity risk arises from situations in which a party interested in trading an asset cannot do it because nobody in the market wants to trade for that asset. Liquidity risk becomes particularly important to parties who are about to hold or currently hold an asset, since it affects their ability to trade.

Manifestation of liquidity risk is very different from a drop of price to zero. In case of a drop of an asset's price to zero, the market is saying that the asset is worthless. However, if one party cannot find another party interested in trading the asset, this can potentially be only a problem of the market participants with finding each other. This is why liquidity risk is usually found to be higher in emerging markets or low-volume markets.

Liquidity risk is financial risk due to uncertain liquidity. An institution might lose liquidity if its credit rating falls, it experiences sudden unexpected cash outflows, or some other event causes counterparties to avoid trading with or lending to the institution. A firm is also exposed to liquidity risk if markets on which it depends are subject to loss of liquidity.

Market and funding liquidity risks compound each other as it is difficult to sell when other investors face funding problems and it is difficult to get funding when the collateral is hard to sell. Liquidity risk also tends to compound other risks. If a trading organization has a position in an illiquid asset, its limited ability to liquidate that position at short notice will compound its market risk. Suppose a firm has offsetting cash flows with two different counterparties on a given day. If the counterparty that owes it a payment defaults, the firm will have to raise cash from other sources to make its payment. Should it be unable to do so, it too will

default. Here, liquidity risk is compounding credit risk. A position can be hedged against market risk but still entail liquidity risk. This is true in the above credit risk example—the two payments are offsetting, so they entail credit risk but not market risk. Another example is the 1993 *Metallgesellschaft* debacle. Futures contracts were used to hedge an Over-the-counter finance OTC obligation. Accordingly, liquidity risk has to be managed in addition to market, credit and other risks. Because of its tendency to compound other risks, it is difficult or impossible to isolate liquidity risk. In all but the most simple of circumstances, comprehensive metrics of liquidity risk do not exist. Certain techniques of asset-liability management can be applied to assessing liquidity risk. A simple test for liquidity risk is to look at future net cash flows on a day-by-day basis. Any day that has a sizeable negative net cash flow is of concern. Such an analysis can be supplemented with stress testing. Look at net cash flows on a day-to-day basis assuming that an important counterparty defaults.

Analyses such as these cannot easily take into account contingent cash flows, such as cash flows from derivatives or mortgage-backed securities. If an organization's cash flows are largely contingent, liquidity risk may be assessed using some form of scenario analysis. A general approach using scenario analysis might entail the following high-level steps:

- Construct multiple scenarios for market movements and defaults over a given period of time
- Assess day-to-day cash flows under each scenario.

Regulators are primarily concerned about systemic implications of liquidity risk.

Pricing of liquidity risk

Risk-averse investors naturally require higher expected return as compensation for liquidity risk. The liquidity-adjusted CAPM pricing model therefore states that, the higher an asset's market-liquidity risk, the higher its required return.

Measures of liquidity risk

Liquidity gap

Culp defines the liquidity gap as the net liquid assets of a firm. The excess value of the firm's liquid assets over its volatile liabilities. A company with a negative liquidity gap should focus on their cash balances and possible unexpected changes in their values.

As a static measure of liquidity risk it gives no indication of how the gap would change with an increase in the firm's marginal funding cost.

Liquidity risk elasticity

Culp denotes the change of net of assets over funded liabilities that occurs when the liquidity premium on the bank's marginal funding cost rises by a small amount as the liquidity risk elasticity. For banks this would be measured as a spread over labor, for non- financials the LRE would be measured as a spread over commercial paper rates.

Problems with the use of liquidity risk elasticity are that it assumes parallel changes in funding spread across all maturities and that it is only accurate for small changes in funding spreads.

Measures of asset liquidity

Bid-offer spread

The n bid offer spread is used by market participants as an asset liquidity measure. To compare different products the ratio of the spread to the product's mid price can be used. The smaller the ratio the more liquid the asset is.

This spread is composed of operational, administrative, and processing costs as well as the compensation required for the possibility of trading with a more informed trader.

Market depth

Hachmeister refers to market depth as the amount of an asset that can be bought and sold at various bid-ask spreads. Slippage is related to the concept of market depth. Knight and Satchell mention a flow trader needs to consider the effect of executing a large order on the market and to adjust the bid-ask spread accordingly. They calculate the liquidity cost as the difference of the execution price and the initial execution price.

Immediacy

Immediacy refers to the time needed to successfully trade a certain amount of an asset at a prescribed cost.

Resilience

Hachmeister identifies the fourth dimension of liquidity as the speed with which prices return to former levels after a large transaction. Unlike the other measures resilience can only be determined over a period of time.

Managing liquidity risk

Liquidity-adjusted value at risk

Liquidity-adjusted VAR incorporates exogenous liquidity risk into value at risk. It can be defined at VAR + ELC (Exogenous Liquidity Cost). The ELC is the worst expected half-spread at a particular confidence level.

Another adjustment is to consider VAR over the period of time needed to liquidate the portfolio. VAR can be calculated over this time period.

Liquidity at risk

Greenspan (1999) discusses management of forex reserves. The Liquidity at risk measure is suggested. A country's liquidity position under a range of possible outcomes for relevant financial variables (exchange rates, commodity prices, credit spreads, etc.) is considered. It might be possible to express a standard in terms of the probabilities of different outcomes. For example, an acceptable debt structure could have an average maturity—averaged over estimated distributions for relevant financial variables—in excess of a certain limit. In addition, countries could be expected to hold sufficient liquid reserves to ensure that they could avoid new borrowing for one year with a certain ex ante probability, such as 95 percent of the time.

Scenario analysis-based contingency plans

The FDIC discuss liquidity risk management and write "Contingency funding plans should incorporate events that could rapidly affect an institution's liquidity, including a sudden inability to securitize assets, tightening of collateral requirements or other restrictive terms associated with secured borrowings, or the loss of a large depositor or counterparty." Greenspan's liquidity at risk concept is an example of scenario based liquidity risk management.

Diversification of liquidity providers

If several liquidity providers are on call then if any of those providers increases its costs of supplying liquidity, the impact of this is reduced. The American Academy of Actuaries wrote "While a company is in good financial shape, it may wish to establish durable, ever-green (i.e., always available) liquidity lines of credit. The credit issuer should have an appropriately high credit rating to increase the chances that the resources will be there when needed."

Derivatives

Bhaduri, Meissner and Youn discuss five derivatives created specifically for hedging liquidity risk.:

- Withdrawal option: A put of the illiquid underlying at the market price.
- Bermudan-style return put option: Right to put the option at a specified strike.
- Return swap: Swap the underlying's return for LIBOR paid periodicially.
- Return swaption: Option to enter into the return swap.
- Liquidity option: "Knock-in" barrier option, where the barrier is a liquidity metric.

Key challenges in effectively managing liquidity risk :The credit crisis has placed liquidity risk management front and center in the global banking industry, presenting some weighty challenges that global banks must address. Liquidity risk management is now a major focus for regulators, and global banks must navigate a range of regulatory requirements and guidance that is not always clear or well-aligned. What is clear is that liquidity risk must be owned from the top of the organization down. Without maintaining a constant pulse on their liquidity position, banks can quickly face serious reputational damage or, worse, insolvency. From our

perspective, there are six key challenges in effectively managing liquidity risk:

1. Moving from tactical stop-gap solutions to a long-term strategic model for risk management, and flowing the new governance structure through all levels of management.

