BANKING PERFORMANCE AND SOCIO ECONOMIC DEVELOPMENT

Dr. Sudesh Kumar

Banking Performance and Socio Economic Development

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Preface

Banking performance refers to the effectiveness and efficiency of banking institutions in carrying out their core functions, including financial intermediation, risk management, and customer service. Key indicators of banking performance include profitability, asset quality, liquidity, and capital adequacy ratios, which are used to assess the financial health and stability of banks.

Socio-economic development encompasses the improvement of social and economic well-being within a society. It involves measures to enhance living standards, reduce poverty, promote education and healthcare, and create opportunities for sustainable economic growth and human development.

The performance of the banking sector has a profound impact on socio-economic development. Banks play a crucial role in mobilizing savings, allocating capital, and providing credit to individuals, businesses, and governments, thus fueling investment, entrepreneurship, and economic growth. Effective banking performance enhances access to financial services, such as savings accounts, loans, and insurance, which are essential for individuals and businesses to invest, grow, and manage financial risks. Improved access to finance promotes inclusive growth by empowering marginalized groups and fostering economic opportunities for all segments of society. A well-functioning banking sector promotes investment in productive sectors of the economy, such as manufacturing, infrastructure, and technology, by providing financing and risk management services. This fosters innovation, productivity, and competitiveness, driving long-term socio-economic development.

Banking performance is closely linked to financial stability, as sound banking practices and effective regulation are essential for safeguarding depositor funds, maintaining public trust, and mitigating systemic risks that could undermine socio-

economic progress. By providing access to credit and financial services, banks can help reduce income inequality and alleviate poverty by enabling individuals and businesses to invest in education, healthcare, and income-generating activities, thus improving their socio-economic well-being.

Policymakers must prioritize policies and regulations that promote a sound and competitive banking sector, enhance financial inclusion, and foster sustainable economic growth. This requires efforts to strengthen banking supervision, improve governance and transparency, and promote innovation and digitalization in banking services to maximize the contribution of the banking sector to socio-economic development.

In this book, we explore the intricate relationship between banking performance and socio-economic development, shedding light on its profound implications for global prosperity.

–Author

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Introduction

ECONOMIC DEVELOPMENT

The economic development in India is highly dependent upon various sectors like agriculture, manufacturing and services (especially in the software market). India ranks fourth with respect to GDP (PPP) as per the International Monetary Fund (IMF), CIA World Factbook and World Bank. India's economy is diverse and encompasses agriculture, handicrafts, textile, manufacturing, and a multitude of services.

Although two-thirds of the Indian workforce still earn their livelihood directly or indirectly through agriculture, services are a growing sector and are playing an increasingly important role in India's economy. The advent of the digital age, and the large number of young and educated people fluent in English are gradually transforming India into an important 'back office' destination for global companies for the outsourcing of their customer services and technical support.

India is a major exporter of highly skilled workers in software and financial services, and software engineering. Other sectors like manufacturing, pharmaceuticals, biotechnology, nanotechnology, telecommunication, shipbuilding, aviation and tourism are showing strong potentials with high growth rates. India has an increasing population and the challenge of reducing economic and social inequality.

Poverty remains a serious problem, although it has declined significantly since independence. Current estimates state that 25% of India's population is below the poverty level.

AGRICULTURE

Composition of India's total production (million tonnes) of foodgrains and commercial crops, in 2003–04.India ranks second worldwide in farm output. Agriculture and allied sectors like forestry, logging and fishing accounted for 18.6% of the GDP in 2005, employed 60% of the total workforce and despite a steady decline of its share in the GDP, is still the largest economic sector and plays a significant role in the overall socio-economic development of India. Yields per unit area of all crops have grown since 1950, due to the special emphasis placed on agriculture in the five-year plans and steady improvements in irrigation, technology, application of modern agricultural practices and provision of agricultural credit and subsidies since the green revolution.

India is the largest producer in the world of milk, cashew nuts, coconuts, tea, ginger, turmeric and black pepper. It also has the world's largest cattle population (193 million). It is the second largest producer of wheat, rice, sugar, groundnut and inland fish. It is the third largest producer of tobacco. India accounts for 10% of the world fruit production with first rank in the production of banana and sapota. The required level of investment for the development of marketing, storage and cold storage infrastructure is estimated to be huge. The government has implemented various schemes to raise investment in marketing infrastructure. Among these schemes are Construction of Rural Go downs, Market Research and Information Network, and Development/Strengthening of Agricultural Marketing Infrastructure, Grading and Standardization.

RESEARCH AND DEVELOPMENT

The Indian Agricultural Research Institute (IARI), established in 1905, was responsible for the research leading to the "Indian Green Revolution" of the 1970s. The Indian Council of Agricultural Research (ICAR) is the apex body in agriculture and related allied fields, including research and education.

The Union Minister of Agriculture is the President of the ICAR. The Indian Agricultural Statistics Research Institute develops new techniques for the design of agricultural experiments, analyses data in agriculture, and specializes in statistical techniques for animal and plant breeding. Prof. M.S. Swaminathan is known as "Father of the Green Revolution" and heads the MS Swaminathan Research Foundation. He is known for his advocacy of environmentally sustainable agriculture and sustainable food security.

INDUSTRIAL OUTPUT

India is fourteenth in the world in factory output. Manufacturing sector in addition to mining, quarrying, electricity and gas together account for 27.6% of the GDP and employ 17% of the total workforce. Economic reforms introduced after 1991 brought foreign competition, led to privatisation of certain public sector industries, opened up sectors hitherto reserved for the public sector and led to an expansion in the production of fast-moving consumer goods. Post-

liberalisation, the Indian private sector, which was usually run by oligopolies of old family firms and required political connections to prosper was faced with foreign competition, including the threat of cheaper Chinese imports. It has since handled the change by squeezing costs, revamping management, focusing on designing new products and relying on low labour costs and technology.

SERVICES

India is fifteenth in services output. Service industry employs 23% of the work force and is growing quickly, with a growth rate of 7.5% in 1991–2000, up from 4.5% in 1951–80. It has the largest share in the GDP, accounting for 53.8% in 2005 up from 15% in 1950.

Business services (information technology, information technology enabled services, business process outsourcing) are among the fastest growing sectors contributing to one third of the total output of services in 2000. The growth in the IT sector is attributed to increased specialisation and availability of a large pool of low cost. Highly skilled, educated and fluent English-speaking workers (a legacy of British Colonialism) on the supply side and on the demand side, has increased demand from foreign consumers interested in India's service exports or those looking to outsource their operations. India's IT industry, despite contributing significantly to its balance of payments, accounts for only about 1% of the total GDP or 1/50th of the total services. The ITES-BPO sector has become the biggest employment generator especially amongst young college graduates. The number of professionals employed by IT and ITES sectors is estimated at 1287000 as on March 2006. Also, Indian IT-ITES is estimated to have helped create an additional 3 million job opportunities through indirect and induced employment.

BANKING AND FINANCE

The RBI headquarters in MumbaiSince liberalisation, the government has approved significant banking reforms. While some of these relate to nationalised banks (like encouraging mergers, reducing government interference and increasing profitability and competitiveness), other reforms have opened up the banking and insurance sectors to private and foreign players. Currently, in 2007, banking in India is generally mature in terms of supply, product range and reach-even, though reach in rural India still remains a challenge for the private sector and foreign banks.

In terms of quality of assets and capital adequacy, Indian banks are considered to have clean, strong and transparent balance sheets relative to other banks in comparable economies of Asia. The Reserve Bank of India is an autonomous body, with minimal pressure from the government.

The stated policy of the Bank on the Indian Rupee is to manage volatility but without any fixed exchange rate. Currently, India has 88 scheduled commercial banks (SCBs) — 28 public sector banks (that is with the Government of India

holding a stake), 29 private banks (these do not have government stake; they may be publicly listed and traded on stock exchanges) and 31 foreign banks. They have a combined network of over 53,000 branches and 17,000 ATMs. The public sector banks hold over 75% of total assets of the banking industry, with the private and foreign banks holding 18.2% and 6.5% respectively.

INDIA'S RESOURCE CONSUMPTION

Oil

India had about 5.6 billion barrels (890,000,000 m^3) of proven oil reserves as of January 2007, which is the second-largest amount in the Asia-Pacific region behind China. Most of India's crude oil reserves are located in the western coast (Mumbai High) and in the northeastern parts of the country, although considerable undeveloped reserves are also located in the offshore Bay of Bengal and in the state of Rajasthan.

The combination of rising oil consumption and fairly unwavering production levels leaves India highly dependent on imports to meet the consumption needs. In 2006, India produced an average of about 846,000 barrels per day (bbl/d) of total oil liquids, of which 77%, or 648,000 bbl/d (103,000 m^3/d), was crude oil. During 2006, India consumed an estimated 2.63 Mbbl/d (418,000 m^3/d) of oil.

The Energy Information Administration (EIA) estimates that India registered oil demand growth of 100,000 bbl/d (16,000 m^3/d) during 2006. EIA forecasts suggest that country is likely to experience similar gains during 2007 and 2008.

Sector Organisation

India’s oil sector is dominated by state-owned enterprises, although the government has taken steps in past recent years to deregulate the hydrocarbons industry and support greater foreign involvement. India’s state-owned Oil and Natural Gas Corporation (ONGC) is the largest oil company, and also the country’s largest company overall by market capitalization. ONGC is the leading player in India’s upstream sector, accounting for roughly 75% of the country’s oil output during 2006, as per Indian government estimates. As a net importer of oil, the Government of India has introduced policies aimed at growing domestic oil production and oil exploration activities.

As part of the effort, the Ministry of Petroleum and Natural Gas crafted the New Exploration License Policy (NELP) in 2000, which permits foreign companies to hold 100% equity possession in oil and natural gas projects. However, to date, only a handful of oil fields are controlled by foreign firms. India’s downstream sector is also dominated by state-owned entities, though private companies have enlarged their market share in past recent years.

Natural Gas

As per the Oil and Gas Journal, India had 38 trillion cubic feet (Tcf) of confirmed natural gas reserves as of January 2007. A huge mass of India’s natural

gas production comes from the western offshore regions, particularly the Mumbai High complex. The onshore fields in Assam, Andhra Pradesh, and Gujarat states are also major producers of natural gas. As per EIA data, India produced 996 billion cubic feet (Bcf) of natural gas in 2004. India imports small amounts of natural gas. In 2004, India consumed about 1,089×109 cu ft (30,800,000,000 m³) of natural gas, the first year in which the country showed net natural gas imports. During 2004, India imported 93×109 cu ft (2,600,000,000 m³) of liquefied natural gas (LNG) from Qatar.

Sector Organization

As in the oil sector, India's state-owned companies account for the bulk of natural gas production. ONGC and Oil India Ltd. (OIL) are the leading companies with respect to production volume, while some foreign companies take part in upstream developments in joint-ventures and production sharing contracts (PSCs). Reliance Industries, a privately-owned Indian company, will also have a bigger role in the natural gas sector as a result of a large natural gas find in 2002 in the Krishna Godavari basin. The Gas Authority of India Ltd. (GAIL) holds an effective control on natural gas transmission and allocation activities.

In December 2006, the Minister of Petroleum and Natural Gas issued a new policy that allows foreign investors, private domestic companies, and national oil companies to hold up to 100% equity stakes in pipeline projects. While GAIL's domination in natural gas transmission and allocation is not ensured by statute, it will continue to be the leading player in the sector because of its existing natural gas infrastructure.

EMERGING ISSUES

Child Labour

There are more children under the age of 14 in India than the entire population of the United States. The great challenge of India, as a developing nation, is to provide sufficient nutrition, education and health care to these children. Children under 14 constitute nearly 3.6% of the total labour force in the country. Of these children, 9 out of every 10 work in their own rural family settings. Around 85% of them are engaged in traditional agricultural activities. Less than 9% work in manufacturing, services and repairs. Child labour is a complex problem that is basically rooted in poverty. The Indian government is implementing the world's largest child labour elimination programme, with primary education targeted for ~250 million. Numerous non-governmental and voluntary organizations are also involved. Special investigation cells have been set up in states to enforce existing laws banning employment of children (under 14) in hazardous industries. The allocation of the Government of India for the eradication of child labour was $10 million in 1995-96 and $16 million in 1996-97. The allocation for 2007 is $21 million.

Corruption

Extent of corruption in Indian states, as measured in a 2005 study by Transparency International India. (Darker regions are more corrupt) Corruption has been one of the pervasive problems affecting India. It takes the form of bribes, evasion of tax and exchange controls, embezzlement, *etc.* The economic reforms of 1991 reduced the red tape, bureaucracy and the Licence Raj that had strangled private enterprise and was blamed for the corruption and inefficiencies. Yet, a 2005 study by Transparency International (TI) India found that more than half of those surveyed had firsthand experience of paying a bribe or peddling influence to get a job done in a public office.

The chief economic consequences of corruption are the loss to the exchequer, an unhealthy climate for investment and an increase in the cost of government-subsidised services. The TI India study estimates the monetary value of petty corruption in 11 basic services provided by the government, like education, healthcare, judiciary, police, *etc.*, to be around ₹ 21,068 crores. India still ranks in the bottom quartile of developing nations in terms of the ease of doing business, and compared with China, the average time taken to secure the clearances for a startup or to invoke bankruptcy is much greater. The Right to Information Act (2005) and equivalent acts in the states, that require government officials to furnish information requested by citizens or face punitive action, computerisation of services and various central and state government acts that established vigilance commissions have considerably reduced corruption or at least have opened up avenues to redress grievances. The 2006 report by Transparency International puts India at 70th place and states that significant improvements were made by India in reducing corruption.

Environmental Degradation

About 1.2 billion people in developing nations lack clean, safe water because most household and industrial wastes are dumped directly into rivers and lakes without treatment. This contributes to the rapid increase in waterborne diseases in humans. Out of India's 3119 towns and cities, just 209 have partial treatment facilities, and only 8 have full wastewater treatment facilities (WHO 1992). 114 cities dump untreated sewage and partially cremated bodies directly into the Ganges River. Downstream, the untreated water is used for drinking, bathing, and washing.

This situation is typical of many rivers in India as well as other developing countries. Globally, but especially in developing nations like India where people cook with fuelwood and coal over open fires, about 4 billion humans suffer continuous exposure to smoke. In India, particulate concentrations in houses are reported to range from 8,300 to 15,000 µg/m3, greatly exceeding the 75 µg/m3 maximum standard for indoor particulate matter in the United States. Changes in ecosystem biological diversity, evolution of parasites, and invasion by exotic species all frequently result in disease outbreaks such as cholera which emerged in 1992 in India. The frequency of AIDS/HIV is increasing. In 1996,

about 46,000 Indians out of 2.8 million (1.6 % of the population) tested were found to be infected with HIV. By the year 2000, more than 10 million Indians, the largest number of any population in the world, were infected.

Future Predictions

Goldman Sachs has predicted that India will become 3rd largest economy of the world by 2035 based on predicted growth rate of 5.3 to 6.1%. Currently It is cruising at 9.4% growth rate.It has been estimated by the economists that the domestic political scene will be dominated by the upcoming general election, which is due to be held by May 2009 but might be held sooner. The increasing importance of regional parties will ensure that the next government will again be a coalition government, likely to be led by either the current ruling party (Indian National Congress) or by the main opposition (Bharatiya Janata Party). A governing alliance of regional and left-wing parties could also be a possibility.