2. Having clear guidance and requirements when global regulators are lacking alignment.

3. Committing huge resources to implement needed changes in liquidity risk management and regulatory compliance.

4. Re-thinking the viability of a business operating model that has traditionally relied on the wholesale funding markets to fund business growth.

5. Integrating stress-testing (vs. using a soloed stress-test approach) when complications arise between intra-day, short-term scenarios vs. longer term scenarios.

6. Projecting contractual cash flows for underlying transactions when some institutions manage millions of transactions.

3.4 Credit Risk:

Credit risk refers to the risk that a borrower will default on any type of debt by failing to make payments which it is obligated to do The risk is primarily that of the lender and include lost principal and interest, disruption to cash flows, and increased collection costs. The loss may be complete or partial and can arise in a number of circumstances. For example:

- A consumer may fail to make a payment due on a mortgage loan, credit card, line of credit, or other loan
- A company is unable to repay amounts secured by a fixed or floating charge over the assets of the company
- A business or consumer does not pay a trade invoice when due
- A business does not pay an employee's earned wages when due
- A business or government bond issuer does not make a payment on a coupon or principal payment when due
- An insolvent insurance company does not pay a policy obligation
- An insolvent bank won't return funds to a depositor
- A government grants bankruptcy protection to an insolvent consumer or business

To reduce the lender's credit risk, the lender may perform a credit check on the prospective borrower, may require the borrower to take out appropriate insurance, such as mortgage insurance or seek security or guarantees of third parties, besides other possible strategies. In general, the higher the risk, the higher will be the interest rate that the debtor will be asked to pay on the debt.

Types of credit risk

Credit risk can be classified in the following way:

- Credit default risk - The risk of loss arising from a debtor being unlikely to pay its loan obligations in full or the debtor is more than 90 days past due on any material credit obligation; default risk may impact all credit-sensitive transactions, including loans, securities and derivatives.
- Concentration risk - The risk associated with any single exposure or group of exposures with the potential to produce large enough

losses to threaten a bank's core operations. It may arise in the form of single name concentration or industry concentration.

- Country risk - The risk of loss arising from a sovereign state freezing foreign currency payments (transfer/conversion risk) or when it defaults on its obligations (sovereign risk).

Assessing credit risk

Significant resources and sophisticated programs are used to analyze and manage risk. Some companies run a credit risk department whose job is to assess the financial health of their customers, and extend credit (or not) accordingly. They may use in house programs to advise on avoiding, reducing and transferring risk. They also use third party provided intelligence. Companies like Standard & Poor's, Moody's, Fitch Ratings, and Dun and Bradstreet provide such information for a fee.

Most lenders employ their own models (credit scorecards) to rank potential and existing customers according to risk, and then apply appropriate strategies. With products such as unsecured personal loans or mortgages, lenders charge a higher price for higher risk customers and vice versa. With revolving products such as credit cards and overdrafts, risk is controlled through the setting of credit limits. Some products also require security, most commonly in the form of property.

Credit scoring models also form part of the framework used by banks or lending institutions grant credit to clients. For corporate and commercial borrowers, these models generally have qualitative and quantitative sections outlining various aspects of the risk including, but not limited to, operating experience, management expertise, asset quality, and leverage and liquidity ratios, respectively. Once this information has been fully reviewed by credit officers and credit committees, the lender

provides the funds subject to the terms and conditions presented within the contract (as outlined above).

Sovereign risk

Sovereign risk is the risk of a government becoming unwilling or unable to meet its loan obligations, or reneging on loans it guarantees. Many countries have faced sovereign risk in the late-2000s global recession. The existence of such risk means that creditors should take a two-stage decision process when deciding to lend to a firm based in a foreign country. Firstly one should consider the sovereign risk quality of the country and then consider the firm's credit quality.

Five macroeconomic variables that affect the probability of sovereign debt rescheduling are:

- Debt service ratio
- Import ratio
- Investment ratio
- Variance of export revenue
- Domestic money supply growth

The probability of rescheduling is an increasing function of debt service ratio, import ratio, variance of export revenue and domestic money supply growth. Frenkel, Karmann, Raahish and Scholtens also argue that the likelihood of rescheduling is a decreasing function of investment ratio due to future economic productivity gains. Saunders argues that rescheduling can become more likely if the investment ratio rises as the foreign country could become less dependent on its external creditors and so be less concerned about receiving credit from these countries/investors

Counterparty risk

A counterparty risk, also known as a default risk, is a risk that a counterparty will not pay what it is obligated to do on a bond, credit derivative, trade credit insurance or payment protection insurance contract, or other trade or transaction when it is supposed to. Financial institutions may hedge or take out credit insurance of some sort with a counterparty, which may find themselves unable to pay when required to do so, either due to temporary liquidity issues or longer term systemic reasons.

Large insurers are counterparties to many transactions, and thus this is the kind of risk that prompts financial regulators to act, e.g., the bailout of insurer AIG.

On the methodological side, counterparty risk can be affected by wrong way risk, namely the risk that different risk factors be correlated in the most harmful direction. Including correlation between the portfolio risk factors and the counterparty default into the methodology is not trivial, Managemnt of credit risk/how to control credit risk:

Hedging is a method for reducing risk where a combination of assets are selected to offset the movements of each other. For instance when investing in a stock it is possible to buy an option to sell that stock at a defined price at some point in the future. The combined portfolio of stock and option is now much less likely to move below a given value. As in diversification there is a cost, this time in buying the option for which there is a premium. Lenders mitigate credit risk using several methods:

- Risk-based pricing: Lenders generally charge a higher interest rate to borrowers who are more likely to default, a practice called risk-based pricing. Lenders consider factors relating to the loan such as loan purpose, credit rating, and loan-to-value ratio and estimates the effect on yield (credit spread).

- Covenants: Lenders may write stipulations on the borrower, called covenants, into loan agreements:
  - Periodically report its financial condition
  - Refrain from paying dividends, repurchasing shares, borrowing further, or other specific, voluntary actions that negatively affect the company's financial position
  - Repay the loan in full, at the lender's request, in certain events such as changes in the borrower's debt-to-equity ratio or interest coverage ratio
- Credit insurance and credit derivatives: Lenders and bond holders may hedge their credit risk by purchasing credit insurance or credit derivatives. These contracts transfer the risk from the lender to the seller (insurer) in exchange for payment. The most common credit derivative is the credit default swap.
- Tightening: Lenders can reduce credit risk by reducing the amount of credit extended, either in total or to certain borrowers. For example, a distributor selling its products to a troubled retailer may attempt to lessen credit risk by reducing payment terms from *net 30* to *net 15*.
- Diversification:[16] Lenders to a small number of borrowers (or kinds of borrower) face a high degree of unsystematic credit risk, called concentration risk. Lenders reduce this risk by diversifying the borrower pool.
- Deposit insurance: Many governments establish deposit insurance to guarantee bank deposits of insolvent banks. Such protection discourages consumers from withdrawing money when a bank is becoming insolvent, to avoid a bank run, and encourages consumers to hold their savings in the banking system instead of in cash.