The Reserve Bank of India (RBI, the central bank) is most likely to maintain a bias towards monetary tightening during the remainder of 2007 in order to keep inflation under control. Monetary policy will move to a more neutral orientation in 2008 to 2012, provided that the wholesale price inflation remains within the RBI's medium-term target range of 4 to 4.5%. The government will remain committed to increased spending on public facilities such as health, education and rural welfare projects in a bid to improve living standards outside the country's fast-growing urban localities. Also, the strong economic growth will increase tax revenue, allowing the government to continue to reduce the budget deficit. The real GDP growth (on an expenditure basis) is forecast to slow from 9.4% in fiscal year 2006/2007 (from April to March) to an annual average of 7.7% in 2007/2008 to 2012/2013. Information technology (IT) and IT-enabled services (ITES) output will grow rapidly in the upcoming period, owing to India's cost advantages in these sectors. The strength of the Indian rupee against the US dollar will mitigate inflationary pressures by limiting import-led price rises. However, strong domestic demand, together with supply-side bottlenecks, will keep consumer price inflation at an average of nearly 5.1% a year in 2008 to 2012

OBJECTIVES OF GLOBAL BUSINESS OPERATIONS

The justifications of business firms in internationalizing their operations are related to their objectives for growth and expansion. The most common manner of market entry is commenced through product distribution through local businesses or partners to gain entry in a short period. After introducing the product to the market, the business firm takes a more involved action by producing and marketing the product through a subsidiary. This is applied because it enables products to gain easy entry into the market even before the company has established its operations in the market. This also involves minimum risk since the company is given time to assess the acceptance of the

market to its products. The reasons for market entry and development are to gain access to cost-effective sources of raw materials and labour, create demand or market for products and services and minimize cost. These justifications are related to the objectives of investment decisions. First objective is to learn in lead markets. There are business firms who incur cost in market entry primarily to learn from market conditions and secondarily to earn profit. Koc a Turkish conglomerate sought to enter Germany, considered as the leading global market for refrigerators, freezers, dishwashers and washing machines in terms of product specification and consumer sophistication. At the start of the endeavor, the company recognized that its brand is unknown in the market and great effort is needed to penetrate the market. However, the company also recognized that if its market entry strategies work it would gain great insight into the marketing situation in Germany and global market entry as well. The lead market differs in different countries. Software is the lead market in the United States, electronics and telecommunications in Japan and fashion in France and Italy.

Second objective is to pursue a competitive attack or competitive defense. The investment decision to penetrate a market is a response to the earlier move of a competitor to enter a new market. The business firm takes the position of a follower. This is done when the company that previously entered a market is a major competitor and the entry is deemed as giving the competitor a great advantage. Apart from the great advantage that the competitor is expected to experience in terms of revenue, the company also perceives that leaving the company to operate alone in the new market will eventually lead to inequality in status to the disadvantage of the business firm. Another scenario that influences the decision to enter a new market is a defensive stance against the move of a major global competitor to enter the domestic market where the business firms are based. The business firm enters the domestic market of the competitor to force the competitor to incur increased cost in an intensified competition in the same way that it incurred cost in responding to the earlier move of the competitor.

Third objective is to take advantage of opportunities offered by a new marketing environment through incentives from domestic and foreign countries. There are countries that encourage businesses to export by providing different kinds of support making it easier for business firms to expand into the global market. There are also countries that give incentives for foreign investments paving the way for the smooth entry of business firms into the market.

MONEY LAUNDERING ENFORCEMENT

Money laundering is defined as an illicit money transfer. There are two main kinds of illicit money transfers. First, traditional money laundering entails transferring illegally obtained funds to conceal their origins and make them appear legal. For example, drug dealers deposit cash revenues in banks and later transfer them until the funds appear to originate from legitimate sources. Second, terrorism financing entails transferring mostly legal funds for illegal purposes.

For instance, legal charity donations are transferred to fund terrorist attacks. In sum, both forms of money laundering are characterized by illicit and socially harmful fund transfers. Money laundering causes social harm because it facilitates crime and enables criminals to enjoy criminal revenues.

Money laundering can happen through various intermediaries. Bank transfers, both by wire and check, are the most common channels for illicit money transfers as described in Reuter and Truman (2004). Money transmitting businesses, such as Western Union, are also used for money laundering as detailed in The Wall Street Journal (2004b).

These businesses are typically franchised or owned by individuals, who might have stronger incentives to turn a blind eye to money laundering than bank branch-managers. In the greyer area of finance, informal value transfer systems (IVTSs) provide money transmitting services usually without a proper paper trail. The hawala or hindi systems used by different ethnic communities are described, for instance, in El-Qorchi (2002).

Money laundering is an economically significant crime, though precise estimates are hard to obtain. According to Camdessus (1998), the consensus range of money laundering volume is between 2 and 5 percent of the global GDP. The FBI (2001) estimates the volume of globally laundered funds as falling between $600 billion and $1.5 trillion.

Laundering fees, *i.e.*, what money launderers charge their criminal clients, are estimated at 5-15% of the laundered amount according to Lal (2003) and Reuter and Truman (2004). Thus, money laundering, including self-laundering, is estimated to be a $30 to $225 billion global 'industry'. Moreover, the harm caused for instance by terrorism financing shows that money laundering is potentially even more significant than what volumes and laundering revenues would suggest. Money laundering enforcement is particularly relevant for the United States.

According to some lawmakers' estimates, half of the globally laundered funds are transferred through US Banks (FBI, 2001). Three known money laundering cases highlight the point. First, $7 billion of Russian funds were washed through the Bank of New York until 1999 (Reuter and Truman, 2004).

Responding to the threat of money laundering, the United States has developed one of the strongest anti-money laundering regulation. The Banking Secrecy Act (1970), which in fact curbed banking secrecy to fight money laundering, was followed by a series of laws, each one of them further strengthening money laundering enforcement: The Money Laundering Control Act (1986), the Annunzio-Wylie Money Laundering Act (1992), the Money Laundering Suppression Act (1994), The Money Laundering and Financial Crimes Strategy Act (1998) and finally the USA Patriot Act (2001).

Second, Stephen Saccoccia alone laundered up to $550 million of drug money for both the Calí and Medellin cartels until he was prosecuted in 1993 (Reuter and Truman, 2004). Third, terrorists transferred $0.5 million for the 9/11 attack (9/11 Commission Report, 2004). The examples also show that the volumes

involved in laundering proceedings of tax evasion and drug trafficking are enormous compared to terrorism financing. Money laundering enforcement relies on bank reporting to law enforcement and government agencies as reviewed in Reuter and Truman (2004). Banks provide two kinds of reports: rule-based and discretionary reports. For instance, banks file the rule-based currency transaction report (CTR) for any cash transactions exceeding $10,000. Enforcing rule-based reporting is a standard disclosure problem as bank actions are ex-post verifiable. They are, however, insufficient, because money launderers are aware of the rules and can circumvent them. For instance, money launderers usually 'smurf', *i.e.*, break down large cash deposits over $10,000 into smaller deposits below the reporting threshold. Nevertheless, rule-based reporting makes money laundering more cumbersome.

The weaknesses of rule-based reports led to the introduction of a discretionary report, the suspicious activity report (SAR), in 1996. The suspicious activity report is filed for any activity that the bank considers to be 'suspicious'. For instance, if the bank spots several transactions just below $10,000, it can identify them as suspicious because they hint at smurfing.

The notion of suspicion is intentionally left vague so as to leave both money launderers and banks uncertain. Thus, money launderers cannot rely on simple rules to avoid being reported. Furthermore, banks are forced to constantly improve their understanding of how money laundering is done.

This intentional vagueness can be understood as another form of constructive ambiguity. The SARs are filed to the Financial Crime Enforcement Network (FinCEN), which might forward them to law enforcement agencies for further investigation.

Banks incur costly screening, monitoring and reporting because of the threat of sanctions.

Failing to file SARs led to fines of $25 million for Riggs Bank (FinCEN, 2004a), $24 million for Arab Bank (FinCEN, 2005f), $50 million for AmSouth Bank (FinCEN, 2004b) and $80 million for ABN-AMRO Bank (FinCEN, 2005g). Most importantly, sanctions or fines are levied for false negatives, *i.e.*, for not reporting transactions which are later prosecuted as money laundering or judged to be suspicious ex-post.

Banks are not fined for false positives, *i.e.*, for reporting legal transactions as money laundering. This 'safe harbor' provision strengthens banks incentive to report.

COMMODITY OF MONEY

That commodity is money. Money enables us to exchange our own specialized products or services much more easily for the products and services of the thousands or millions of others we rely on for the goods and services we consume. Without a system of monetary exchange, it is hard to imagine that modern production, with extensive division of labour and collaboration and high labour productivity, could exist at all. Accordingly, in this chapter we explore modern

monetary systems. We will first spend a bit of time on the history of money, and the evolution of modern monetary systems, and then on the workings of the modern systems. As always, we will focus mostly on the American system, but many of the principles will be applicable in other countries, and we shall try to indicate the ways in which the American system is unique.

Money is whatever serves as the "medium of exchange." That is, as the quotation from Adam Smith says, money is a commodity or token that everyone will accept in exchange for the things they have to sell. Different societies may have different monies. Some historical examples are:

- Gold coins (in medieval Europe)
- Cowrie shells (in West Africa)

The cowrie shells used in West Africa are small seashells. This may sound "quaint," but cowrie-money was very successful. It continued to be used into the twentieth century, after the West African countries had become colonies. The colonies were required to use European money, and they did--but when the European monetary systems collapsed in hyperinflation, the West African people went back to using their cowrie-money to get past the crisis. It was the cowrie-money that proved most reliable for many years of the twentieth century. We should say that the "commodity" that serves as money can be a purely symbolic token, like dollar bills in America. Indeed, all money has primarily symbolic value.

Even the gold coins used in medieval Europe were probably valued more for their symbolic value than for the gold they contained. Symbolic or not, money is an asset. Thus we define:

A GRAPHIC TIMELINE OF THE HISTORY OF MONEY

Money has been used for something like 3000 years. City-states in the ancient near east had extensive trade from city to city, and they used precious metals as a medium of exchange. When trades were settled a certain amount of metal could be used to settle the difference. There was a problem of quality control, however. There were problems of determining that the quantity and purity of the metal was as agreed.

The answer was quality control and certification. The early kings of Lydia standardized the hunks of metal and guaranteed their quality by stamping the king's picture on them. These were the first coins. This guarantee of quality by the Lydian kingdom--already a rich and powerful one--was very successful, and made the Kingdom of Lydia even richer, indeed proverbially rich. Croesus and Midas--of all kings the most proverbially wealthy ones--were among the kings of Lydia.

But what Lydia could do, other kingdoms could also do. By 1000 AD, metallic coin monetary systems had spread through much of the old world.

As in so many other things, the Chinese were the innovators for the next step. The Chinese invented printing, and not too much later, they also invented

paper money. It was widespread in China by around 1000 AD, but the Chinese abandoned it after about 1500, in the general decline of Chinese society after the Mongol conquest.

Paper money was to evolve much more indirectly in Europe, though.

Economists have traditionally explained the evolution of modern monetary systems by telling an old story, more or less a fictionalized version of the history of European money. Let's tell our own version of the old story, the story of the Bank of Fred.

Fred is a goldsmith, the only goldsmith in a small medieval city. As a goldsmith, he has a strong vault, to keep his own gold supplies in. Indeed, he has the only strong vault in town, and he stores the gold owned by other citizens for a small fee. A business that stores money in its vaults for a fee is called a bank of deposit. Naturally, to keep the records clear, Fred gives his customers receipts for their deposits.

After a while, some of Fred's customers use receipts for the gold they have deposited to make payments and settle debts. One customer may hand over a receipt in payment for a wagon, for example; and the wagon-maker may go down to Fred's Deposit Bank and take out his gold. But the wagon-maker may instead leave the gold on deposit, and pass the receipt on to the cooper (that is, the barrel-maker) to pay for some barrels. In this way, the receipts begin to circulate as money.

Thus, the receipts have become bank notes. Each receipt says, "Fred the Goldsmith will pay to the bearer, on demand, one gold florin," and these receipts are acceptable as money in Fred's town because the people have faith that Fred can and will honor that promise--that is, the bank-notes are "fiduciary money." A bank that issues bank-notes that circulate as fiduciary money is known as a "Bank of Issue," and Fred's Goldsmith Shop has become a bank of issue.

MODELS IN ECONOMICS

Of course, the real world of economics is very complex. The allocation of resources in a market economy is the result of the interaction of thousands of decisions made by each of hundreds of millions of individual people. Economics deals with this complexity in part by thinking in terms of "models."In a modern economic system, individuals, companies, markets and even nations are interdependent.

A model (of a particular subsystem of the economic system) is a description of these interdependencies in terms of mathematics, pictures, a computer programming language, or some similar descriptive language, together with a theory of the dynamics of the subsystem. Dynamics is the way the subsystem evolves as time passes.

Models are usually somewhat more complex than theories, and a theory may be just one part of a model. Like theories, however, models are abstract, and must ignore some aspects of the system they describe. The term "model" is sometimes used in two different ways. The most common usage in economics

can be expressed as "a model of." This is the usage just described: a "model of" is descriptive. However, we may also hear of a "model for," as in "the economy of Taiwan provides a model for all of China to emulate." In economics, "model of" is the primary meaning, and nothing more will be said here about "models for."

In economics, a model is most likely to take the form of a list of variables and one or more relationships among the variables. These variables and relationships describe the interdependence among the people and activities in the economic system or subsystem, and the way these activities change as time passes.

Examples serve best to make this clear. In the next few sections, we will illustrate this approach by discussing a model of a very basic economic concept, the concept of "scarcity." This model is one we use in discussing the allocation of resources, so we will come back to it in studying microeconomics, and it will illustrate the key role of allocation of resources in modern economics, as well as giving an example of economic models.

SCARCITY

Resources of all kinds are scarce. That simply means that we do not have enough resources to produce all of the goods and services that anybody might like to have. It means that we, as a society, must somehow answer some basic questions: What resources will be used to produce which goods and services.

To answer these questions, and get the resources to the users, is to "allocate" resources. We would, of course, like to organize things so that the resources are used for the most urgent and rewarding kinds of production--that is, we would like to allocate resources "efficiently."

In the Soviet Union, under the system of economic planning, the allocation of resources was pretty obvious--the government decided who got to use which resources. The government "allocated resources" in a way that anyone would recognize. (They don't seem to have done it very efficiently, though). Notice, however, that markets also allocate resources.

This allocation is not as obvious--it goes on while we are not looking, so to say--so we don't always think of it as allocation. But it is allocation of resources, since the bidding and higgling and haggling and deal-making of the market-place does determine which resources are used for what purposes.

A Model Illustrating Scarcity

Let's have an example of a model in economics. At the same time, it will be a model that illustrates what economists mean by scarcity. The model we shall use for our example is the Production Possibility Frontier model. To repeat, scarcity and choice go hand in hand.

This has far-reaching implications. Productive resources are always scarce, since we cannot increase the output of one kind of product without decreasing that of another. Of course, our economy produces many kinds of goods and

services, so that we may be able to understand that better if we think in terms of a model. For our model, let us think of an economy that produces just two kinds of goods: "machines" and food.

ECONOMIC CONDITIONS FOR MONEY USE

Where the free exchange of goods and services is unknown, money is not wanted. In a state of society in which the division of labour was a purely domestic matter and production and consumption were consummated within the single household it would be just as useless as it would be for an isolated man. But even in an economic order based on division of labour, money would still be unnecessary if the means of production were socialized, the control of production and the distribution of the finished product were in the hands of a central body, and individuals were not allowed to exchange the consumption goods allotted to them for the consumption goods allotted to others.

The phenomenon of money presupposes an economic order in which production is based on division of labour and in which private property consists not only in goods of the first order (consumption goods), but also in goods of higher orders (production goods). In such a society, there is no systematic centralized control of production, for this is inconceivable without centralized disposal over the means of production. Production is "anarchistic." What is to be produced, and how it is to be produced, is decided in the first place by the owners of the means of production, who produce, however, not only for their own needs, but also for the needs of others, and in their valuations take into account, not only the use-value that they themselves attach to their products, but also the use-value that these possess in the estimation of the other members of the community. The balancing of production and consumption takes place in the market, where the different producers meet to exchange goods and services by bargaining together. The function of money is to facilitate the business of the market by acting as a common medium of exchange.