Credit derivative

credit derivative refers to any one of "various instruments and techniques designed to separate and then transfer the credit risk of the underlying loan. It is a securitized derivative whereby the credit risk is transferred to an entity other than the lender. Where credit protection is bought and sold between bilateral counterparties, this is known as an unfunded credit derivative. If the credit derivative is entered into by a financial institution or a special purpose vehicle (SPV) and payments under the credit derivative are funded using securitization techniques, such that a debt obligation is issued by the financial institution or SPV to support these obligations, this is known as a funded credit derivative.

This synthetic securitization process has become increasingly popular over the last decade, with the simple versions of these structures being known as synthetic CDOs; credit –linked notes; single tranche CDOs, to name a few. In funded credit derivatives, transactions are often rated by rating agencies, which allows investors to take different slices of credit risk according.

Credit derivatives are fundamentally divided into two categories: funded credit derivatives and unfunded credit derivatives.

Types of Credit derivatives:2 types

An unfunded credit derivative is a bilateral contract between two counterparties, where each party is responsible for making its payments under the contract (i.e. payments of premiums and any cash or physical settlement amount) itself without recourse to other assets.

A funded credit derivative involves the protection seller (the party that assumes the credit risk) making an initial payment that is used to settle any potential credit events. (The protection buyer, however, still may be exposed to the *credit risk* of the *protection seller* itself. This is known as counterparty risk.)

3.5 Investment management

There are two main lines of business in investment banking. Trading securities for cash or for other securities (i.e. facilitating transactions, market-making), or the promotion of securities An investment bank can also be split into private and public functions

Investment banks offer services to both corporations issuing securities and investors buying securities. For corporations, investment bankers offer information on when and how to place their securities on the open market, an activity very important to an investment bank's reputation. Therefore, investment bankers play a very important role in issuing new security offerings.

three product segments: (1) investment banking (fees for M&A advisory services and securities underwriting); (2) asset management (fees for sponsored investment funds), and (3) trading and principal investments (broker-dealer activities including proprietary trading ("dealer" transactions) and brokerage trading ("broker" transactions)).

The traditional service of underwriting security issues has declined as a percentage of revenue; as far back as 1960,

The investment banking division (IBD) is generally divided into industry coverage and product coverage groups. Industry coverage groups focus on a specific industry – such as healthcare, public finance (governments), FIG (financial institutions group), industrials, TMT (technology, media, and telecommunication) – and maintains relationships with corporations within the industry to bring in business for the bank. Product coverage groups focus on financial products – such as mergers and acquisitions, leveraged finance, public finance, asset

finance and leasing, structured finance, restructuring, equity, and high-grade debt – and generally work and collaborate with industry groups on the more intricate and specialized needs of a client. Sales and trading

Sales is the term for the investment bank's sales force, whose primary job is to call on institutional and high-net-worth investors to suggest trading ideas *Strategists* advise external as well as internal clients on the strategies that can be adopted in various markets. Ranging from derivatives to specific industries, strategists place companies and industries in a quantitative framework with full consideration of the macroeconomic scene.

Research: This division reviews companies and writes reports about their prospects, often with "buy" or "sell" ratings. Investment banks typically have sell side analysis which cover various industries. Their sponsored funds or proprietrary trading offices will also have buy-side research. While the research division may or may not generate revenue (based on policies at different banks), its resources are used to assist traders in trading, the sales force in suggesting ideas to customers, and investment bankers by covering their clients. Research also serves outside clients with investment advice (such as institutional investors and high net worth individuals) in the hopes that these clients will execute suggested trade ideas through the sales and trading division of the bank, and thereby generate revenue for the firm. However, research does not directly bring in revenue through commission or profit, which arguably places research in a middle office role. Research also covers credit research, fixed income research, macroeconomic research, and quantitative analysis, all of which are used internally and externally to advise clients but do not directly affect revenue. All research groups, nonetheless, provide a key service in terms of advisory and strategy. There is a potential conflict of interest between the investment bank and its analysis, in that published analysis can affect the bank's profits.

Hence in recent years the relationship between investment banking and research has become highly regulated,

Risk Management;Risk management involves analyzing the market and credit risk that an investment bank or its clients take onto their balance sheet during transactions or trades. Credit risk focuses around capital markets activities, such as loan syndication, bond issuance, restructuring, and leveraged finance. Market risk conducts review of sales and trading activities utilizing the VaR model and provide hedge-fund solutions to portfolio managers. Other risk groups include country risk, operational risk, and counterparty risks which may or may not exist on a bank to bank basis. Credit risk solutions are key part of capital market transactions, involving debt structuring, exit financing, loan amendment, , leveraged buy-outs, and sometimes portfolio hedging. Front office market risk activities provide service to investors via derivative solutions, portfolio management, portfolio consulting, and risk advisory. Risk Solutions group within Barclays' investment banking division and Risk Management and Financing group housed in Goldman Sach's securities division are client-driven franchises. However, risk management groups such as operational risk, internal risk control, legal risk

Middle office: This area of the bank includes treasury management, internal controls, and internal corporate strategy.

Internal corporate strategy tackling firm management and profit strategy, unlike corporate strategy groups that advise clients, is non-revenue regenerating yet a key functional role within investment banks.

This list is not a comprehensive summary of all middle-office functions within an investment bank, as specific desks within front and back offices may participate in internal functions.

This involves data-checking trades that have been conducted, ensuring that they are not erroneous, and transacting the required transfers. Many banks have outsourced operations. It is, however, a critical part of the bank. Due to increased competition in finance related careers, college degrees are now mandatory at most Tier 1 investment banks A finance degree has proved significant in understanding the depth of the deals and transactions that occur across all the divisions of the bank.

Global size and revenue mix

Global investment banking revenue increased for the fifth year running in 2007, to a record US$84.3 billion, which was up 22% on the previous year and more than double the level in 2003. Subsequent to their exposure to United States sub prime securities investments, many investment banks have experienced losses. As of late 2012, global revenues for investment banks were estimated at $240 billion, down about a third from 2009, as companies pursued less deals and traded less. Differences in total revenue are likely due to different ways of classifying investment banking revenue, such as subtracting proprietary trading revenue.

In terms of total revenue, SEC filings of the major independent investment banks in the United States show that investment banking (defined as M&A advisory services and security underwriting) only made up about 15-20% of total revenue for these banks from 1996 to 2006, with the majority of revenue (60+% in some years) brought in by "trading" which includes brokerage commissions and

According to estimates published by the International Financial Services London, for the decade prior to the financial crisis in 2008, M&A was a primary source of investment banking revenue, often accounting for 40% of such revenue, but dropped during and after the financial

crisis.Equity underwriting revenue ranged from 30% to 38% and fixed-income underwriting accounted for the remaining revenue.

Revenues have been affected by the introduction of new products with higher margins; however, these innovations are often copied quickly by competing banks, pushing down trading margins. For example, brokerages commissions for bond and equity trading is a commodity business but structuring and trading derivatives has higher margins.

Banks also earned revenue by securitizing debt, particularly mortgage debt prior to the financial crisis. Investment banks have become concerned that lenders are securitizing in-house, driving the investment

3.6 Foreign currency dealing

The foreign exchange market owes its existence to the 1971 abandonment of the Bretton Woods accord and the subsequent unwinding of the regime of universal fixed exchange rates.