MULTINATIONAL COMPANIES IN THE GLOBAL MARKET

It is in the context of globalization that multinational companies developed and persisted and it is also in the context of capitalism, liberalization and privatization that the strategies of multinational companies are based. Multinational companies are business firms that controls and managers manufacturing processes in two or more countries. Multinational companies are multiplant firms operating in more than one state. (1996) Multinational companies are large firms operating in two or more countries through subsidiaries. Subsidiaries are companies controlled by a larger corporation. Control and ownership of the company may be shared with other companies. If the larger corporation fully owns and controls the subsidiary then the latter is a wholly owned company. (2001)

There are different categories of multinational corporations. One type is the horizontally integrated multinational corporation involved in the production activities located in more than one country for the manufacture of similar products. Another is the vertically integrated multinational corporation engaged in the production or manufacture of products in one country to be used in another production activity in another state. In the second category, the company produces or manufactures raw or processed materials in one country to be used in the production of a final product produced in another country. Still another category is the diversified multinational corporation involved in the management of production firms in different countries that are related neither horizontally nor vertically. (2003)

Multinational companies developed into competitive forces in the world economy. The focus of the operations of multinational corporations is on the coordination of the allocation of resources in its international operations in order to minimize production cost and maximize revenue. However, before companies can operate as multinational businesses, these firms also have to develop market-entry strategies to become competitive forces in a foreign economy. There are different strategies that multinational corporations may utilize to enter into a foreign market. The common strategies used in market entry are either marketing or operational. Marketing entry strategies include exporting and licensing where the company does not have to establish a physical base in the new market. Operational entry strategies include franchising, joint venture and foreign direct investment. After all these considerations, the multinational company can now concern itself with building a business structure, actual production, direct marketing as well as financial planning.

GLOBALIZING OR INTERNATIONALIZING A BUSINESS

The endeavor of entering and developing a foreign market is not easy because at the start of the process, the company is like starting a business and there are no sales or marketing structure in place and there is limited knowledge of the market. There is also a difference between domestic and international operations due to the difference in the operating environment and the strategic requirements for success. Although there is no actual difference between domestic and international operations in relation to marketing and operations theories, there are factors in global operations that affect management decisions. (1996) Penetrating an international market involves a process with zero-base because the business does not have an existing business in the market, there is limited knowledge on the market and lack of managerial competence to operate in the new market. This situation implies that the business introduced in a foreign market is likely to experience a greater rate of change than the change in the business environment because there are many internal adjustments to be made by the business organization. The company has several options to address the situation. One option is entering into partnerships with local firms for the distribution of products. Another option is speeding up the process of changing

the marketing strategy through a new product or expanding distribution or changing the marketing organization by acquiring sole distribution of products. (1996) Globalizing a business involves the development of a multi-market network because of the influence of its previous experience in its businesses in other countries. The more international businesses that a company has, the more that operations will be done in an aggregate level. In terms of price, the company may apply a uniform price for its products with minimum influence by the domestic market or it may also vary price in the different markets especially in cases where one business is incurring increased sales and another suffering losses. International operation influences decision-making in different way than in domestic operations. (2003)

International business operations involve rapid changes in marketing strategy as the company grows or fails. Decision-making on strategies is affected by market factors as well as organizational development. Thus, in studying the strategies applied by existing multinational companies, market factors and organizational characteristics are the two major points to be considered. These two factors co-exist in the process of entering and developing an international market. In determining the strategies that contributed to the success of international businesses, the common experiences of these businesses are important to learn the evolution of marketing and organizational strategies from the initial entry until the successful introduction of the company. (2002)

JUSTIFICATIONS FOR GLOBAL BUSINESS OPERATIONS

There are several justifications that support the strategy of some companies to enter the global market. First is to find cost-effective sources of raw materials that support the increasing production needs of the company. The domestic economy may not be able to provide the requirements of the company for raw materials and labour or the cost of raw materials and labour is too high making it not rational for the company to depend on the domestic economy for its raw material needs. When cost-effective sources of raw material and labour are available in other economies, companies expand into other economies to take advantage of cheaper raw materials and labour. One of the first companies to operate as multinational companies are those engaged in oil exploration such as British Petroleum and Exxon.

Second is to find new markets for their products. There are companies that experience decrease sales due to market saturation. Market saturation refers to the extent that a particular product is diffused or distributed into the market. The extent of distribution determines the remaining portion of the market for business expansion. Market saturation depends upon the following market factors: 1) the purchasing power of consumers; 2) competition; 3) prices; and technology. In the case of television, almost all of the households in industrialized countries such as the United States and Britain own television resulting to a very high diffusion rate. Companies manufacturing televisions are forced to compete based on innovations to attract households to purchase new television

sets. Most companies selling televisions are multinational companies offering their products to new markets in developing countries. Third is to rationalize the firms operating cost. Business firms with seeking to achieve cost-efficient production are attracted to expand their operations to other countries not only to lessen the cost of raw materials and labour but also to minimize cost required in production such as taxes and policy restrictions. In minimizing cost, the business firm is able to remain as cost competitive. Multinational corporations consider cost minimization in terms of its internal operations as well as the external factors that affect production. High business taxes and strict industry standards or restrictions are the most salient business environment features that repel business firms. Less tax and less stringent policy restrictions are the factors that multinational companies look for in choosing a country to expand its operations. Business firms that primarily became multinational companies to minimize operating cost are Texas Instruments, Intel and Seagate Technology.

ENTRY STRATEGIES IN THE GLOBAL MARKET

Entering another economy requires the transfer of financial resources, management skills and technology to another market. There are several ways of gaining market entry for multinational firms, which are exporting, franchising, licensing, joint venture and foreign direct investment. Foreign direct investment provides greatest control of production by the foreign company but requires the greatest use of resources. Franchising and joint venture involves moderate degree of control as well as a moderate infusion of resources. Licensing offers the least level of control because it also involves the least utilization of resources. The entry strategy of a multinational corporation depends upon its business objective and the availability of resources.

Exporting refers to the process of marketing and distributing products to a foreign market. This activity involves the interaction between the exporter, importer, transport provider and the government of the foreign country. The goods distributed are not produced in the foreign market so that there is no need to establish a physical structure in the new market. Costs involved covers marketing activities of the company. This market entry strategy is ideal for business firms with limited knowledge and experience on international operations.

Piggybacking is an exporting arrangement that involves taking advantage of the channels of distribution in the global market instead of targeting a particular market. A company that successfully used this strategy is F&P Gruppo, an Italian rice firm that owns the Gallo brand. The company entered the Poland through its subsidiary in Argentina because the Argentinean air force was sending empty air freighters to Poland that comes back with imports. Food companies took advantage of the cheaper way of exporting products. Another manner of piggybacking is the joining of two companies to take advantage of a channel of distribution. This is applied by IBM and Minolta with the latter taking advantage

of the established distribution channels of IBM and the former welcoming a firm to share the cost of distribution. Franchising is a market entry strategy as well as a hybrid manner of organizing the business by establishing a relationship of agency with the franchisees. Franchising involves the convergence of a parent company and several small businesses. The parent company sells to the smaller businesses the right to distribute its products or use its trade name and processes. The agency relationship established between the parent company and the franchisee is governed by a contract. The franchise contract defines the conditions of the agency and the duration of the relationship..

McDonalds celebrated its 50th anniversary in April 15, 2005 and remained true to the statement "As far as I can tell, the only place you can't get a Big Mac is in outer space." The company operates as a global business through franchising. In 2004, the company reported to have established 30,000 local restaurants located in 115 countries across five continents. It is the biggest fast food retailer conquering markets worldwide. In almost every country in the world, there is a McDonalds restaurant and in a single state or region, there are several branches. The company has spread so widely that the term "mcdonaldization" was coined to describe the organization and culture of the company. The term has evolved to refer to the general business strategy of expansion.

Licensing is the process of permitting a local company to use the property of the licensor in exchange for a fee. The property refers to intangible things such as patents, trademarks as well as production techniques. This arrangement involves the infusion of little resources enabling the licensor to obtain a high return on investment. However, there is a risk of revenue loss because the licensee produces and markets products and collects revenue.

Licensing also refers to the market entry of business firms with a distinct legally protected asset that constitutes their distinction in the market. Distinct protected assets covers brand name, technology, product design and manufacturing or service process. Licensing is not an exclusive strategy in global marketing. Disney is a company renowned for licensing cartoon characters to manufacturing and other firms within and outside the United States. The central activity of Disney is its media productions while marketing is done by the business firms permitted to use Disney cartoon characters. In department stores cartoon characters are found in children's clothing, shoes, bags, pens and toys while in supermarkets Disney characters are used in shampoos, soap, diapers, milk, cereals and a wide array of other products.

Joint venture refers to the management arrangement that involves the partnership of a foreign company and a local company based on the sharing of capital, technological resources and other benefits. The foreign company benefits from the relationship by gaining entry into the market and taking advantage of the expertise of the local company on the political and economic environment while the local company benefits from enjoying the infusion of capital and technological innovations into its operations. The extent of control of the foreign

and local firms in the joint venture depends upon the agreement and the legal limitations. The New Corporation by its strategic joint ventures became a multinational company. Its corporate projects started out as a drive to expand its reach to other countries apart from Australia. It ventured into the UK purchasing newspapers both national and local and then it set foot in the United States to introduce his company as a potent competitor to existing companies. The most recent venture is developing its business in Asia particularly in China and Hong Kong, India, Indonesia and the Philippines which catered not only to the English speaking locals but also accommodated and aired the local events and locally produced movies and television programmes. In countries where there are established broadcasting companies the strategy of The News Corporation is to gain control of the channels of distributing televised news by gaining controlling interest in influential cable companies through joint ventures. When satellite television was introduced, it also acquired interests in satellite corporations. After being assured of the means of showing its programmes, the company had the freedom to create and develop its shows. The company is known for hit movies *Titanic* and *Independence Day* and the kids channel Fox Kids.

Foreign direct investment (FDI) is "a category of international investment that reflects the objective of a resident in one economy (the direct investor) obtaining a lasting interest in an enterprise resident in another economy (the direct investment enterprise)" (2003). Foreign direct investment implies the development of a lasting interest in the establishment of a continuing relationship of the direct investor with the enterprise including influencing the management of the firm to a certain degree (1996). Foreign direct investment allows the direct investor and the direct investment enterprise to experience certain economic benefits from the relationship. On one hand, the direct investor is able to engage in new ventures or expand into other economies by sharing capital, management expertise and technology to the direct investment enterprise (2003). On the other hand, the direct investment enterprise benefits from capital infusion, technological transfer and management skill acquisition necessary for growth. (1998) International business firms that fared well through foreign direct investment include General Motors that established a plant in the Philippines as well as Coca-cola and Pepsi with processing plants in every geographical region for cost-efficiency.

OPERATIONAL AND MARKETING STRATEGIES

The success of the marketing strategy of multinational corporations depends upon the manner that the company takes advantage of the different opportunities and tools to improve its gain a place relative to its competitors and the market. Marketing efficiency means creating a market in the local economy by introducing and promoting products with the objective of extending product life cycle or introducing products that reached high levels of saturation in other markets. Strategy in global marketing considers the first mover advantage of

the company. The multinational company may also take advantage of the higher price that people expect from new products. Risk as a strategy consideration refers to the benefits that the multinational company gets by spreading the operational and macroeconomic risks in different economies. Learning is a benefit achieved by the multinational company because management is able to expand its experience by operating in different economies and markets. Reputation is the benefit experienced by the company in increasing its brand equity in the global market through the influence of crossover customers.

Operating in the global market requires strategies based on accurate information about the marketing environment worldwide. The company can utilize marketing and operations theories but it should apply these in the context of the local environment. Operating strategies revolve around diversity. The company needs to consider and integrate three sources of information: firm-specific knowledge or information on the local market environment, country specific knowledge or information on the political and economic characteristics of the local environment, and knowledge of global environment to determine trends that affects decisions on business operations.

Marketing strategy should focus on mass-marketing competence and establishing marketing channels. Mass-marketing competence is an important because this is the strategy demanded by the emerging market and it is the best way of fulfilling the objective of the business firm to develop a market for its products. Companies seeking entry into new markets initially price their products higher than local counterparts in order to maintain global price consistency and to prevent parallel importing threats. This results to their products accessible only to the elite segment of the market. In the long run the company does not obtain projected sales and it also allows local companies time to develop their products and brands. Establishing marketing channels is an important factor in market penetration because this strategy links the offer of the company to the demands of the customer.

2

The Financial System's Banking Sector

THE BANKING SECTOR

Only recently have researchers started to address the general questions of the optimal design of the financial system and the optimal scope of financial intermediaries. The predominant role that banks have long played in financial intermediation led researchers to focus for many years on the development of theories explaining the existence of these intermediaries. This in turn has shaped the research both on the motives for regulating banks and on the role of capital regulation.

DESIGN OF THE FINANCIAL SYSTEM

Economic theory has traditionally focused on the real sector of the economy and disregarded the role of financial intermediation, viewing it as a veil. Effectively, in a world à la Arrow-Debreu, where markets are complete, information is symmetric and other frictions are not present, there is no room for financial intermediaries. However, the world we live in is quite different from that envisioned by Arrow and Debreu, which explains the increasing evidence of financial intermediaries' influence in the economy. This evidence has manifested itself in various different ways, ranging from a strong correlation between the size of the financial system and the level of the country's economic development (King and Levine (1993)) to differences in the way firms finance investment in bank-based systems (systems where banks predominate) and market-based systems (those where financial markets predominate) (Mayer (1988)).

Despite the interest in the configuration of the financial system that such evidence has generated, our understanding of the interlinkages between the various parts of that system remains limited because research on the optimal design of the financial system is still in its early stages and has been hampered by the complexity of the problems involved.2 Nevertheless, researchers have already made significant progress explaining, for example, the parallel existence of financial intermediaries and markets, the differences between bank-based systems and market-based systems and the role of various financial intermediaries.

As for the research on financial intermediaries, it focused initially on the development of theories to explain commercial banks but has more recently been extended its goals to a study of the implications of broadening the scope of these intermediaries to include activities such as investment banking, insurance and commerce. Notwithstanding all this progress, the research on bank capital regulation continues to focus on intermediaries that combine lending with deposit taking.

THE EXISTENCE OF BANKS

In a world à la Arrow-Debreu with complete and frictionless markets, there would be no need for financial intermediaries because investors and borrowers would be able to achieve efficient risk allocation on their own. It is necessary to modify the assumptions underlying this framework and assume the presence of some frictions in order to justify the existence of financial intermediaries. In the earlier theories of banks, these frictions result from transaction costs. In the contemporary theories, they arise instead from informational asymmetries.

In earlier theories of financial intermediation, such as Gurley and Shaw's (1960), the main activity of intermediaries would be the transformation of securities issued by firms (shares and bonds) into securities demanded by investors (deposits). Financial intermediaries are valuable because they provide services of divisibility and risk transformation, which borrowers cannot obtain on their own under identical conditions due to transaction costs. For example, if there are fixed costs associated with any financial transaction, borrowers will form coalitions to sell together in order to save on these costs. If there are indivisibilities in the transaction technology, a coalition of investors will be able to build a more diversified portfolio, that is, one with lower risk than the portfolio each member is able to build on its own.

In modern theories of financial intermediation, the two most prominent explanations for the existence of intermediaries like depository institutions are the provision of liquidity and the provision of monitoring services.6 Banks are valuable as providers of liquidity services because they provide depositors with liquidity insurance (Bryant (1980) and Diamond and Dybvig (1983)). By issuing demand deposits, banks can improve on a competitive market because these deposits allow for better risk-sharing among households that face idiosyncratic shocks to their consumption needs over time.

The importance of banks in this framework arises from an information asymmetry: the shock that affects a household's consumption needs is not publicly observable. Banks are valuable as providers of monitoring services because they act as delegated monitors to investors and thus avoid the duplication of monitoring costs, (Diamond (1984)). As with the liquidity insurance explanation, the key to the existence of banks in this setup is also an informational problem.

Firms are assumed to have more information about their investment projects than investors do.

Investors can learn this information but only after incurring a monitoring cost. They may choose, however, to delegate monitoring to a bank, through which they all provide funding to the firm. By acting as delegated monitors of investors, banks save on monitoring costs and make funding available to firms at a lower cost than direct lending. The provision of liquidity insurance explains the liability side of the bank's balance sheet and the provision of monitoring services explains the asset side of the balance sheet.

None of these approaches, however, puts forward an explanation as to why it is advantageous for an intermediary to offer both of these services, as happens with the existing depository institutions. Diamond and Rajan (1998) address this issue in a model where both investors and borrowers care about liquidity.

The former are concerned with liquidity because they are uncertain about the time at which they may want to reduce their holdings of a financial asset, while the latter are concerned with liquidity because they are uncertain about their ability to raise added funding in the future.

An intermediary that accepts deposits and extends loans is valuable in that setting because it enables depositors to have better access to their funds than they would if they invested directly in firms, and it insures borrowers against the risk that funding will be cut off prematurely, which they would face had they borrowed from an investor.

In conclusion, the research on the design of the financial system reviewed in this section shows that financial institutions and markets are not perfect substitutes, thus confirming that the configuration of the financial system matters. Therefore, any change to one of these institutions, for example through regulations, is bound to have implications far beyond the institution itself.

Despite this, researchers continue to focus on financial intermediation through banks. This is motivated partly by the role of banks, which are still perceived to be the most important intermediaries, and partly for simplifying reasons because models rich enough to encompass various forms of intermediation become highly complicated very quickly.

DO BANKS NEED TO BE REGULATED?

The justification for any regulation usually stems from a market failure such as externalities, market power or asymmetry of information between buyers and sellers. In the case of banking, there is still no consensus on whether banks

need to be regulated and, if so, how they should be regulated. This partly reflects the lack of consensus on the nature of the market failure that makes free banking not optimal. Nonetheless, there are two justifications that are often presented for regulating banks: the risk of a systemic crisis and the inability of depositors to monitor banks.

THE SYSTEMIC RISK ARGUMENT

Banks' provision of liquidity services leaves them exposed to runs (Diamond and Dybvig (1983)). The reason is that a bank needs to operate with a balance sheet where the liquidation value of its assets is less than the value of liquid deposits in order to provide liquidity services. Under these circumstances, given that depositors' expectations about the value of their deposits depend on their place in line at the time of withdrawal because of the first come, first served rule, a run can occur without the release of adverse information about the bank's assets and even when there is perfect information about the bank's assets. For example, if depositors panic, they may try to withdraw their funds out of fear that other depositors will do so first, thus forcing an otherwise sound bank into bankruptcy.

If there were no aggregate uncertainty and if each bank's investment in the short-term asset were publicly observable then depositors could be fully insured against the liquidity risk faced by their bank if banks could lend to each other (Bhattacharya and Gale (1987)).

However, when there is asymmetry of information about the banks' assets, as happens when banks provide monitoring services because this requires them to hold a large portion of their assets in the form of illiquid loans, the interbank market will not generally be able to provide depositors with full liquidity insurance.

A possible reason is that under these conditions, banks are afraid of a "winner's curse" (that is, of lending only to other banks that have already been rejected loans because of their poor quality) and consequently lend less than they would under homogeneous information (Flannery (1996)). Asymmetry of information about banks' assets makes them susceptible to an additional source of runs, the release of information on the value of those assets, (Jacklin and Bhattacharya (1988)). A bank run that is triggered by the release of information indicating poor performance by the bank may be beneficial because it is a source of discipline.

In contrast, a run triggered by depositors' panic or by the release of information when there is asymmetry of information among depositors about bank returns will not be beneficial. In this case, the run is costly because it forces the premature liquidation of assets, thus disrupting the production process. Furthermore, it may trigger contagion runs, which may culminate in a system failure. It is this risk of a system failure that forms the basis of the classical argument proposing mechanisms to insure banks against liquidity shocks despite their interference in the free functioning of markets.

PROPOSALS TO INSULATE BANKS FROM RUNS

One of these proposals suggests the development of narrow banks, that is, banks that invest only in riskless securities, such as short-term government securities. Narrow banks are run-proof but this comes at a cost in that they do not perform one of banks' key functions, the creation of liquidity. Another drawback associated with narrow banking results from the inability of intermediaries to exploit the gains that result from combining deposit-taking with lending extended through commitments or credit lines (Kashyap, Rajan and Stein (1999)). Moreover, it is possible that the new firms that would move in to fill the vacuum left by banks would inherit the problem of runs (Diamond and Dybvig (1986) and Wallace (1996)).

Another proposal suggests funding banks with equity rather than demand deposits. This would make banks immune to runs but would be costly, as under certain conditions demand deposits dominate equity contracts in insuring consumers against random shocks to their intertemporal preferences for consumption (Jacklin (1987)). This proposal, therefore, yields a trade-off between stability and efficiency.

A third proposal builds on the suspension of convertibility. If banks could precommit not to liquidate more than the portion of their assets that is necessary to meet the liquidity demands of those consumers that wish to consume early then they would eliminate the other consumers' incentive to run on the bank. Suspension of convertibility, though, provides complete insurance only if liquidity shocks are perfectly diversifiable and if the portion of consumers that wish to consume early is known. A fourth proposal, probably the oldest one, is associated with Bagehot (1873), who is usually credited with the first analysis of a central bank's role as lender of last resort (LLR) in preventing a bank run from turning into a panic. To that end, he argues that the central bank should make clear in advance its readiness to lend any amount to a bank that is having liquidity problems provided the bank is solvent. Lending should be done at a penalty rate (to reduce banks' incentives to use these loans to fund normal business) and only against good collateral (valued at pre-panic prices). It appears, however, that the conditions set out by Bagehot for operating the LLR function impede the LLR from attaining its key objective. A bank with good collateral will be able to borrow from the market. It is when there is some uncertainty about the bank's financial condition that the bank may not be able to meet its liquidity needs in the interbank market and therefore an LLR becomes valuable (Flannery (1996)). In Bagehot's own words: "Every Banker knows that if he has to prove that he is worthy of credit, however may be his argument, in fact his credit is gone" (p. 68). The LLR could avoid this problem by committing to extend liquidity support to all the banks seeking it, but this would come at a cost, as it would lead to moral hazard.

A final proposal to protect banks from runs is for the government to offer deposit insurance (Diamond and Dybvig (1983)).18 A government scheme of full insurance guarantees banks complete protection from runs. However, such

a scheme is not socially costless because the government will have to tax other sectors of the economy, and therefore leads to a possible deadweight loss, when it is asked to provide liquidity as a result of a bank's low return or of large early withdrawals. Deposit insurance, in addition, may lead to moral hazard.

DEPOSIT INSURANCE AND MORAL HAZARD

Government deposit insurance has proven very successful in protecting banks from runs, but at a cost because it leads to moral hazard. By offering a guarantee that depositors are not subject to loss, the provider of deposit insurance bears the risk that they would otherwise have borne. As a result, it diminishes depositors' incentive to monitor banks and to demand an interest payment commensurate with the risk of the bank. Furthermore, when the insurance scheme charges the bank a flat rate premium, the bank does not internalise the full cost of risk and therefore it has an incentive to take on more risk.

Merton (1977) pioneered the use of the arbitrage pricing method, originally developed for pricing options on common stock, to analyse the deposit insurance distortion on banks' risk-taking incentives. He shows that deposit insurance can be viewed as a put option on the value of the bank's assets with a striking price equal to the promised maturity value of its debt. If the insurance premium is risk-insensitive, the bank can increase the value of the put option by increasing the risk of its assets and/or decreasing its capital-to-assets ratio. A bank's appetite for risk is further increased with an increase in competition in the banking sector and a reduction in the value of the bank's charter (Marcus (1984) and Keeley (1990), Hellmann, Murdock and Stiglitz (1997), and Matutes and Vives (1998)). The trade-off introduced by deposit insurance - ruling out bank runs at the expense of moral hazard - has motivated proposals to change the design of the deposit insurance scheme or introduce complementary regulations aimed at reducing the moral hazard while maintaining the protection to depositors. The most frequent proposals to deal with the moral hazard caused by deposit insurance are to charge banks risk-related insurance premiums and to regulate their capital structure.

IS FAIRLY PRICED DEPOSIT INSURANCE POSSIBLE?

To eliminate the risk-shifting incentive it gives banks, deposit insurance needs to be fairly priced. However, as we are about to see, asymmetry of information may make the computation of fair premiums impossible or undesirable from a welfare point of view.

Starting with Merton (1977), a vast literature has used the arbitrage pricing method to determine the fair insurance premium. The arbitrage pricing method assumes that, among other things, the financial markets are complete, the provider of deposit insurance has perfect information about the risk of banks' assets, it can value accurately banks' assets, and moral hazard is explicitly or implicitly ruled out. Under these conditions, however, deposit insurance is not necessary because there is no risk of bank panics.

For that reason researchers began to study the feasibility of fairly priced deposit insurance where there is asymmetry of information. Chan, Greenbaum and Thakor (1992), for example, consider a setting where there is asymmetry of information and the insurance provider offers a menu of contracts, each requiring the bank to hold a certain capital-to-assets ratio and charging it a given insurance premium per unit of deposits it holds. The authors find that it is generally impossible to implement incentive-compatible, fairly priced deposit insurance in that setting. When there is only adverse selection, the impossibility arises because banks are indifferent vis-à-vis their capital structure when insurance is fairly priced. Therefore, they prefer a lower insurance premium for any positive level of deposits. Because of this, the high-risk institution always prefers the menu of contracts chosen by the low-risk institution as long as this one chooses some positive level of deposits.

Freixas and Rochet (1995) consider the issue of incentive-compatible fair pricing of deposit insurance in a more general framework, where banks are valuable because they manage deposits. They show that fair pricing is feasible but is not desirable from a welfare point of view. The reason is that it entails a subsidisation of the less efficient banks by the more efficient ones. This cross-subsidisation prevents the less efficient banks from mimicking the more efficient ones, thus improving the allocation of deposits, but it is distortionary because it leads to inefficient entry and exit decisions.

THE DEPOSITORS' REPRESENTATIVE ARGUMENT

The systemic risk argument builds on the instability that arises with banks' provision of monitoring and liquidity services, which leaves them with a balance sheet that combines a large portion of liabilities in the form of demand deposits with a large portion of assets in the form of illiquid loans. Dewatripont and Tirole (1993a, 1993b) propose a rationale for banking regulation - the representation hypothesis - that builds instead on the corporate governance problems created by the separation of ownership from management and on the inability of depositors to monitor banks. The departing point of their argument is that banks, like most businesses, are subject to moral hazard and adverse selection problems. Therefore, it is important that investors monitor them. Monitoring, however, is expensive and requires, among other things, access to information.

Furthermore, it is wasteful when duplicated by several parties. In the case of banking, this is complicated by the fact that bank debt is mainly held by unsophisticated depositors without the necessary information to perform efficient monitoring. In addition, because most of them hold only a small deposit they have little incentive to perform any of the functions that monitoring a bank would require. This free-riding problem creates a need for a private or public representative of depositors. That need can be met by a regulation that mimics the control and monitoring that depositors would exert if they had the appropriate information, were sophisticated and fully coordinated. In sum, the research

reviewed in this section shows that banks provide superior intertemporal risksharing when they fund themselves with demand deposits. Under these conditions, however, bank runs and panics may develop as an equilibrium phenomenon. Because these are costly, several mechanisms have been proposed to rule them out. These mechanisms, however, are themselves costly. For example, government deposit insurance can provide depositors full insurance but is a source of moral hazard. These problems are usually presented as one of the reasons for regulating banks. Another common rationale for banking regulation builds on the problems that the separation of ownership from management raises for corporate governance. In the case of banks, these problems are compounded by the fact that depositors are not in a position to monitor management, as they are small and uninformed.

Therefore, they need to be represented by a regulator.

THE REGULATION OF BANK CAPITAL

Since Modigliani and Miller's seminal contribution in 1958 showing that in a frictionless world with full information and complete markets the value of a firm is independent from its capital structure, researchers have studied the implications of deviations from that world for a firm's optimal capital structure. Taxes, costs of financial distress, imperfections in the product markets, transactions costs and asymmetry of information problems are just some examples of the frictions that researchers have considered to explain a firm's capital structure.

In the case of banks, they have also considered two other factors: banks' access to the safety net, in particular to deposit insurance, and the fact that small, generally uninformed investors hold most of the bank debt.

CAPITAL REGULATION AND THE SYSTEMIC RISK ARGUMENT

As we have seen, deposit insurance, when not fairly priced, gives banks an incentive to increase risk, which they can accomplish, for example, by increasing the risk of their assets or their leverage. This risk-shifting incentive, together with the potential externalities resulting from bank failures, has been one of the main justifications for regulating bank capital.

The earlier literature on bank capital regulation, such as Kahane (1977), Kareken and Wallace (1978) and Sharpe (1978), studies the effectiveness of capital standards in controlling banks' solvency in complete market, state preference models. This literature creates a role for capital regulation by introducing deposit insurance. Depositors are fully insured and, therefore, have no incentive to adjust the demanded returns for the risk undertaken by the bank.

Because the insurance provider charges banks a flat insurance premium it gives them an incentive to increase risk. A problem with this rationale for capital regulation is that when markets are complete and there is no information asymmetry the need for deposit insurance is unclear and when it exists it can be appropriately priced, which eliminates the risk-shifting incentive.

This led researchers to start studying capital regulation in incomplete market settings. Some researchers adopted the portfolio approach of Pyle (1971) and Hart and Jaffee (1974), which models the bank as a portfolio of securities. Bankers choose the composition of their portfolios in order to maximise the expected profit for a given level of risk, taking the yields of all securities as given. Koehn and Santomero (1980) and Kim and Santomero (1988) adopt this approach and assume, as a proxy for the incompleteness of markets, that bankers are risk-averse and therefore maximise a utility function of the bank's financial net wealth.

A possible justification for this proxy is that the bank is owned and managed by the same agent, which cannot completely diversify the risk. The introduction of a flat capital requirement restricts the risk-return frontier of the bank, forcing it to reduce leverage and to reconfigure the composition of its portfolio of risky assets.

This may lead to an increase in the bank's probability of failure because the banker may choose to compensate the loss in utility from the reduction in leverage with the choice of a riskier portfolio. Regulators can eliminate this adverse effect by requiring banks to meet a risk-based capital requirement instead. The conclusion by this literature that more stringent capital standards could lead to an increase in the bank's risk of failure drew a great deal of attention, but it was subsequently questioned on several grounds. Rochet (1992) questions two features of the Pyle-Hart-Jaffee model adopted in this literature. Bank capital is treated in the same way as any other security, implying that banks can buy and sell their own stock at a given price, regardless of their investment policy, and banks choose their policies as if they were fully liable. Rochet shows that when limited liability is taken into account and bank capital is exogenously set at a certain level, the convexity of preferences due to limited liability may dominate risk aversion, and the bank, if undercapitalised, will behave as a risk lover.

In this case, even a risk-based capital regulation that makes use of "market-based" risk weights (that is, weights proportional to the systematic risks of the assets as measured by their market betas) may not be enough to restrain the bank's appetite for risk.28 It may be necessary to impose an additional regulation, for example, to require banks to operate with a minimum capital level. Furlong and Keeley (1989) and Keeley and Furlong (1990) also question the adverse effect of more stringent capital standards, arguing that this result does not hold when the possibility of bank failure and the effects of changes in the value of the deposit insurance put option are appropriately considered. The authors use a value-maximising model where a bank with publicly traded stock maximises the value of its stock.

They show that the bank never increases portfolio risk as a result of increased capital standards when it pays a flat rate deposit insurance premium. The reason is that the marginal value of the deposit insurance option with respect to asset risk declines as leverage declines.

Therefore, an increase in capital standards reduces the bank's incentive to take risk. A key aspect of modern banking theory not considered in this literature is the existence of information asymmetries. These are important because they are directly related to the existence of banks. As we saw previously, an important function of banks is to screen and monitor loans. The returns of these loans then become private information to bank managers, giving them discretion in the choice of the screening and monitoring intensities of loans.