According to the 2001 triennial survey by the Bank of International Settlements (BIS), global foreign exchange turnover amounts to more than $1,200 billion per day, over 50 per cent of which is transacted on the London market alone.

Global turnover, however, is markedly down on the 1998 BIS survey figure of $1,490 billion.

The BIS attributes this to the launch of the euro, banking mergers, the growth of electronic broking at the expense of voice and telephone dealing,leading to fewer transactions, and non-banking consolidations that have reduced the need for foreign exchange.

The players

Currency trading is inherently an activity for central and private sector banks, non-banking international corporations and hedge funds. However, technological innovations like the internet have made it feasible for individual investors to monitor currency markets and to trade via intermediaries.

The attraction for private investors

The main attractions of currency dealing to private investors are:

- 24-hour trading, five days a week with continuous access to global dealers
- An enormous liquid market making it easy to exchange most currencies
- Volatile markets offering profit opportunities
- Recognised instruments for controlling risk exposure
- The ability to profit in rising or falling markets
- Leveraged trading with low margin requirements
- Zero dealing commission

On the other hand, trading Forex is a fundamentally risky activity. the section on margin trading: risk and reward below.

Five ways to trade Forex

Private investors can trade directly or indirectly in foreign exchange through:

- the spot market

- forwards and futures
- options
- contracts for difference
- spread betting

We shall examine each of these instruments in turn, but first a risk warning.

Margin trading: risk and reward

All the aforementioned Forex instruments are margin products, which means that your investment exposure can be a multiple of the cash that you lay down, known as the margin.

The main advantages of margin trading are that:

- It enables private investors to deal in markets with high minimum units of trading, as in the spot market where the minimum size trade is 100,000 units of the base currency.
- It enhances the rate of profit.

The principal disadvantage of margin trading is that it has the habit of inflating rates of loss, on top of systemic risk. For example, currency options are inherently riskier than spot market trades, because a small change in the underlying spot rate can generate a disproportionately large change in options prices.

Sell "naked" call options and there is no limit to potential losses. Add leverage to the cocktail and you have the potential for large profits and large losses.

Learning to trade Forex

Forex is still relatively fresh territory for private investors, having really only been rendered feasible by the advent of the internet. Like any financial discipline, the best investment is a sound and practical education.

To this end, Trader House Network (UK) Limited has set up a dedicated training campus at the Cottesmore Golf and Country Club, near Gatwick, where it currently runs two-day Forex trading tutorials from its dealing room.

Margin broker Easy2Trade has teamed up with Trader House to offer two-day basic training programmes in Forex for new account holders at the Cottesmore campus where they can practise on demo accounts and benefit from expert one-to-one supervision.

As of late January 2003, Trader House will be holding three-day residential training courses in spread betting at the Cottesmore campus, culminating in tutorial sessions conducted in a live dealing environment.

For further details, contact Andy Shearman on 01293 512211 or 07957 421769.

Regulation and caveats

Forex trading is regulated by the Financial Services Authority. In order to open an account with a margin broker, applicants must demonstrate that they are "intermediately experienced" investors, albeit not necessarily in Forex.

This may entail disclosure of one's investment history supported by trading statements and other evidence. Additionally, the applicant must

demonstrate an understanding of the advantages and risks of margin trading.

"Forex dealing is a fascinating, rewarding but risky investment activity," says Shani Shamah, author of Foreign Exchange Primer (published by Wiley & Co) and Global Head of Sales at primary market maker IFX Markets Limited.

"In order to limit risk, a trader should routinely monitor positions against the market and should run risk-control safeguards against each open position."

3.7 Foreign Currency Risk

Foreign exchange risk (also known as exchange rate risk or currency risk) is a financial risk posed by an exposure to unanticipated changes in the exchange rate between two currencies. Investors and multinational businesses exporting or importing goods and services or making foreign investments throughout the global economy are faced with an exchange rate risk which can have severe financial consequences if not managed appropriately.

Types of exposure

Foreign currency exposures are generally categorized into the following three distinct types: transaction exposure, economic exposure, and translation exposure. These exposures pose risks to firms' cash flows, competitiveness, market value, and financial reporting.

Transaction exposure

A firm has *transaction exposure* whenever it has contractual cash flows whose values are subject to unanticipated changes in exchange rates due to a contract being denominated in a foreign currency. To realize the domestic value of its foreign-denominated cash flows, the firm must exchange foreign currency for domestic currency. As firms negotiate contracts with set prices and delivery dates in the face of a volatile foreign exchange market with exchange rates constantly fluctuating, the firms face a risk of changes in the exchange rate between the foreign and domestic currency. Firms generally become exposed as a direct result of activities such as importing and exporting or borrowing and investing Exchange rates may move by up to 10% within any single year, which can significantly affect a firm's cash flows, meaning a 10% decline in the value of a receivable or a 10% rise in the value of a payable. Such outcomes could be troublesome as export profits could be negated entirely or import costs could rise substantially.

Economic exposure

A firm has *economic exposure* (also known as *operating exposure*) to the degree that its market value is influenced by unexpected exchange rate fluctuations. Such exchange rate adjustments can severely affect the firm's position with regards to its competitors, the firm's future cash flows, and ultimately the firm's value. Economic exposure can affect the present value of future cash flows. Any transaction that exposes the firm to foreign exchange risk also exposes the firm economically, but economic exposure can be caused by other business activities and investments which may not be mere international transactions, such as future cash flows from fixed assets. A shift in exchange rates that influences the demand for a good in some country would also be an economic exposure for a firm that sells that good.

Translation exposure

A firm's *translation exposure* is the extent to which its financial reporting is affected by exchange rate movements. As all firms generally must prepare consolidated financial statements for reporting purposes, the consolidation process for multinationals entails translating foreign assets and liabilities or the financial statements of foreign subsidiaries from foreign to domestic currency. While translation exposure may not affect a firm's cash flows, it could have a significant impact on a firm's reported earnings and therefore its stock price. Translation exposure is distinguished from transaction risk as a result of income and losses from various types of risk having different accounting treatments. Translation gives special consideration to assets and liabilities with regards to foreign exchange risk, whereas exposures to revenues and expenses can often be managed *ex ante* by managing transactional exposures when cash flows take place.

Contingent exposure

A firm has *contingent exposure* when bidding for foreign projects or negotiating other contracts or FDI. Such an exposure arises from the potential for a firm to suddenly face a transactional or economic foreign exchange risk, contingent on the outcome of some contract or negotiation. For example, a firm could be waiting for a project bid to be accepted by a foreign business or government that if accepted would result in an immediate receivable. While waiting, the firm faces a contingent exposure from the uncertainty as to whether or not that receivable will happen. If the bid is accepted and a receivable is paid the firm then faces a transaction exposure, so a firm may prefer to manage contingent exposures.

Measurement of Foreign Currency Risk:

If foreign exchange markets are efficient such that purchasing power parity, interest rate parity and the International Fisher effect hold true, a

firm or investor needn't protect against foreign exchange risk due to an indifference toward international investment decisions. A deviation from one or more of the three international parity conditions generally needs to occur for an exposure to foreign exchange risk.