This discretion can lead to various forms of moral hazard when a bank management's incentives are distorted, as happens when there is deposit insurance. Gennotte and Pyle (1991) consider the role of asymmetry of information by assuming that it prevents some firms from accessing the capital markets. Banks, however, can monitor these firms and thus make positive NPV loans. This contrasts with the previous literature, where banks invest in zero NPV assets (because these are traded on perfect capital markets). Banks finance themselves with insured deposits and thus have their incentives distorted towards risk-taking. An increase in capital standards now has an ambiguous effect on the probability of failure. The induced increase in the portfolio risk may be outweighed, depending on the relationship between the NPV of loans and bank's investment in loans, by the effect of the reduction in the bank size.

Santos (1999) also considers the role of information asymmetry, but in a model where there is a principal-agent problem between the bank and the borrowing firm. The optimal contract the bank uses to fund that firm involves a combination of a loan and an equity stake in the firm. This contract is distorted by the fact that the bank funds itself with insured deposits. An increase in capital standards leads the bank to adjust this contract to account for the higher costs it will incur in case of bankruptcy (as it is forced to operate with lower leverage) and the higher cost of funding (as capital is more expensive than deposits). This adjustment in the financing contract induces the firm to lower its risk, which in turn reduces the bank's risk of insolvency.

The previous papers assume that banks are owned and managed by the same agent or that there are no conflicts of interest between management and shareholders. Besanko and Kanatas (1996) study the implications of this assumption. In their model, bank insiders own only a fraction of the bank equity and take unobservable actions that maximise their own welfare. In that setting, higher capital standards have the usual asset substitution effect, leading, for a given asset base, to a reduction in the risk of the bank's assets. They also have the additional effect of reducing the bank insiders' effort as their equity stake decreases with the bank's issuance of equity to meet the new standards.

This dilution effect has a negative impact on the bank's solvency, which in some cases outweighs the asset substitution effect. Information frictions can also give rise to adverse selection problems. Bensaid, Pagès and Rochet (1995) consider both the presence of an adverse selection problem, as the quality of the bank's assets is private information of the bank's owner, and a moral hazard problem, as the bank's profits depend on the unobservable effort chosen by the

banker. In contrast with most of the previous literature that focuses on the solvency effects of capital regulation, their main goal is to find the efficient solvency regulation that minimises the dead-weight losses of running deposit insurance. They find that optimal regulation can be decentralised by offering banks a menu of solvency and quality requirements.

Solvency requirements need to be risk-adjusted and quality requirements are defined in terms of (soft) interim information, measured, for instance, by ratings performed by independent agencies.

The literature reviewed above uses a partial equilibrium analysis and therefore does not capture the costs to the other sectors of the economy of an increase in the demand for capital due to capital standards. Gorton and Winton (1995) show that these costs may lead the regulator to set a capital standard lower than that called for by stability considerations alone.31 Banks in their model provide liquidity by offering demand deposits and produce information about borrowers which is lost if they fail or leave the industry. In choosing the capital standards, the regulator faces two problems: one deriving from banks' participation incentives (negative externalities from bank failures make their social charter value higher than the private value, giving shareholders less incentive to raise capital than the regulator) and the other from the imperfect substitutability between capital and deposits. Increasing capital standards reduces the risk of failure (this is both privately and socially desirable because the bank's charter value is lost less often), but it reduces deposits (this is costly because these securities are less informationally sensitive than bank capital and therefore they economise on the "lemons cost" that agents incur when trading in the latter).

BASICS OF BANKING

A good way to understand how banks work is to imagine starting your own bank. The first thing you need to do is put up some of your own money. You won't receive a banking license unless you have your own capital at risk.

GETTING STARTED

Let's assume you raise $6 million in cash with help from other investors. That will be the bank's initial equity, the owner's stake. Next you obtain a charter, rent a building, furnish it with all the necessary equipment, hire and train a staff, and open your doors for business.

You'll need to deposit some of your initial stake at the Fed. Those funds will be used to clear checks written by your own depositors. You'll also need to keep enough cash in the vault to meet the demand for withdrawals by your depositors. Let's assume initial expenses of $1.2 million. That leaves $4.8 million, of which you allocate $2 million to vault cash and $2.8 million to your Fed account.

MANAGING LOANS AND OTHER INVESTMENTS

As your business develops, some customers will deposit their own money to open checking accounts. Others will invest in your savings accounts and

certificates of deposit (term loans) which must pay a competitive interest rate. Still others will seek loans from the bank. It is up to you to determine whether prospective borrowers are good credit risks, and will be able to pay the interest charges and return the principal on the specified date.

ACCOUNTING NEEDS

In managing your bank, you will need an accounting system to determine how your decisions are likely to affect the bank's profitability. The most important account is the balance sheet.

This shows at any given moment, the bank's assets (what it owns), its liabilities (what it owes to others), and its net worth (what belongs to the owners). Net worth, or equity, is equal to assets minus liabilities. Your equity should remain positive and preferably growing. If it ever gets too low relative to total assets, your regulator may close the bank.

BALANCE SHEET AND EARNINGS FORECASTS

If your bank does well, the balance sheet will expand with new assets and liabilities. The equity should also increase, assuming you retain some of the profits in the bank rather than pay them all out as dividends to the owners.

You started with initial equity of $6 million. Let's take a look at the balance sheet after you have been in business for some time. It is shown together with an earnings forecast for the coming year. The earnings forecast is based on expected earning rates of the bank's assets and the cost of borrowed funds. Also shown is the expected cost of operations or fixed costs, covering rent, insurance, utilities, salaries, *etc.* The entries in blue are items that you might try to modify to see how they would affect the key performance measure, the return on equity. Of course, you must maintain the required minimum ratios set by the regulators.

GROWTH MANAGEMENT

Note that your equity has grown from $6.0 million to $10.5 million due to retained earnings. You have acquired a substantial amount in deposits, some of which are ordinary checking accounts that pay no interest. Others were borrowed at market rates. All deposits whether or not they bear interest have associated costs. With the additional funds available from deposits, you have redistributed your assets to what you hope will enhance future earnings: $5.0 million in reserves, $7.7 million in T-bills, $1.1 million in loans to other banks, and $110 million in ordinary loans. You project net earnings for the coming year after taxes of $1.51 million. That would be a return on equity of 14.38% and a return on assets of 1.21%, which is quite reasonable performance.

REQUIRED OPERATING RATIOS

In the lower left corner of the table are the three ratios that must be kept above minimum values established by bank regulators. The capital ratio is the ratio of a bank's equity to a risk-weighted sum of the bank's assets. The weightings

are 0 for reserves, 0 for government securities, 0.2 for loans to banks, and 1.0 for ordinary loans. A minimum capital ratio of 8% is required. The leverage ratio is the ratio of a bank's equity to the unweighted sum of its total assets. The required minimum is 3%. The reserve ratio is the ratio of a bank's reserves (deposits at the Fed plus vault cash) to its demand deposits, *i.e.*, checking deposits. The required minimum is 10% for large banks, but only 3% on the first $45.4 million of demand deposits, which is the case for your small bank.

HOW TRANSACTIONS AFFECT OPERATING RATIOS

When a bank issues an ordinary loan, its assets (A) and liabilities (L) increase equally. Its reserves (R) remain unchanged, which results in a decrease in its reserve ratio (R/L). Its equity, *i.e.*, capital (C = A-L) remains unchanged, which results in a decrease in its capital ratio (C/A).

When the borrower spends the funds, assuming they end up in a different bank, R, A, and L decrease equally. Since R is normally a small fraction of L, the reserve ratio decreases by an amount roughly equal to the fractional change in R. Since C is normally a small fraction of A, the capital ratio increases by an amount roughly equal to the fractional change in A. When the borrower pays interest on the loan out of a deposit within the bank, L decreases while A and R remain unchanged. This results in an increase in both the reserve ratio and the capital ratio. If the borrower pays interest from an outside source, A and R increase while L remains unchanged. This results in an increase in both the reserve ratio and the capital ratio.

When the borrower repays the loan from a deposit within the bank, R remains unchanged while A and L decrease equally. This results in an increase in both the reserve ratio and the capital ratio. If the borrower repays the loan from an outside source, R increases while A and L remain unchanged. This results in an increase in reserve ratio but no change in the capital ratio.

When a bank buys something for itself, it may issue a bank draft in payment. If the recipient deposits the draft in the same bank, he receives a deposit which increases L, while A and R remain unchanged. If he deposits it in another bank, A and R decrease while L remains unchanged. In both cases, the capital ratio and reserve ratio of the issuing bank decrease..

COMPETITION BANKING

Therefore, we have restricted ourselves to gleaning out a notion of competition that is appropriate in the context banking. The following review of the concept seeks to bring out the major elements in the process of evolution of the concept, which deserve a detailed consideration. The literature on competition is vast and so the review had to be selective. It covers the major contributions to the concepts of competition due to Smith (1976), Chamberlain (1933), Schumpeter (1934), Hayek (1948) and Stigler (1995). It also covers some old and new commentaries on the concept including McNulty (1968) and Richardson (1975) on the one hand and Vickers (1995) on the other. A number of attempts have

been made since then to develop the concept. However, lack of clarity remains. But during the process of evolution, the concept got mixed with other entities, and any attempt to understand the true essence of competition has been rendered difficult. There exists a voluminous literature in the area, but the concept remains surrounded by ambiguities and confusions in a large measure. A few reviews of the concept remained confined to only selected interpretations of competition. Some of them also cut across each other. To substantiate the above point an example is cited below.

According to McNulty (1968), there exist two fundamentally distinct interpretations of the concept of competition, which have led to the ambiguity and confusion surrounding the concept of competition. · In one interpretation, competition is conceived as a descriptive term characterized by an idealized market structure.

In the second interpretation, it has been identified with a force, which through equating prices with marginal costs assures allocative efficiency in the system. According to the first interpretation, competition is a seemingly tranquil equilibrium state in which informed agents treat price parametrically. This is the concept of perfect competition, which is compared to the idea of a perfect vacuum. In the second form, it has been identified with a force, which through equating prices with marginal costs assures allocative efficiency in the system. Through competition resources gravitate towards their most productive use and price is forced to the lowest level to be sustained over the long run. This standpoint views competition as assuring order and stability in the economic world as does the gravitation to the physical world. As opposed to the earlier interpretation, the second interpretation looks at competition as a rivalry with respect to prices.

As opposed to McNulty, Vickers argued that the concepts or competition as an idealized market structure in which price is parametrically given and as a rivalry with respect to prices are not two distinct concepts of competition. He analyzed Cournot and Edgeworth models to show that the notion of perfect competition has its roots in the broad concept of competition as rivalry.

We now set out for a review of the concept of competition. It is clear that the current review cannot but begin with Adam Smith's concept of competition. While Smith's contribution holds a pride of place in any discussion of competition, there are conflicting interpretations of his notion of competition. These interpretations are analyzed in order to understand the true substance of the concept of competition, as understood by Smith. The former commentator has reduced Smith's notion of competition to a process of price competition alone. It is this view of competition as an ordering force, which dominated the classical economics. Adam Smith referred to competition in connection with the forcing of market price to its natural level and lowering of profits to a minimum. The classical view of competition looks at competition as a process for allocating resources to their optimal use through the instrument of price mechanism. When price mechanism functions properly, equilibrium emerges

with prices equal to marginal social costs of production. When it does not function properly, equilibrium exists with price above marginal cost. In such a situation, the society suffers a welfare loss from the under consumption of these goods. Such malfunctions are immediately attributed to an insufficient number of buyers or sellers. Monopoly is seen as an antithesis of competition. This view sees competition as a process for determining prices and quantities, the allocation of resources for a given set of tastes and technological opportunities. Competition produces an equilibrium set of prices that induce a Pareto optimal allocation of economy's goods and services. Such equilibrium is anticipated so long as monopolistic elements are absent. There was no systematic association between the idea of competition and market structure in classical economics, which viewed competition as a price determining force operating in market.

The private business firm and the market are the two primary institutions through which resources are organized, transformed and channeled for ultimate consumption as goods and services. Economic goods and services broadly possess two characteristics: quality and price. Firm and market correspond to the two characteristics possessed by economic goods. While quality is related to production and takes place within the business firm, exchange *i.e.*, the determination of economic value, which in is in turn price, arises in the various markets in which the firm operates. But the concept of competition has been usually associated only with exchange, even when economic activity consists of both production and exchange. It is argued that despite according competition a pride of place in economic theory, Adam Smith contributed nothing to its precise economic meaning. The concept of competition, which he incorporated in his Wealth of Nations, was already developed in the then literature by a number of scholars like Cantillon, Turgot, Hume, and Stuart, *etc.* A reviewer expressed surprise how the mercantilist's overwhelming concern with price continued to be main subject matter with Smith, who was aware of the importance of the dynamic changes in productive techniques and industrial organization within the business enterprise in the era of English industrial revolution. While first commentator argued that Adam Smith's concept of competition mainly related to price mechanism alone, the second pointed out that Adam Smith's vision of competition goes beyond price determination within markets. In order to support his viewpoint, he quoted from Wealth of Nations referring to means like new division of labour, new improvements in art, which would have been never thought of in absence of competition among producers. However, the later reviewer apparently agreed with the former when he argues that Adam Smith and other classical economist's related competition more to the issues of resource allocation and theory of value than to productive efficiency.

Richardson (1975) argues that the concept of competition in the Wealth of Nations relates to two distinct phenomena.

The first meaning related to balancing of supply and demand in particular markets. Evolution of structural and technological forces is the second interpretation. Smith offers a theory of economic equilibrium on the one hand

and a theory of economic evolution on the other in Wealth of Nations. Competition has a role to play in both of them. Let us elaborate. Smith describes how actual prices tend to gravitate to their natural or cost determined level. Competition is shown to be necessary to the process. It is pointed out monopoly by raising prices and reducing supply would "derange more or less the natural distribution of the stock of money". Smith identifies the tendency towards equilibrium and implies the resulting allocation of resources is optimal from society's point of view.

In his theory of economic evolution, Smith has advanced a disequilibrium theory in which he views the economy as in a state of constant and internally generated change. Perpetual motion results from the fact that division of labour is both a cause and effect of economic progress. Smith discusses how division of labour increases wealth on the one hand and widens market on the other. Widening of the market would lead to increased wealth, which in turn would lead division of labour be carried forward. The dynamic character of the interaction may not be fully appreciated till one recognizes the extent of market also depends on wealth, which in turn is created by division of labour (Young, 1928). Thus in the Wealth of Nations, competition apart from equating demands and supplies within the context of a given industrial structure and a given technology, has also to adapt both structure and technology to the fresh opportunities created by expanding markets. While there are two distinct interpretations of competition in Wealth of nations, problems arose later. It is because of the fact theorists succeeding Smith (except Marshall) attended things that could be easily handled. They focused on that interpretation of competition, which is easier between the two. The equilibrating and allocative functions of competition are discussed exclusively reducing technical progress to an exogenous variable and ignoring structural evolution. Later writers, concerned with more analytical rigor, developed the theory of equilibrium in a way, which is clearly very different from that implicit in Smith's theory of evolution. Existence of Smith's theory of economic evolution went unnoticed, and so the notion of competition contained therein.

While the classical economists viewed competition as a market process, the emergence of the concept of competition as a market structure is a distinctive contribution of the neoclassical economics. The groundwork for this development was laid by Cournot followed by attempts by Jevons and Edgeworth at marrying the concepts of competition and market. Such an attempt finally led to the current concept of perfect competition, after refinements by Clark and Knight. Stigler viewed this marriage as unfortunate as each deserved a separate treatment. Interestingly, the concept of competition has been accorded a subsidiary status to the concept of market. Hayek argues that the theory of perfect competition has little claim to be called competition. He stresses that perfect knowledge and foresight would create a paralyzing influencing effect on all action. It is not possible to argue that perfect competition is a model of competition because it is only through competition that knowledge will be

discovered. The real basis for comparison with existing competition is not perfect competition; Perfect competition would exist if competition in the Smithian sense were prevented from operating.

The classical view regards competition as the antithesis of monopoly. Thus competition was viewed as absence of monopoly power is. It was left to Chamberlain to reconcile economic theory with the fact that it is not possible for a firm to compete without monopolizing and hence much of the business world is a mixture of competition and monopoly. Every act of competition on the part of a businessman is evidence of some degree of monopoly power in economic theory.