Financial risk is most commonly measured in terms of the variance or standard deviation of a variable such as percentage returns or rates of change. In foreign exchange, a relevant factor would be the rate of change of the spot exchange rate between currencies. Variance represents exchange rate risk by the spread of exchange rates, whereas standard deviation represents exchange rate risk by the amount exchange rates deviate, on average, from the mean exchange rate in a probability distribution.A higher standard deviation would signal a greater currency risk. Economists have criticized the accuracy of standard deviation as a risk indicator for its uniform treatment of deviations, be they positive or negative, and for automatically squaring deviation values. Alternatives such as average absolute deviation semi-variance have been advanced for measuring financial risk.

Value at Risk

Practitioners have advanced and regulators have accepted a financial risk management technique called value at risk(VAR), which examines the tail end of a distribution of returns for changes in exchange rates to highlight the outcomes with the worst returns. Banks in Europe have been authorized by the Bank for International settlements to employ VAR models of their own design in establishing capital requirements for given levels of market risk. Using the VAR model helps risk managers determine the amount that could be lost on an investment portfolio over a certain period of time with a given probability of changes in exchange rates.

Management

Managers of multinational firms employ a number of foreign exchange hedging strategies in order to protect against exchange rate risk. Transaction exposure is often managed either with the use of the money markets, foreign exchange derivatives such as forwards contracts, future contracts, options and swaps, or with operational techniques such as currency invoicing, leading and lagging of receipts and payments, and exposure netting.

Firms may exercise alternative strategies to financial hedging for managing their economic or operating exposure, by carefully selecting production sites with a mind for lowering costs, using a policy of flexible sourcing in its supply chain management, diversifying its export market across a greater number of countries, or by implementing strong research and development activities and differentiating its products in pursuit of greater inelasticity and less foreign exchange risk exposure.

Translation exposure is largely dependent on the accounting standards of the home country and the translation methods required by those standards. For example, the United States federal accounting standards Board specifies when and where to use certain methods such as the temporal method and current rate method. Firms can manage translation exposure by performing a balance sheet hedge. Since translation exposure arises from discrepancies between net assets and net liabilities on a balance sheet solely from exchange rate differences. Following this logic, a firm could acquire an appropriate amount of exposed assets or liabilities to balance any outstanding discrepancy. Foreign exchange derivatives may also be used to hedge against translation exposure.

History

Many businesses were unconcerned with and did not manage foreign exchange risk under the Breton Woods System of international monetary order. It wasn't until the onset of floating exchange rates following the

collapse of the Breton Woods system that firms perceived an increasing risk from exchange rate fluctuations and began trading an increasing volume of financial derivatives in an effort to hedge their exposure. The outbreak of currency crisis in the 1990s and early 2000s, such as the Mexican peso crisis, Asian Currency crisis,1998 Russian financial crisis, and the Argentine peso crisis substantial losses from foreign exchange have led firms to pay closer attention to foreign exchange risk

UNIT 4

International banking

- The survey covered 163 overseas branches, 158 overseas subsidiaries of Indian Banks and 309 branches of foreign banks operating in India.
- Indian banks operating abroad employed 66.3 per cent of employees from local sources, 30.8 per cent from India and remaining 2.9 per cent from other countries. In case of foreign banks working in India, the share of local employees in total employees was 99.6 per cent in 2011-12.
- The number of employees of Indian banks operating abroad increased by 6.1 per cent. In case of foreign banks operating in India, number of employees decreased by 2.9 per cent during 2011-12.
- Growth of credit extended by Indian banks' branches operating abroad increased by 27.0 per cent to `4,451.1 billion. Credit extended by foreign banks operating in India increased by 21.8 per cent to `2413.2 billion during 2011-12.
- Deposit mobilised by Indian banks' branches operating abroad increased by 27.1 per cent during 2011-12. In case of foreign banks operating in India, deposit mobilised increased by 14.3 per cent during 2011-12.
- The profitability ratio, i.e. profit to total assets, of branches of Indian banks operating abroad decreased to 0.7 per cent (from 1.1 per cent) in 2011-12. The profitability ratio of foreign banks operating in India increased to 2.4 per cent (from 2.3 per cent) in 2011-12.
- Bahrain, Belgium, Hong Kong, Japan, Singapore, Sri Lanka, UAE, UK and USA were the major countries which accounted together for nearly 90.8 per cent of the total trade in banking services of the branches of Indian banks operating abroad.

- During 2011-12, 309 branches of foreign banks operating in India generated total fee income of `94.3 billion. In case of branches of Indian banks operating outside India, total fee income generated was `68.0 billion.
- Indian banks' branches operating abroad generated major share of fee income by rendering credit related services and trade finance related services. 'Derivative, stock, securities, foreign exchange trading services' and 'Financial Consultancy and Advisory Services' were the major source of fee income for the foreign banks operating in India.

4.2 Non Banking Financial Institutions/Companies

The Reserve Bank of India is entrusted with the responsibility of regulating and supervising the Non-Banking Financial Companies by virtue of powers vested in Chapter III B of the Reserve Bank of India Act, 1934. The regulatory and supervisory objective, is to:

a) ensure healthy growth of the financial companies;

b) ensure that these companies function as a part of the financial system within the policy framework, in such a manner that their existence and functioning do not lead to systemic aberrations; and that

c) the quality of surveillance and supervision exercised by the Bank over the NBFCs is sustained by keeping pace with the developments that take place in this sector of the financial system.

It has been felt necessary to explain the rationale underlying the regulatory changes and provide clarification on certain operational matters for the benefit of the NBFCs, members of public, rating agencies, Chartered Accountants etc. To meet this need, the

clarifications in the form of questions and answers, is being brought out by the Reserve Bank of India (Department of Non-Banking Supervision) with the hope that it will provide better understanding of the regulatory framework.

Meaning:Non-Banking Financial Company (NBFC) is a company registered under the Companies Act, 1956 engaged in the business of loans and advances, acquisition of shares/stocks/bonds/debentures/securities issued by Government or local authority or other marketable securities of a like nature, leasing, hire-purchase, insurance business, chit business but does not include any institution whose principal business is that of agriculture activity, industrial activity, purchase or sale of any goods (other than securities) or providing any services and sale/purchase/construction of immovable property. A non-banking institution which is a company and has principal business of receiving deposits under any scheme or arrangement in one lump sum or in installments by way of contributions or in any other manner, is also a non-banking financial company (Residuary non-banking company).

Difference between banks & NBFCs ?

NBFCs lend and make investments and hence their activities are akin to that of banks; however there are a few differences as given below:

i. NBFC cannot accept demand deposits;

ii. NBFCs do not form part of the payment and settlement system and cannot issue cheques drawn on itself;

iii. deposit insurance facility of Deposit Insurance and Credit Guarantee Corporation is not available to depositors of NBFCs, unlike in case of banks.

Registration:In terms of Section 45-IA of the RBI Act, 1934, no Non-banking Financial company can commence or carry on business of a non-banking financial institution without a) obtaining a certificate of registration from the Bank and without having a Net Owned Funds of Rs. 25 lakhs (Rs two crore since April 1999). However, in terms of the powers given to the Bank. to obviate dual regulation, certain categories of NBFCs which are regulated by other regulators are exempted from the requirement of registration with RBI viz. Venture Capital Fund/Merchant Banking companies/Stock broking companies registered with SEBI, Insurance Company holding a valid Certificate of Registration issued by IRDA, Nidhi companies as notified under Section 620A of the Companies Act, 1956, Chit companies as defined in clause (b) of Section 2 of the Chit Funds Act, 1982, Housing Finance Companies regulated by National Housing Bank , Stock Exchange or a Mutual Benefit company.