Thus while he recognized that most markets are to some extent both controlled and controlling, it has limited relevance as a guide in implementing policies in order to be meaningful for economic policy seeking to restrain monopoly and promote competition. While the traditional distinction between competition and monopoly is a non-starter, the merging of these two concepts in a theory of monopolistic competition avoided defining a concept of competition.

Chamberlin's concept of monopolistic competition as a market structure characterised by large numbers with free entry and product differentiation but without recognition of interdependence is now regarded as being only trivially different from perfect competition and may be as rare as perfect competition. Product differentiation takes place typically in a market environment of competition among the few. Chamberlin's contribution in section 4 of chapter 3 of his book relating to "mutual dependence recognized" is not a core part of his contribution and constitutes original contribution to theory of oligopoly.

The root of the ambiguity of the meaning of the term competition is attributed to the failure to distinguish between the idea of competition and the idea of market structure. The common feature of perfect competition and monopoly is that both rule out the possibility of any competitive behaviour. In monopoly, there is no one to compete. Perfect competition, ironically is a state of passive adjustment. Neither is there any competition through quality, because products are homogenous, nor is there any price competition because there can be no price-cutting. Also there can be no non-price competition, because there is no product differentiation. So the only form of competition can be cost reducing competition. What is insufficiently emphasized is that perfect competition is a state of affairs totally incompatible with the idea of any and all competition. All other forms of competition except perfect competition are an admixture of monopoly and competition.

Both perfect competition and monopoly mean absence of competition but reasons are distinct in each case. Monopoly is a market situation in which intraindustry competition has been done away with by means of identifying the firm as the industry. Perfect competition, on the other hand is a market situation, which as a result of free entry of a large number of formerly competing firms has evolved to the point of equilibrium where no further competition within the industry is possible. Schumpeter's notion of competition views of competition

sees it less as a process for allocating given stock of resources and reduction in prices for an existing set of products and in the form of new and improved ideas, new products, new production processes, new marketing techniques, new organizational structures, *etc.* Such competition strikes at the foundations of the life of the existing firms and not merely at their outputs and profits. Twentieth century competition apparently resembles Schumpeter's notion of competition as price competition between firms has given way to competition on the basis of product improvements and cost advantages generated by developments in methods of production and organization. In this view, innovation is the major mechanism by which firms compete. According to Schumpeter, there are three stages in the process of change.

The first stage is invention: It relates to the generation of a new idea and its subsequent development to a point where the conceptual and practical difficulties of its implementation have been overcome. The second stage is innovation, which occurs when entrepreneur believes that it is worthwhile to commercialize the invention. He distinguishes among five types of innovations. There is a tendency to narrowly focus on introduction of new products, and processes, which incorporate technological change. His broader definition of innovation covers more of the ways in which use of resource may be improved. This includes improvement in the quality of existing products, development of a new market, exploitation of new source of supply and adoption of improved organizational routines.

The entrepreneur cannot know in advance whether his innovation will succeed or not. If expectations are correct, then the innovation generates abnormal profits, as a result of either increasing revenue or reducing costs and leads to creation of temporary monopolistic advantages over competitors. But successful innovation creating transitory monopolies create pockets of profits which in turn provide the incentive for the imitators to step forward and thereby drive these profits to zero. This is Schumpeter's third stage: diffusion. As a result of widespread imitation, the innovation becomes established as the basis for future invention and innovation. Schumpeter's notion of competition is a process of creative destruction. Innovation creating monopoly, monopoly creating profits, profits creating imitators until a state of normalcy returns only to be followed by new innovations and repeat of a cycle. Thus, whereas the first view sees monopoly as antithesis of competition, the second views monopoly as an integral part of dynamically competitive process and a passing stage in industry's evolution. Competition displaces existing products and methods of production by new ones. Hence from day to day there are winners and losers. This representation of competitive process owes its origin to Joseph Schumpeter.

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The ideas of the Austrian school originate in Karl Menger and proponents include Mises and Hayek. Economic freedom is the hallmark of competition and is deemed to be limited only in so far as the rights of other people are not infringed. Hayek argued that individual freedom gives rise to spontaneous order which as not been deliberately designed by any one.

The spontaneity of individual behaviour gives rise to an open ended process the outcome of which can not predicted. While economic freedom is the best suited for safeguarding the individual welfare, welfare maximum cannot be identified in advance. As opposed to a static market structure of perfect

competition, Austrians see of competition as a process of discovery by which economic agents seek to enhance their welfare and thus attempt to reach an optimum over time in an uncertain and changing world. Most efficient techniques and products appealing most to the consumers cannot be anticipated with certainty without putting unknown and untried techniques and novel products to the test of the market. The price of a successful product commands may exceed average costs. Success is thus rewarded by profitability, which in turn provides incentives for further innovations. A deficient state of knowledge is thus overcome by competition as a process of discovery.

3

The Structure of Banks in Financial Sector Reforms

The financial sector reforms ushered in the year 1991 have been well calibrated and timed to ensure a smooth transition of the system from a highly regulated regime to a market economy. The first phase of reforms focused on modification in the policy framework, improvement in financial health through introduction of various prudential norms and creation of a competitive environment. The second phase of reforms started in the latter half of 90s, targeted strengthening the foundation of banking system, streamlining procedures, upgrading technology and human resources development and further structural changes. The financial sector reforms carried out so far have made the balance sheets of banks look healthier and helped them move towards achieving global benchmarks in terms of prudential norms and best practices. Under the existing Basel Capital Accord, allocation of capital follows a one-size-fit-all approach. This would be replaced by a risk based approach to capital allocation. While regulatory minimum capital requirements would still continue to be relevant and an integral part of the three pillar approach under Basel II, the emphasis is on risk based approach relying on external ratings as well as internal rating of each asset and capital charge accordingly.

The internal risk based approach would need substantial investments in technology and development of MIS tools. For a rating tool for internal assessment to be effective, past data for 3 to 5 years would be required and as such, Indian banking system will have to build up the capabilities for a smooth migration to the new method. Another aspect which is included in Basel II

accord is a provision for capital allocation for operational risk. This is a new parameter and even internationally evaluation tools are not yet fully developed. This would be another area where banking system will have to reckon additional capital needs and functioning of its processes. The financial sector reforms have brought in the much needed competition in the market place. The competition to the existing banks came mainly from the techno-savvy private sector banks. In the coming years, we expect to see greater flow of foreign capital to come into the Indian banking sector. Opening up of banking sector to global players would see banks facing global competition.

Technology is expected to be the main facilitator of change in the financial sector. Implementation of technology solutions involves huge capital outlay. Besides the heavy investment costs, technology applications also have a high degree of obsolescence. Banks will need to look for ways to optimize resources for technology applications. In this regard, global partnerships on technology and skills sharing may help. The pressure on capital structure is expected to trigger a phase of consolidation in the banking industry. Banks could achieve consolidation through different ways. Mergers and acquisitions could be one way to achieve this. In the past, mergers were initiated by regulators to protect the interests of depositors of weak banks. In recent years, market led mergers between private banks have taken place.

It is expected that this process would gain momentum in the coming years. Mergers between public sector banks or public sector banks and private banks could be the next logical thing/development to happen as market players tend to consolidate their position to remain in competition. Consolidation could take place through strategic alliances/partnerships. Besides helping banks to achieve economy of scale in operations and augment capital base, consolidation could help market players in other ways also to strengthen their competitiveness. The advantage could be in achieving better segmentation in the market.

Strategic alliances and collaborative approach, as an alternative to mergers and acquisitions, could be attempted to reduce transaction costs through outsourcing, leverage synergies in operations and avoid problems related to cultural integration. If consolidation is taken too far, it could lead to misuse of dominant market positions. Rapid expansion in foreign markets without sufficient knowledge of local economic conditions could increase vulnerability of individual banks. Public Sector Banks had, in the past, relied on Government support for capital augmentation. However, with the Government making a conscious decision to reduce its holding in Banks, most Banks have approached the capital market for raising resources. This process could gain further momentum when the government holding gets reduced to 33% or below. It is expected that pressures of market forces would be the determining factor for the consolidation in the structure of these banks. If the process of consolidation through mergers and acquisitions gains momentum, we could see the emergence of a few large Indian banks with international character. There could be some large national banks and several local level banks.

Opening up of the financial sector from 2005, under WTO, would see a number of Global banks taking large stakes and control over banking entities in the country. They would bring with them capital, technology and management skills. This will increase the competitive spirit in the system leading to greater efficiencies. Government policy to allow greater FDI in banking and the move to amend Banking Regulation Act to remove the existing 10% cap on voting rights of shareholders are pointers to these developments. The cooperative banks have played a crucial part in the development of the economy. The primary agricultural societies which concentrate on short-term credit and rural investment credit institutions supported by District/State level cooperative banks have played a crucial role in the credit delivery in rural areas. The Urban Cooperative Banks have found their own niche in urban centres.

These institutions in the cooperative sector need urgent capital infusion to remain as sound financial entities. Cooperative sector comes under State jurisdiction while commercial banking operations are regulated by the Reserve Bank of India. The duality in control had weakened the supervisory set up for these institutions. It is expected that certain amendments to the Banking Regulation Act introduced recently in the Parliament with the objective of strengthening the regulatory powers of the Reserve Bank of India would pave the way for strengthening of cooperative/financial institutions. It is expected that these banks would upgrade skills of their staff and improve the systems and procedures to compete with commercial bank entities. Consolidation would take place not only in the structure of the banks, but also in the case of services. For instance, some banks would like to shed their non-core business portfolios to others. This could see the emergence of niche players in different functional areas and business segments such as housing, cards, mutual funds, insurance, sharing of their infrastructure including ATM Network, *etc.*

Rationalization of a very large network of branches, which at present has rendered the system cost ineffective and deficient in service would take place. Most of the banks would have adopted core-banking solutions in a fully networked environment. Back office functions would be taken away from branches to a centralized place. While brick and mortar branches would continue to be relevant in the Indian scenario, the real growth driver for cost cutting would be virtual branches viz., ATMs, Internet Banking, mobile banking, kiosks, *etc.*, which can be manned by a few persons and run on 24 x 7 basis to harness the real potential of these technological utilities, there will be strategic alliances/ partnership amongst banks and this phenomenon has already set in. As we move along, the concept of branch banking will undergo changes. Banks will find that many of the functions could be outsourced more profitably without compromising on the quality of service.

Specialized agencies could come forward to undertake Marketing and delivery functions on behalf of banks. This could see banking products being sold outside the four walls of a branch. Banks would then concentrate on developing new products and earning fee based income. The composition of bank staff will

change. As total computerization will render a part of the workforce surplus, banks will go for a rightsizing exercise. Some may resort to another round of VRS to shed excess flab while some other may go for re-deployment to strengthen marketing arms. With greater use of technology and outsourcing of services in different areas, the manpower recruitment will mostly be in specialized areas and technology applications. With commitment shifting from the organization to the profession, we could see greater lateral movement of banking personnel. Training and skill development will, however, continue to be key HR functions. With the age profile of staff undergoing changes, banks will have to focus on leadership development and succession planning. Knowledge management will become a critical issue. Management structure of banks will also undergo drastic changes in the coming years. Instead of the present pyramid structure, the banks will move towards reduction in tiers to ultimately settle for a flat structure. Product-wise segmentation will facilitate speedier decision-making.

RISK MANAGEMENT IN BANKING

Risk is inherent in any commercial activity and banking is no exception to this rule. Rising global competition, increasing deregulation, introduction of innovative products and delivery channels have pushed risk management to the forefront of today's financial landscape. Ability to gauge the risks and take appropriate position will be the key to success. It can be said that *risk takers will survive, effective risk managers will prosper and risk averse are likely to perish*. In the regulated banking environment, banks had to primarily deal with credit or default risk. As we move into a perfect market economy, we have to deal with a whole range of market related risks like exchange risks, interest rate risk, *etc.* Operational risk, which had always existed in the system, would become more pronounced in the coming days as we have technology as a new factor in today's banking. Traditional risk management techniques become obsolete with the growth of derivatives and off-balance sheet operations, coupled with diversifications. The expansion in E-banking will lead to continuous vigilance and revisions of regulations.

Building up a proper risk management structure would be crucial for the banks in the future. Banks would find the need to develop technology based risk management tools. The complex mathematical models programmed into risk engines would provide the foundation of limit management, risk analysis, computation of risk-adjusted return on capital and active management of banks' risk portfolio. Measurement of risk exposure is essential for implementing hedging strategies. Under Basel II accord, capital allocation will be based on the risk inherent in the asset. The implementation of Basel II accord will also strengthen the regulatory review process and, with passage of time, the review process will be more and more sophisticated. Besides regulatory requirements, capital allocation would also be determined by the market forces. External users of financial information will demand better inputs to make investment decisions.

More detailed and more frequent reporting of risk positions to banks' shareholders will be the order of the day. There will be an increase in the growth of consulting services such as data providers, risk advisory bureaus and risk reviewers. These reviews will be intended to provide comfort to the bank managements and regulators as to the soundness of internal risk management systems.

Risk management functions will be fully centralized and independent from the business profit centres. The risk management process will be fully integrated into the business process. Risk return will be assessed for new business opportunities and incorporated into the designs of the new products. All risks – credit, market and operational and so on will be combined, reported and managed on an integrated basis. The demand for Risk Adjusted Returns on Capital (RAROC) based performance measures will increase. RAROC will be used to drive pricing, performance measurement, portfolio management and capital management. Risk management has to trickle down from the Corporate Office to branches or operating units. As the audit and supervision shifts to a risk based approach rather than transaction orientation, the risk awareness levels of line functionaries also will have to increase.

Technology related risks will be another area where the operating staff will have to be more vigilant in the coming days. Banks will also have to deal with issues relating to Reputational Risk as they will need to maintain a high degree of public confidence for raising capital and other resources. Risks to reputation could arise on account of operational lapses, opaqueness in operations and shortcomings in services. Systems and internal controls would be crucial to ensure that this risk is managed well. The legal environment is likely to be more complex in the years to come. Innovative financial products implemented on computers, new risk management software, user interfaces, *etc.*, may become patentable. For some banks, this could offer the potential for realizing commercial gains through licensing.

Advances in risk management (risk measurement) will lead to transformation in capital and balance sheet management. Dynamic economic capital management will be a powerful competitive weapon. The challenge will be to put all these capabilities together to create, sustain and maximise shareholders' wealth. The bank of the future has to be a total-risk-enabled enterprise, which addresses the concerns of various stakeholders' effectively. Risk management is an area the banks can gain by cooperation and sharing of experience among themselves.

Common facilities could be considered for development of risk measurement and mitigation tools and also for training of staff at various levels. Needless to add, with the establishment of best risk management systems and implementation of prudential norms of accounting and asset classification, the quality of assets in commercial banks will improve on the one hand and at the same time, there will be adequate cover through provisioning for impaired loans. As a result, the NPA levels are expected to come down significantly.

FUNDAMENTAL OF TECHNOLOGY IN BANKING

Technology will bring fundamental shift in the functioning of banks. It would not only help them bring improvements in their internal functioning but also enable them to provide better customer service. Technology will break all boundaries and encourage cross border banking business. Banks would have to undertake extensive Business Process Re-Engineering and tackle issues like a) how best to deliver products and services to customers b) designing an appropriate organizational model to fully capture the benefits of technology and business process changes brought about. c) how to exploit technology for deriving economies of scale and how to create cost efficiencies, and d) how to create a customer-centric operation model. Entry of ATMs has changed the profile of front offices in bank branches. Customers no longer need to visit branches for their day to day banking transactions like cash deposits, withdrawals, cheque collection, balance enquiry, *etc.*

E-banking and Internet banking have opened new avenues in "convenience banking". Internet banking has also led to reduction in transaction costs for banks to about a tenth of branch banking. Technology solutions would make flow of information much faster, more accurate and enable quicker analysis of data received. This would make the decision making process faster and more efficient.