Different types/categories of NBFCs registered with RBI?

NBFCs are categorized a) in terms of the type of liabilities into Deposit and Non-Deposit accepting NBFCs, b) non deposit taking NBFCs by their size into systemically important and other non-deposit holding companies (NBFC-NDSI and NBFC-ND) and c) by the kind of activity they conduct. Within this broad categorization the different types of NBFCs are as follows:

i. Asset Finance Company (AFC) : An AFC is a company which is a financial institution carrying on as its principal business the financing of physical assets supporting productive/economic activity, such as automobiles, tractors, lathe machines, generator sets, earth moving and material handling equipments, moving on own power and general purpose industrial machines. Principal business for this purpose is defined as aggregate of financing real/physical assets supporting economic activity and income

arising there from is not less than 60% of its total assets and total income respectively.

ii. Investment Company (IC) : IC means any company which is a financial institution carrying on as its principal business the acquisition of securities,

iii. Loan Company (LC) : LC means any company which is a financial institution carrying on as its principal business the providing of finance whether by making loans or advances or otherwise for any activity other than its own but does not include an Asset Finance Company.

iv. Infrastructure Finance Company (IFC) : IFC is a non-banking finance company a) which deploys at least 75 per cent of its total assets in infrastructure loans, b) has a minimum Net Owned Funds of Rs. 300 crore, c) has a minimum credit rating of 'A 'or equivalent d) and a CRAR of 15%.

v. Systemically Important Core Investment Company (CIC-ND-SI) : CIC-ND-SI is an NBFC carrying on the business of acquisition of shares and securities which satisfies the following conditions:-

   a. it holds not less than 90% of its Total Assets in the form of investment in equity shares, preference shares, debt or loans in group companies;
   b. its investments in the equity shares (including instruments compulsorily convertible into equity shares within a period not exceeding 10 years from the date of issue) in group companies constitutes not less than 60% of its Total Assets;
   c. it does not trade in its investments in shares, debt or loans in group companies except through block sale for the purpose of dilution or disinvestment;
   d. it does not carry on any other financial activity referred to in Section 45I(c) and 45I(f) of the RBI act, 1934 except investment in bank deposits, money market instruments, government securities, loans to and investments in debt

issuances of group companies or guarantees issued on behalf of group companies.

e. Its asset size is Rs 100 crore or above and
f. It accepts public funds

vi. Infrastructure Debt Fund: Non- Banking Financial Company (IDF-NBFC) : IDF-NBFC is a company registered as NBFC to facilitate the flow of long term debt into infrastructure projects. IDF-NBFC raise resources through issue of Rupee or Dollar denominated bonds of minimum 5 year maturity. Only Infrastructure Finanace Companies (IFC) can sponsor IDF-NBFCs.

vii. Non-Banking Financial Company - Micro Finance Institution (NBFC-MFI): NBFC-MFI is a non-deposit taking NBFC having not less than 85% of its assets in the nature of qualifying assets which satisfy the following criteria:

a. loan disbursed by an NBFC-MFI to a borrower with a rural household annual income not exceeding Rs. 60,000 or urban and semi-urban household income not exceeding Rs. 1,20,000;
b. loan amount does not exceed Rs. 35,000 in the first cycle and Rs. 50,000 in subsequent cycles;
c. total indebtedness of the borrower does not exceed Rs. 50,000;
d. tenure of the loan not to be less than 24 months for loan amount in excess of Rs. 15,000 with prepayment without penalty;
e. loan to be extended without collateral;
f. aggregate amount of loans, given for income generation, is not less than 75 per cent of the total loans given by the MFIs;
g. loan is repayable on weekly, fortnightly or monthly instalments at the choice of the borrower

viii. Non-Banking Financial Company – Factors (NBFC-Factors): NBFC-Factor is a non-deposit taking NBFC engaged in the

principal business of factoring. The financial assets in the factoring business should constitute at least 75 percent of its total assets and its income derived from factoring business should not be less than 75 percent of its gross income.

Requirements for registration with RBI?

A company incorporated under the Companies Act, 1956 and desirous of commencing business of non-banking financial institution as defined under Section 45 I (a) of the RBI Act, 1934 should comply with the following:

i. it should be a company registered under Section 3 of the companies Act, 1954

ii. It should have a minimum net owned fund of Rs 200 lakh. (The minimum net owned fund (NOF) required for specialized NBFCs like NBFC-MFIs, NBFC-Factors, CICs is indicated separately in the FAQs on specialized NBFCs)

Procedure for application to the Reserve Bank for Registration?

At this stage, the applicant company will not need to log on to the COSMOS application and hence user ids are not required.). The company can click on "CLICK" for Company Registration on the login page of the COSMOS Application. A window showing the Excel application form available for download would be displayed. The company can then download suitable application form (i.e. NBFC or SC/RC) from the above website, key in the data and upload the application form. The company may note to indicate the correct name of the Regional Office in the field "C-8" of the "Annex-Identification Particulars" in the Excel application form. The company would then get a Company Application Reference Number for the CoR application filed on-line. Thereafter, the company has to submit the hard copy of the

application form (indicating the online Company Application Reference Number , along with the supporting documents, to the concerned Regional Office. The company can then check the status of the application from the above mentioned secure address, by keying in the acknowledgement number.

Essential documents required to be submitted along with the application form to the Regional Office of the Reserve Bank?

A hard copy of the application form is available at www.rbi.org.in → Site Map → NBFC List → Forms and Returns. An indicative checklist of the documents required to be submitted along with the application can

Can all NBFCs accept deposits ?

All NBFCs are not entitled to accept public deposits. Only those NBFCs to which the Bank had given a specific authorisation are allowed to accept/hold public deposits.

Is there any ceiling on acceptance of Public Deposits? What is the rate of interest and period of deposit which NBFCs can accept?

Yes, there is a ceiling on acceptance of Public Deposits by NBFCs authorized to accept deposits.. An NBFC maintaining required minimum NOF,/Capital to Risk Assets Ratio (CRAR) and complying with the prudential norms can accept public deposits as follows:

Category of NBFC having minimum NOF of Rs 200 lakhs	Ceiling on public deposit
AFC* maintaining CRAR of 15% without credit rating	1.5 times of NOF or Rs 10 crore whichever is less
AFC with CRAR of 12% and having minimum	4 times of NOF

investment grade credit rating	
LC/IC** with CRAR of 15% and having minimum investment grade credit rating	1.5 times of NOF
* AFC = Asset Finance Company ** LC/IC = Loan company/Investment Company	

As has been notified on June 17, 2008 the ceiling on level of public deposits for NBFCs accepting deposits but not having minimum Net Owned Fund of Rs 200 lakh is revised as under:

Category of NBFC having NOF more than Rs 25 lakh but less than Rs 200 lakh	Revised Ceiling on public deposits
AFCs maintaining CRAR of 15% without credit rating	Equal to NOF
AFCs with CRAR of 12% and having minimum investment grade credit rating	1.5 times of NOF
LCs/ICs with CRAR of 15% and having minimum investment grade credit rating	Equal to NOF

Presently, the maximum rate of interest an NBFC can offer is 12.5%. The interest may be paid or compounded at rests not shorter than monthly rests.

The NBFCs are allowed to accept/renew public deposits for a minimum period of 12 months and maximum period of 60 months. They cannot accept deposits repayable on demand.

salient features of NBFCs regulations which the depositor may note at the time of investment?

Some of the important regulations relating to acceptance of deposits by NBFCs are as under:

i. The NBFCs are allowed to accept/renew public deposits for a minimum period of 12 months and maximum period of 60 months. They cannot accept deposits repayable on demand.
ii. NBFCs cannot offer interest rates higher than the ceiling rate prescribed by RBI from time to time. The present ceiling is 12.5 per cent per annum. The interest may be paid or compounded at rests not shorter than monthly rests.
iii. NBFCs cannot offer gifts/incentives or any other additional benefit to the depositors.
iv. NBFCs (except certain AFCs) should have minimum investment grade credit rating.
v. The deposits with NBFCs are not insured.
vi. The repayment of deposits by NBFCs is not guaranteed by RBI.
vii. Certain mandatory disclosures are to be made about the company in the Application Form issued by the company soliciting deposits.

What is 'deposit' and 'public deposit'? Is it defined anywhere?

The term 'deposit' is defined under Section 45 I(bb) of the RBI Act, 1934. 'Deposit' includes and shall be deemed always to have included any receipt of money by way of deposit or loan or in any other form but does not include:

i. amount raised by way of share capital, or contributed as capital by partners of a firm;
ii. amount received from a scheduled bank, a co-operative bank, a banking company, Development bank, State Financial Corporation, IDBI or any other institution specified by RBI;

iii. amount received in ordinary course of business by way of security deposit, dealership deposit, earnest money, advance against orders for goods, properties or services;
iv. amount received by a registered money lender other than a body corporate;
v. amount received by way of subscriptions in respect of a 'Chit'.

Paragraph 2(1)(xii) of the Non-Banking Financial Companies Acceptance of Public Deposits (Reserve Bank) Directions, 1998 defines a ' public deposit' as a 'deposit' as defined under Section 45 I(bb) of the RBI Act, 1934 and further excludes the following:

i. amount received from the Central/State Government or any other source where repayment is guaranteed by Central/State Government or any amount received from local authority or foreign government or any foreign citizen/authority/person;
ii. any amount received from financial institutions specified by RBI for this purpose;
iii. any amount received by a company from any other company;
iv. amount received by way of subscriptions to shares, stock, bonds or debentures pending allotment or by way of calls in advance if such amount is not repayable to the members under the articles of association of the company;
v. amount received from shareholders by private company;
vi. amount received from directors or relative of the director of an NBFC;
vii. amount raised by issue of bonds or debentures secured by mortgage of any immovable property or other asset of the company subject to conditions;
viii. the amount brought in by the promoters by way of unsecured loan;
ix. amount received from a mutual fund;
x. any amount received as hybrid debt or subordinated debt;
xi. any amount received by issuance of Commercial Paper.

xii. any amount received by a systemically important non-deposit taking non-banking financial company by issuance of 'perpetual debt instruments'

xiii. any amount raised by the issue of infrastructure bonds by an Infrastructure Finance Company

Thus, the directions exclude from the definition of public deposit, amount raised from certain set of informed lenders who can make independent decision.

Are Secured debentures treated as Public Deposit? If not who regulates them?

Debentures secured by the mortgage of any immovable property of the company or by any other asset or with an option to convert them into shares in the company , if the amount raised does not exceed the market value of the said immovable property or other assets, are excluded from the definition of 'Public Deposit' in terms of Non-Banking Financial Companies Acceptance of Public Deposits (Reserve Bank) Directions, 1998. Secured debentures are debt instruments and are regulated by Securities & Exchange Board of India.

Whether NBFCs can accept deposits from NRIs?

Effective from April 24, 2004, NBFCs cannot accept deposits from NRIs except deposits by debit to NRO account of NRI provided such amount does not represent inward remittance or transfer from NRE/FCNR (B) account. However, the existing NRI deposits can be renewed.

Is nomination facility available to the Depositors of NBFCs?

Yes, nomination facility is available to the depositors of NBFCs. The Rules for nomination facility are provided for in section 45QB of the

Reserve Bank of India Act, 1934. Non-Banking Financial Companies have been advised to adopt the Banking Companies (Nomination) Rules, 1985 made under Section 45ZA of the Banking Regulation Act, 1949. Accordingly, depositor/s of NBFCs are permitted to nominate one person to whom the NBFC can return the deposit in the event of the death of the depositor/s. NBFCs are advised to accept nominations made by the depositors in the form similar to one specified under the said rules, viz Form DA 1 for the purpose of nomination, and Form DA2 and DA3 for cancellation of nomination and change of nomination respectively.

The terms 'owned fund' and 'net owned fund' in relation to NBFCs?

'Owned Fund' means aggregate of the paid-up equity capital , preference shares which are compulsorily convertible into equity, free reserves , balance in share premium account and capital reserves representing surplus arising out of sale proceeds of asset, excluding reserves created by revaluation of asset, after deducting therefrom accumulated balance of loss, deferred revenue expenditure and other intangible assets. 'Net Owned Fund' is the amount as arrived at above, minus the amount of investments of such company in shares of its subsidiaries, companies in the same group and all other NBFCs and the book value of debentures, bonds, outstanding loans and advances including hire purchase and lease finance made to and deposits with subsidiaries and companies in the same group, to the extent it exceeds 10% of the owned fund.

What are the responsibilities of the NBFCs accepting/holding public deposits with regard to submission of Returns and other information to RBI?

The NBFCs accepting public deposits should furnish to RBI

i. Audited balance sheet of each financial year and an audited profit and loss account in respect of that year as passed in the annual general meeting together with a copy of the report of the Board of Directors and a copy of the report and the notes on accounts furnished by its Auditors;
ii. Statutory Quarterly Return on deposits - NBS 1;
iii. Certificate from the Auditors that the company is in a position to repay the deposits as and when the claims arise;
iv. Quarterly Return on prudential norms-NBS 2;
v. Quarterly Return on liquid assets-NBS 3;
vi. Annual return of critical parameters by a rejected company holding public deposits – NBS 4
vii. Half-yearly ALM Returns by companies having public deposits of Rs. 20 crore and above or asset size of Rs. 100 crore and above irrespective of the size of deposits holding
viii. Monthly return on exposure to capital market by deposit taking NBFC with total assets of Rs 100 crore and above–NBS 6; and
ix. A copy of the Credit Rating obtained once a year

documents or the compliance required to be submitted to the Reserve Bank of India by the NBFCs not accepting/holding public deposits?