For the Banks, this would also enable development of appraisal and monitoring tools which would make credit management much more effective. The result would be a definite reduction in transaction costs, the benefits of which would be shared between banks and customers. While application of technology would help banks reduce their operating costs in the long run, the initial investments would be sizeable. IT spent by banking and financial services industry in USA is approximately 7% of the revenue as against around 1% by Indian Banks. With greater use of technology solutions, we expect IT spending of Indian banking system to go up significantly. One area where the banking system can reduce the investment costs in technology applications is by sharing of facilities. We are already seeing banks coming together to share ATM Networks.

Similarly, in the coming years, we expect to see banks and FIs coming together to share facilities in the area of payment and settlement, back office processing, data warehousing, *etc.* While dealing with technology, banks will have to deal with attendant operational risks. This would be a critical area the Bank management will have to deal with in future. Payment and Settlement system is the backbone of any financial market place. The present Payment and Settlement systems such as Structured Financial Messaging System (SFMS), Centralised Funds Management System (CFMS), Centralised Funds Transfer System (CFTS) and Real Time Gross Settlement System (RTGS) will undergo further fine-tuning to meet international standards. Needless to add, necessary security checks and controls will have to be in place. In this regard, Institutions such as IDRBT will have a greater role to play.

REGULATORY AND LEGAL ENVIRONMENT

The advent of liberalization and globalization has seen a lot of changes in the focus of Reserve Bank of India as a regulator of the banking industry. De-regulation of interest rates and moving away from issuing operational prescriptions have been important changes. The focus has clearly shifted from micro monitoring to macro management. Supervisory role is also shifting more towards off-site surveillance rather than on-site inspections. The focus of inspection is also shifting from transaction-based exercise to risk-based supervision. In a totally de-regulated and globalised banking scenario, a strong regulatory framework would be needed.

The role of regulator would be critical for:

a. Ensuring soundness of the system by fixing benchmark standards for capital adequacy and prudential norms for key performance parameters.
b. Adoption of best practices especially in areas like risk-management, provisioning, disclosures, credit delivery, *etc.*
c. Adoption of good corporate governance practices.
d. Creation of an institutional framework to protect the interest of depositors.
e. Regulating the entry and exit of banks including cross-border institutions.

Further, the expected integration of various intermediaries in the financial system would add a new dimension to the role of regulators. Also as the co-operative banks are expected to come under the direct regulatory control of RBI as against the dual control system in vogue, regulation and supervision of these institutions will get a new direction. Some of these issues are addressed in the recent amendment Bill to the Banking Regulation Act introduced in the Parliament. The integration of various financial services would need a number of legislative changes to be brought about for the system to remain contemporary and competitive.

The need for changes in the legislative framework has been felt in several areas and steps have been taken in respect of many of these issues, such as:

(i) Abolition of SICA/BIFR setup and formation of a National Company Law Tribunal to take up industrial re-construction.
(ii) Enabling legislation for sharing of credit information about borrowers among lending institutions.

INTEGRATION OF FINANCIAL SYSTEM

Integration of the financial system would change the way we look at banking functions. The present definition of banking under Banking Regulation Act would require changes, if banking institutions and non-banking entities are to merge into a unified financial system.

While the recent enactments like amendments to Debt Recovery Tribunal (DRT) procedures and passage of Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 (SARFAESI Act) have helped to improve the climate for recovery of bank dues, their impact is yet to be felt at the ground level.

It would be necessary to give further teeth to the legislations, to ensure that recovery of dues by creditors is possible within a reasonable time. The procedure for winding up of companies and sale of assets will also have to be streamlined. In the recent past, Corporate Debt Restructuring has evolved as an effective voluntary mechanism. This has helped the banking system to take timely corrective actions when borrowing corporates face difficulties. With the borrowers gaining confidence in the mechanism, it is expected that CDR setup would gain more prominence making NPA management somewhat easier. It is expected that the issue of giving statutory backing for CDR system will be debated in times to come. In the emerging banking and financial environment there would be an increased need for self-regulation. This is all the more relevant in the context of the stated policy of RBI to move away from micro-management issues.

Development of best practices in various areas of banks' working would evolve through self-regulation rather than based on regulatory prescriptions. Role of Indian Banks' Association would become more pronounced as a self regulatory body. Development of benchmarks on risk management, corporate governance, disclosures, accounting practices, valuation of assets, customer charter, Lenders' Liability, *etc.*, would be areas where IBA would be required to play a more proactive role. The Association would also be required to act as a lobbyist for getting necessary legislative enactments and changes in regulatory guidelines. HR practices and training needs of the banking personnel would assume greater importance in the coming days. Here again, common benchmarks could be evolved. Talking about shared services, creation of common database and conducting research on contemporary issues to assess anticipated changes in the business profile and market conditions would be areas where organizations like Indian Banks' Association are expected to play a greater role.

Evolution of Corporate Governance being adopted by banks, particularly those who have gone public, will have to meet global standards over a period of time. In future, Corporate Governance will guide the way Banks are to be run.

Good Corporate Governance is not a straight jacketed formula or process; there are many ways of achieving it as international comparisons demonstrate, provided the following three basic principles are followed:

a. Management should be free to drive the enterprise forward with the minimum interference and maximum motivation.
b. Management should be accountable for the effective and efficient use of this freedom. There are two levels of accountability – of management to the Board and of the Board to the Shareholders. The main task is to ensure the continued competence of management, for without adequate and effective drive, any business is doomed to decline. As stated by J.Wolfensohn, President, World Bank – "Corporate governance is about promoting corporate fairness, transparency and accountability".
c. In order to enlist the confidence of the global investors and international market players, the banks will have to adopt the best global practices

of financial accounting and reporting. This would essentially involve adoption of judgmental factors in the classification of assets, based on Banks' estimation of the future cash flows and existing environmental factors, besides strengthening the capital base accordingly.

INTERNATIONAL ACCOUNTING PRACTICES AND REPORTING FORMATS

When we talk about adoption of International accounting practices and reporting formats it is relevant to look at where we stand and the way ahead. Accounting practices being followed in India are as per Accounting Standards set by the Institute of Chartered Accountants of India (ICAI). Companies are required to follow disclosure norms set under the Companies Act and SEBI guidelines relating to listed entities. Both in respect of Accounting Practices and disclosures, banks in India are guided by the Reserve bank of India guidelines issued from time to time. Now these are, by and large, in line with the Accounting Standards of ICAI and other regulatory bodies. It is pertinent to note that Accounting Standards of ICAI are based on International Accounting Standards (IAS) being followed in a large number of countries. Considering that US forms 40% of the financial markets in the world compliance with USGAAP has assumed greater importance in recent times. Many Indian banks desirous of raising resources in the US market have adopted accounting practices under USGAAP and we expect more and more Indian Financial entities to move in this direction in the coming years.

There are certain areas of differences in the approach under the two main international accounting standards being followed globally. Of late, there have been moves for convergence of accounting standards under IAS and USGAAP and this requires the standard setters to agree on a single, high-quality answer. Discussions in the accounting circles indicate that convergence of various international accounting standards into a single global standard would take place by 2007. In the Indian context, one issue which is likely to be discussed in the coming years is the need for a common accounting standard for financial entities. While a separate standard is available for financial entities under IAS, ICAI has not so far come out with an Indian version in view of the fact that banks, *etc.*, are governed by RBI guidelines. It is understood that ICAI is seized of the matter. It is expected that banks would migrate to global accounting standards smoothly in the light of these developments, although it would mean greater disclosure and tighter norms.

ORGANIZATION OF HUMAN RESOURCES MANAGEMENT

The key to the success of any organization lies in how efficiently the organization manages its' human resources. The principle applies equally and perhaps more aptly to service institutions like banks. The issue is all the more

relevant to the public sector banks who are striving hard to keep pace with the technological changes and meet the challenges of globalization. In order to meet the global standards and to remain competitive, banks will have to recruit specialists in various fields such as Treasury Management, Credit, Risk Management, IT related services, HRM, *etc.*, in keeping with the segmentation and product innovation. As a complementary measure, fast track merit and performance based promotion from within would have to be institutionalized to inject dynamism and youthfulness in the workforce.

To institutionalize talent management, the first priority for the banking industry would be to spot, recognize and nurture the talent from within. Secondly, the industry has to attract the best talent from the market to maintain the required competitive edge vis-a-vis global players. However, the issue of critical importance is how talent is integrated and sustained in the banks. Therefore, a proper system of talent management has to be put in place by all the banks.

As the entire Indian banking industry is witnessing a paradigm shift in systems, processes, strategies, it would warrant creation of new competencies and capabilities on an on-going basis for which an environment of continuous learning would have to be created so as to enhance knowledge and skills. Another important ingredient of HR management is reward and compensation which at present do not have any linkage to skills and performance. A system of reward and compensation that attracts, recognizes and retains the talent, and which is commensurate with performance is an urgent need of the industry. An equally important issue relevant to HRM is to create a conducive working environment in which the bankers can take commercial decisions judiciously and, at the same time, without fear. This calls for a re-look into the vigilance system as it exists today, and perhaps there is a need to keep the banking industry out of the CVC. The Banks' Boards may be allowed to have their own system of appropriate checks and balances as well as accountability.

RURAL AND SOCIAL BANKING ISSUES

Since the second half of 1960s, commercial banks have been playing an important role in the socio-economic transformation of rural India. Besides actively implementing Government sponsored lending schemes, Banks have been providing direct and indirect finance to support economic activities. Mandatory lending to the priority sectors has been an important feature of Indian banking. The Narasimham committee had recommended for doing away with the present system of directed lending to priority sectors in line with liberalization in the financial system. The recommendations were, however, not accepted by the Government. In the prevailing political climate in the country any drastic change in the policy in this regard appears unlikely. The banking system is expected to reorient its approach to rural lending. "Going Rural" could be the new market *mantra*.

Rural market comprises 74% of the population, 41% of Middle class and 58% of disposable income. Consumer growth is taking place at a fast pace in

17113 villages with a population of more than 5000. Of these, 9989 villages are in 7 States, namely Andhra Pradesh, Bihar, Kerala, Maharashtra, Tamilnadu, Uttar Pradesh and West Bengal. Banks' approach to the rural lending will be guided mainly by commercial considerations in future. Commercial Banks, Co-operatives and Regional Rural Banks are the three major segments of rural financial sector in India. Rural financial system, in future has a challenging task of facing the drastic changes taking place in the banking sector, especially in the wake of economic liberalization. There is an urgent need for rural financial system to enlarge their role functions and range of services offered so as to emerge as "one stop destination for all types of credit requirements of people in rural/semi-urban centres. Barring commercial banks, the other rural financial institutions have a weak structural base and the issue of their strengthening requires to be taken up on priority. Co-operatives will have to be made viable by infusion of capital.

Bringing all cooperative institutions under the regulatory control of RBI would help in better control and supervision over the functioning of these institutions. Similarly Regional Rural banks (RRBs) as a group need to be made structurally stronger. It would be desirable if NABARD takes the initiative to consolidate all the RRBs into a strong rural development entity. Small Scale Industries have, over the last five decades, emerged as a major contributor to the economy, both in terms of employment generation and share in manufactured output and exports. SSIs account for 95% of the industrial units and contribute about 40% of the value addition in the manufacturing sector. There are more than 32 lac units spread all over the country producing over 7500 items and providing employment to more than 178 lac persons. The employment generation potential and favourable capital-output ratio would make small scale sector remain important for policy planners.

Removal of quantitative restrictions on a large number of items under the WTO and opening up of Indian market to greater international competition have thrown both challenges and opportunities for the SSI sector. Low capital base and weak management structure make these units vulnerable to external shocks, more easily. However the units which can adopt to the changing environment and show imagination in their business strategy will thrive in the new environment. Instead of following the narrow definition of SSI, based on the investment in fixed assets, there is a move to look at Small and Medium Enterprises (SME) as a group for policy thrust and encouragement. For SMEs, banks should explore the option of E-banking channels to develop web-based relationship banking models, which are customer-driven and more cost-effective. Government is already considering a legislation for the development of SME sector to facilitate its orderly growth. In the next ten years, SME sector will emerge more competitive and efficient and knowledge-based industries are likely to acquire greater prominence. SMEs will be dominating in industry segments such as Pharmaceuticals, Information Technology and Biotechnology. With SME sector emerging as a vibrant sector of the Indian economy, flow of credit to this

sector would go up significantly. Banks will have to sharpen their skills for meeting the financial needs of this segment. Some of the Banks may emerge as niche players in handling SME finance. Flow of credit to this Sector will be guided purely by commercial considerations as Banks will find SMEs as an attractive business proposition.

FINANCIAL SECTOR REFORMS

Financial Sector Reforms set in motion in 1991 have greatly changed the face of Indian Banking. The banking industry has moved gradually from a regulated environment to a deregulated market economy. The market developments kindled by liberalization and globalization have resulted in changes in the intermediation role of banks. The pace of transformation has been more significant in recent times with technology acting as a catalyst. While the banking system has done fairly well in adjusting to the new market dynamics, greater challenges lie ahead. Financial sector would be opened up for greater international competition under WTO. Banks will have to gear up to meet stringent prudential capital adequacy norms under Basel II.

In addition to WTO and Basel II, the Free Trade Agreements (FTAs) such as with Singapore, may have an impact on the shape of the banking industry. Banks will also have to cope with challenges posed by technological innovations in banking. Banks need to prepare for the changes. In this context the need for drawing up a Road Map to the future assumes relevance. The idea of setting up a Committee to prepare a Vision for the Indian Banking industry came up in IBA, in this background. Managing Committee of Indian Banks' Association constituted a Committee under the Chairmanship of Shri S C Gupta, Chairman & Managing Director, Indian Overseas Bank to prepare a Vision Report for the Indian Banking Industry. The composition of the Committee is given at the end of the report.

The Committee held its first meeting on 23rd June 2003 at Mumbai. Prior to the meeting the members were requested to give their thoughts on the future landscape of the banking industry. A discussion paper based on the responses received from members was circulated along with a questionnaire eliciting views of members on some of the specific issues concerning anticipated changes in the banking environment. In the meeting, which served as a brainstorming session, members gave their Vision of the future. A second meeting of the Committee was held at Chennai on 7th August 2003 to have further discussions on the common views, which emerged in the first meeting, and also to examine fresh areas to be covered in the study. The Vision Statement prepared by the Committee is based on common thinking that crystallized at the meetings. In the Chennai meeting it was decided to form a smaller group from among the members to draft the report of the Committee. The group met thrice to finalize the draft report. The report was adopted in the final meeting of the Committee held at Mumbai. When we talk about the future, it is necessary to have a time horizon in mind. The Committee felt, it would be rather difficult to visualize

the landscape of banking industry say, 20 years hence due to the dynamic environment. While Government of India brought out India Vision 2020, the Committee is of the view that the pace of changes taking place in the banking industry and in the field of Information Technology would render any attempt to visualize the banking scenario in 2020, inconceivable. The entire financial services sector may undergo a dramatic transformation. It was, therefore, felt that we should set our goals for the near future say, for 5-10 years hence and appropriately call this exercise "Banking Industry – Vision 2010".

FUTURE LANDSCAPE OF INDIAN BANKING

Liberalization and de-regulation process started in 1991-92 has made a sea change in the banking system. From a totally regulated environment, we have gradually moved into a market driven competitive system. Our move towards global benchmarks has been, by and large, calibrated and regulator driven. The pace of changes gained momentum in the last few years. Globalization would gain greater speed in the coming years particularly on account of expected opening up of financial services under WTO. Four trends change the banking industry world over, viz. 1) Consolidation of players through mergers and acquisitions, 2) Globalisation of operations, 3) Development of new technology and 4) Universalisation of banking. With technology acting as a catalyst, we expect to see great changes in the banking scene in the coming years. The Committee has attempted to visualize the financial world 5-10 years from now.