A. The NBFCs having assets of Rs. 100 crore and above but not accepting public deposits are required to submit:

(i) Quarterly statement of capital funds, risk weighted assets, risk asset ratio etc., for the company – NBS 7

(ii) Monthly Return on Important Financial Parameters of the company

(iii) Asset- Liability Management (ALM) returns:

(iv) Statement of short term dynamic liquidity in format ALM [NBS-ALM1] -Monthly,

(v) Statement of structural liquidity in format ALM [NBS-ALM2] Half Yearly

(vi) Statement of Interest Rate Sensitivity in format ALM -[NBS-ALM3], Half yearly

B. The non deposit taking NBFCs having assets of more than Rs.50 crore and above but less than Rs 100 crore are required to submit Quarterly return on important financial parameters of the company. Basic information like name of the company, address, NOF, profit / loss during the last three years has to be submitted quarterly by non-deposit taking NBFCs with asset size between Rs 50 crore and Rs 100 crore

All companies not accepting public deposits have to pass a board resolution to the effect that they have neither accepted public deposit nor would accept any public deposit during the year.

However, all the NBFCs (other than those exempted) are required to be registered with RBI and also make sure that they continue to be eligible to retain the Registration. Further, all NBFCs (including non-deposit taking) should submit a certificate from their Statutory Auditors every year to the effect that they continue to undertake the business of NBFI requiring holding of CoR under Section 45-IA of the RBI Act, 1934.

NBFCs are also required to furnish the information in respect of any change in the composition of its Board of Directors, address of the company and its Directors and the name/s and official designations of its principal officers and the name and office address of its Auditors. With effect from April 1, 2007, non-deposit taking NBFCs with assets of Rs 100 crore and above were advised to maintain minimum CRAR of 10% and also comply with single/group exposure norms. As on date, such NBFCs are required to maintain a minimum CRAR of 15%..

Can a NBFC pre-pay its public deposits?

ANS 32. An NBFC accepts deposits under a mutual contract with its depositors. In case a depositor requests for pre-mature payment, Reserve Bank of India has prescribed Regulations for such an eventuality in the Non-Banking Financial Companies Acceptance of Public Deposits (Reserve Bank) Directions, 1998 wherein it is specified that NBFCs cannot grant any loan against a public deposit or make premature repayment of a public deposit within a period of three months (lock-in period) from the date of its acceptance. However, in the event of death of a depositor, the company may, even within the lock-in period, repay the deposit at the request of the joint holders with survivor clause / nominee / legal heir only against submission of relevant proof, to the satisfaction of the company.

An NBFC, (which is not a problem company) subject to above provisions, may permit after the lock–in period, premature repayment of a public deposit at its sole discretion, at the rate of interest prescribed by the Bank.

A problem NBFC is prohibited from making premature repayment of any deposits or granting any loan against public deposit/deposits, as the case may be. The prohibition shall not, however, apply in the case of death of depositor or repayment of tiny deposits i.e. up to Rs. 10000/- subject to lock in period of 3 months in the latter case.

liquid assets requirement for the deposit taking companies? Where are these assets kept? Do depositors have any claims on them?

In terms of Section 45-IB of the RBI Act, 1934, the minimum level of liquid assets to be maintained by NBFCs is 15 per cent of public deposits outstanding as on the last working day of the second preceding quarter. Of the 15%, NBFCs are required to invest not less than ten

percent in approved securities and the remaining 5% can be in unencumbered term deposits with any scheduled commercial bank. Thus, the liquid assets may consist of Government securities, Government guaranteed bonds and term deposits with any scheduled commercial bank.

The investment in Government securities should be in dematerialised form which can be maintained in Constituents' Subsidiary General Ledger (CSGL) Account with a scheduled commercial bank (SCB) / Stock Holding Corporation of India Limited (SHICL). In case of Government guaranteed bonds the same may be kept in dematerialised form with SCB/SHCIL or in a dematerialised account with depositories [National Securities Depository Ltd. (NSDL)/Central Depository Services (India) Ltd. (CDSL)] through a depository participant registered with Securities & Exchange Board of India (SEBI). However in case there are Government bonds which are in physical form the same may be kept in safe custody of SCB/SHCIL.

NBFCs have been directed to maintain the mandated liquid asset securities in a dematerialised form with the entities stated above at a place where the registered office of the company is situated. However, if an NBFC intends to entrust the securities at a place other than the place at which its registered office is located, it may do so after obtaining the permission of RBI in writing. It may be noted that liquid assets in approved securities will have to be maintained in dematerialised form only.

The liquid assets maintained as above are to be utilised for payment of claims of depositors. However, deposits being unsecured in nature, depositors do not have direct claim on liquid assets.

Companies which are NBFCs, but are exempted from registration?

Housing Finance Companies, Merchant Banking Companies, Stock Exchanges, Companies engaged in the business of stock-broking/sub-broking, Venture Capital Fund Companies, Nidhi Companies, Insurance companies and Chit Fund Companies are NBFCs but they have been exempted from the requirement of registration under Section 45-IA of the RBI Act, 1934 subject to certain conditions.

Housing Finance Companies are regulated by National Housing Bank, Merchant Banker/Venture Capital Fund Company/stock-exchanges/stock brokers/sub-brokers are regulated by Securities and Exchange Board of India, and Insurance companies are regulated by Insurance Regulatory and Development Authority. Similarly, Chit Fund Companies are regulated by the respective State Governments and Nidhi Companies are regulated by Ministry of Corporate Affairs, Government of India.

It may also be mentioned that Mortgage Guarantee Companies have been notified as Non-Banking Financial Companies under Section 45 I(f)(iii) of the RBI Act, 1934.

There are some entities (not companies) which carry on activities like that of NBFCs. Are they allowed to take deposits? Who regulates them?

Any person who is an individual or a firm or unincorporated association of individuals cannot accept deposits except by way of loan from relatives, if his/its business wholly or partly includes loan, investment, hire-purchase or leasing activity or principal business is that of receiving of deposits under any scheme or arrangement or in any manner or lending in any manner.

What is a Residuary Non-Banking Company (RNBC)? In what way it is different from other NBFCs?

Residuary Non-Banking Company is a class of NBFC which is a company and has as its principal business the receiving of deposits, under any scheme or arrangement or in any other manner and not being Investment, Asset Financing, Loan Company. These companies are required to maintain investments as per directions of RBI, in addition to liquid assets. The functioning of these companies is different from those of NBFCs in terms of method of mobilization of deposits and requirement of deployment of depositors' funds as per Directions. Besides, Prudential Norms Directions are applicable to these companies also.

4.3 Management of foreign exchange

The Foreign Exchange Management Act (1999) or in short FEMA has been introduced as a replacement for earlier Foreign Exchange Regulation Act (FERA). FEMA became an act on the 1st day of June, 2000. FEMA was introduced because the FERA didn't fit in with post-liberalisation policies. A significant change that the FEMA brought with it, was that it made all offenses regarding foreign exchange civil offenses, as opposed to criminal offenses as dictated by FERA.

The main objective behind the Foreign Exchange Management Act (1999) is to consolidate and amend the law relating to foreign exchange with the objective of facilitating external trade and payments. It was also formulated to promote the orderly development and maintenance of foreign exchange market in India.

FEMA is applicable to all parts of India. The act is also applicable to all branches, offices and agencies outside India owned or controlled by a person who is a resident of India.

The FEMA head-office, also known as Enforcement Directorate is situated in New Delhi and is headed by a Director. The Directorate is

further divided into 5 zonal offices in Delhi, Mumbai, Kolkata, Chennai and Jalandhar and each office is headed by a Deputy Director. Each zone is further divided into 7 sub-zonal offices headed by the Assistant Directors and 5 field units headed by Chief Enforcement Officers.

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