It entails emergence of an integrated and diversified financial system. The move towards universal banking has already begun. This will gather further momentum bringing non-banking financial institutions also, into an integrated financial system. The traditional banking functions would give way to a system geared to meet all the financial needs of the customer. We could see emergence of highly varied financial products, which are tailored to meet specific needs of the customers in the retail as well as corporate segments. The advent of new technologies could see the emergence of new financial players doing financial intermediation. For example, we could see utility service providers offering say, bill payment services or supermarkets or retailers doing basic lending operations. The conventional definition of banking might undergo changes. The competitive environment in the banking sector is likely to result in individual players working out differentiated strategies based on their strengths and market niches. For example, some players might emerge as specialists in mortgage products, credit cards, *etc.*, whereas some could choose to concentrate on particular segments of business system, while outsourcing all other functions. Some other banks may concentrate on SME segments or high net worth individuals by providing specially tailored services beyond traditional banking offerings to satisfy the needs of customers they understand better than a more generalist competitor.

International trade is an area where India's presence is expected to show appreciable increase. Presently, Indian share in the global trade is just about

0.8%. The long term projections for growth in international trade is placed at an average of 6% per annum. With the growth in IT sector and other IT Enabled Services, there is tremendous potential for business opportunities. Keeping in view the GDP growth forecast under India Vision 2020, Indian exports can be expected to grow at a sustainable rate of 15% per annum in the period ending with 2010. This again will offer enormous scope to Banks in India to increase their forex business and international presence. Globalization would provide opportunities for Indian corporate entities to expand their business in other countries. Banks in India wanting to increase their international presence could naturally be expected to follow these corporates and other trade flows in and out of India. Retail lending will receive greater focus.

Banks would compete with one another to provide full range of financial services to this segment. Banks would use multiple delivery channels to suit the requirements and tastes of customers. While some customers might value relationship banking (conventional branch banking), others might prefer convenience banking (e-banking). One of the concerns is quality of bank lending. Most significant challenge before banks is the maintenance of rigorous credit standards, especially in an environment of increased competition for new and existing clients. Experience has shown us that the worst loans are often made in the best of times. Compensation through trading gains is not going to support the banks forever. Large-scale efforts are needed to upgrade skills in credit risk measuring, controlling and monitoring as also revamp operating procedures. Credit evaluation may have to shift from cash flow based analysis to "borrower account behaviour", so that the state of readiness of Indian banks for Basle II regime improves. Corporate lending is already undergoing changes. The emphasis in future would be towards more of fee based services rather than lending operations. Banks will compete with each other to provide value added services to their customers. Structure and ownership pattern would undergo changes. There would be greater presence of international players in the Indian financial system. Similarly, some of the Indian banks would become global players. Government is taking steps to reduce its holdings in Public sector banks to 33%. However the indications are that their PSB character may still be retained.

Mergers and acquisitions would gather momentum as managements will strive to meet the expectations of stakeholders. This could see the emergence of 4-5 world class Indian Banks. As Banks seek niche areas, we could see emergence of some national banks of global scale and a number of regional players. Corporate governance in banks and financial institutions would assume greater importance in the coming years and this will be reflected in the composition of the Boards of Banks. Concept of social lending would undergo a change. Rather than being seen as directed lending such lending would be business driven. With SME sector expected to play a greater role in the economy, Banks will give greater overall focus in this area.

Changes could be expected in the delivery channels used for lending to small borrowers and agriculturalists and unorganized sectors (micro credit). Use of

intermediaries or franchise agents could emerge as means to reduce transaction costs. It would not be out of place, however, to state that most of the changes in the landscape of financial sector discussed above would be technology driven. In the ultimate analysis, successful institutions will be those which continue to leverage the advancements in technology in re-engineering processes and delivery modes and offering state-of-the-art products and services providing complete financial solutions for different types of customers. Human Resources Development would be another key factor defining the characteristics of a successful banking institution. Employing and retaining skilled workers and specialists, re-training the existing workforce and promoting a culture of continuous learning would be a challenge for the banking institutions.

EMERGING ECONOMIC SCENE IN LIFELINE

The financial system is the lifeline of the economy. The changes in the economy get mirrored in the performance of the financial system, more so of the banking industry. The Committee, therefore felt, it would be desirable to look at the direction of growth of the economy while drawing the emerging contours of the financial system. The "India Vision 2020" prepared by the Planning Commission, Government of India, is an important document, which is likely to guide the policy makers, in the years to come. The Committee has taken into consideration the economic profile drawn in India Vision 2020 document while attempting to visualise the future landscape of banking Industry. India Vision 2020 envisages improving the ranking of India from the present 11^{th} to 4^{th} among 207 countries given in the World Development Report in terms of the Gross Domestic Product (GDP). It also envisages moving the country from a low-income nation to an upper middle-income country.

To achieve this objective, the India Vision aims to have an annual growth in the GDP of 8.5 per cent to 9 per cent over the next 20 years. Economic development of this magnitude would see quadrupling of real per capita income. When compared with the average growth in GDP of 4-6% in the recent past, this is an ambitious target. This would call for considerable investments in the infrastructure and meeting the funding requirements of a high magnitude would be a challenge to the banking and financial system. India Vision 2020 sees a nation of 1.3 billion people who are better educated, healthier, and more prosperous. Urban India would encompass 40% of the population as against 28 % now. With more urban conglomerations coming up, only 40% of population would be engaged in agricultural sector as against nearly two thirds of people depending on this sector for livelihood.

Share of agriculture in the GDP will come down to 6% (down from 28%). Services sector would assume greater prominence in our economy. The shift in demographic profile and composition of GDP are significant for strategy planners in the banking sector. Small and Medium Enterprises (SME) sector would emerge as a major contributor to employment generation in the country. Small Scale sector had received policy support from the Government in the past considering

the employment generation and favourable capital-output ratio. This segment had, however, remained vulnerable in many ways. Globalization and opening up of the economy to international competition has added to the woes of this sector making bankers wary of supporting the sector. It is expected that the SME sector will emerge as a vibrant sector, contributing significantly to the GDP growth and exports. India's share in International trade has remained well below 1%. Being not an export led economy (exports remaining below 15% of the GDP), we have remained rather insulated from global economic shocks.

This profile will undergo a change, as we plan for 8-9% growth in GDP. Planning Commission report visualizes a more globalised economy. Our international trade is expected to constitute 35% of the GDP. In short, the Vision of India in 2020 is of a nation bustling with energy, entrepreneurship and innovation. In other words, we hope to see a market-driven, productive and highly competitive economy. To realize the above objective, we need a financial system, which is inherently strong, functionally diverse and displays efficiency and flexibility.

The banking system is, by far, the most dominant segment of the financial sector, accounting for as it does, over 80% of the funds flowing through the financial sector. It should, therefore, be our endeavor to develop a more resilient, competitive and dynamic financial system with best practices that supports and contributes positively to the growth of the economy. The ability of the financial system in its present structure to make available investible resources to the potential investors in the forms and tenors that will be required by them in the coming years, that is, as equity, long term debt and medium and short-term debt would be critical to the achievement of plan objectives. The gap in demand and supply of resources in different segments of the financial markets has to be met and for this, smooth flow of funds between various types of financial institutions and instruments would need to be facilitated.

Government's policy documents list investment in infrastructure as a major area which needs to be focused. Financing of infrastructure projects is a specialized activity and would continue to be of critical importance in the future. After all, a sound and efficient infrastructure is a sine qua non for sustainable economic development. Infrastructure services have generally been provided by the public sector all over the world in the past as these services have an element of public good in them.

In the recent past, this picture has changed and private financing of infrastructure has made substantial progress. This shift towards greater role of commercial funding in infrastructure projects is expected to become more prominent in coming years. The role of the Government would become more and more of that of a facilitator and the development of infrastructure would really become an exercise in public-private partnership. 'India Infrastructure Report' placed financing of infrastructure as a major responsibility of banks and financial institutions in the years to come. The report estimated the funding requirements of various sectors in the infrastructure area at ₹ 12,00,000 crore

by the year 2005-06. Since the estimated availability of financing from Indian financial institutions and banks was expected at only ₹ 1,20,000 crore, a large gap is left which needs to be filled through bilateral/multilateral/government funding. It has been observed globally that project finance to developing economies flows in where there is relatively stable macro-economic environment.

These include regulatory reforms and opening of market to competition and private investment. Liberalized financial markets, promoting and deepening of domestic markets, wider use of risk management tools and other financial derivative products, improved legal framework, accounting and disclosure standards etc are some of the other aspects which would impact commercial funding of infrastructure projects. The India Vision document of Planning Commission envisages Foreign Direct Investments (FDI) to contribute 35% (21% now) to gross capital formation of the country by 2020. Government has announced a policy to encourage greater flow of FDI into the banking sector.

The recent amendment bill introduced in Parliament to remove the 10% ceiling on the voting rights of shareholders of banking companies is a move in this direction. The working group expects this to have an impact on the capital structure of the banks in India in the coming years. Consequent to opening up of the economy for greater trade and investment relations with the outside world, which is imperative if the growth projections of India Vision 2020 were to materialize, we expect the banking Industry's business also to be driven by forces of globalization.

This may be further accentuated with the realisation of full convertibility of the rupee on capital account and consequent free flow of capital across the borders. An increase in the income levels of the people would naturally lead to changes in the spending pattern also. This could result in larger investments in the areas like entertainment and leisure, education, healthcare etc and naturally, these would attract greater participation of the banking system.

On the basis of the projection made by the Draft 10th Five Year Plan on relevant macro indicators such as GDP and extending the trend for a further period of three years, it is estimated that GDP at current market prices during 2009-10 would be ₹ 61,40,000 crore. Taking into account the on-going reform measures, expected Basel II needs, and financial dis-intermediation, the pace of expansion in the balance sheets of banks is likely to decelerate. Thus total assets of all scheduled commercial banks by end March 2010 may be taken as ₹ 40,90,000 crore as a working estimate.

At that level, the annual composite rate of growth in total assets of Scheduled Commercial Banks would be about 13.4 per cent to be over 2002-03 as compared to 16.7 per cent between 1994-95 and 2002-03. It will form about 65 per cent of GDP at current market prices as compared to 67 per cent in 2002-03. On the liability side, there may be large augmentation to capital base. Reserves are likely to increase substantially. Banks will relay more on borrowed funds. Hence, the pace of accretion to deposits may slow down.

NEW TECHNOLOGY IN BANKING AND FINANCE SECTORS

Some of the general issues that have concerned unions and employees, especially women, in the wake of the introduction of new technology in the banking and finance sectors have been:

- Increase in workloads.
- Pressure for flexibility.
- Changes in job contents.
- Increase in the proportion of 'non-bargainable' staff (*i.e.*, those without an automatic right to unionize) as compared to the 'bargainable' staff.
- Changes in grading and pay.
- Changes in information and control.
- Prospects of job losses and declining employment levels.
- Changes in health and safety conditions.
- Increase in insecurity in the workplace, and loss of union power.
- Changes in the autonomy of employees.

JOB LOSSES

There have not been visible losses of employment in either the banking or insurance industries, due to the massive expansion and diversification in the two industries and to the high proportion of nationalized enterprises, in which workers are generally protected against job losses. Some of the foreign banks have undergone massive expansion in terms of the number of their branches and their areas of operation. In fact, in January 1992, 12 foreign banks sought permission to open 44 more branches in various major cities of India. There has however been a reduction in the rate of recruitment in the nationalized banks. According to a recent study covering three banks and two insurance companies, the growth of new jobs has dwindled. As the use of new technology expands, labour savings are likely to increase further in some operations. The three developments that are likely to displace workers, and women in particular, are voice recognition, optical character recognition and artificial intelligence.

An employee at the Hong Kong bank observed that the entire category of typists had already been abolished. It is possible to discern a tendency to reduce the proportion of 'bargainable' staff in both nationalized and foreign banks. The Banque Nationale de Paris reduced its bargainable staff from 200 employees in 1979 to just 135 in 1992, by not recruiting staff at the lowest levels and by asking about 35 employees to accept the so-called Voluntary Retirement Scheme (VRS) because computerization was expected to reduce the need for their labour.

PRESSURE FOR FLEXIBILITY

Over the last decade and a half, management has consistently sought to have flexible manning levels. They have argued that they need operational flexibility in order to respond quickly to changes in the market, to introduce technological innovations, and to deal with fluctuations in the flow of work. This, they say,

can be achieved by employing a core of secure, permanent, multiskilled, full-time employees and a 'periphery' of marginal, generally single-skilled workers who may be employed part-time or temporarily, and directly or indirectly, in a variety of 'new' ways Computer technology demands functionally flexible multiskilled workers rather than specialists. The strategy of increasing flexibility in the employment system frequently targets women workers, who occupy the lower rungs of the job hierarchy. They are often forced to change work stations or leave the firm. Professionals and specialists, a majority of whom are men, benefit from the strategy.

INCREASE IN WORKLOADS

New technology could lessen the repetitive and heavy nature of certain operations. However, most employees in the insurance and banking industry, especially in the foreign banks, have experienced serious strain and heavy work-loads. According to an employee working in the cash department of the Citibank, Before computerization we used to do 30-40 cash entries per day; now we have to do more than 100. There is a greater pressure of work more work and more responsibility. The speed has increased enormously. According to experienced unionists in ANZ Grindlays Bank, computerization, coupled with non-recruitment and non-replacement of retired staff, has led to a tremendous increase in workloads, 'after 20 years of employment, people are bound to be completely fagged out.

Then the management will term them "unsuitable", "old" or "unfit"'. The personnel officer of Grindlays, who disagrees with the union on everything else, admitted, 'Since the emphasis is entirely on productivity and efficiency, there has been intensification of work. Employees' efficiency levels have gone up ten-fold'. Personnel officers at the Life Insurance Corporation (LIC) confirmed this picture.

CHANGES IN JOB CONTENT

Changes in work methods caused by the introduction of computerization affect the content of work as well as the skills needed by employees. The direction of changes is, however, not uniform. Two divergent tendencies can be observed. In routine transactions, certain skills of a mechanical nature, which nevertheless require a measure of mental effort and concentration, are no longer required or are needed less. The skills replacing them are equally mechanical but call for less mental effort.

The level of skills required for the performance of routine transactions therefore actually falls, although the degree of attention and concentration required will be just as high or even higher. In contrast, in the area of customer services, computerization offers potential for an increase in both the necessary range and level of skills, for example, searching for, extracting and assimilating relevant information in response to a request. The realization of the potential is, however, contingent on the relevant organizational decisions being taken by

management. The impact of new technology on work content and the skills required of workers also depends on how rigidly jobs are defined and demarcated and on the skill levels of the existing workforce. Various studies seem to show that, in places where the tasks of workers have already been defined broadly and flexibly, with much overlapping, the reorganization of work after the introduction of new technology has been comparatively smooth and workers' resistance relatively minor.

In places where the skill level of workers is high, technological change tends to strengthen the tendency towards the integration of planning and production tasks. Where skill levels are low there seems to be a trend towards polarization of skills. Computerization is also creating skills that are largely transferable from one enterprise to another, such as the skills of computer programmers. Product innovations have generally led to an increase in the importance of formal skills. The informal skills, learned on the job, that characterized women's work are not seen as important. The professional and technical jobs increase in number and importance, and formal theoretical knowledge is becoming more important for employees in the banking sector. In India as elsewhere, categories such as junior clerks and tellers are becoming less important in the overall workforce as Automated Teller Machines (ATMs) multiply. An employee working at the bill discounting department in Citibank, Bombay, says: Earlier, when a bill was brought to us, we made manual entries.

The customer would present the bill. We had to scrutinise it, and then send it to the liability department for their approval. In the liability department, each client had one big card which showed her status. After approval, it was sent back to us for processing. Each department had a journal keeper. Now, we still have to scrutinise a bill. Then we key it into the programme-the bill programme. The computer shows the credit limit automatically. The ticket is then given to the officer, who takes it to the Credit Approval Committee. There are no manual interest calculations, no manual tickets, no journal-keeper. There are positive aspects of computerization as weld.

Although employees used to do the posting of debit and credit, they did not necessarily know much about whether and why a particular debit or credit was passed. There is greater knowledge about these things now. There is also greater access to other types of work. Earlier I did not endorse documents. According to the personnel manager of the LIC, work had not been enriched or tasks enlarged, because jobs were set and functions well-defined. 'Computerization has made the jobs easier rather than interesting.' The personnel officer at the ANZ Grindlays Bank, in contrast, was adamant that employees' skills had increased ten-fold, but he was actually referring to their productivity or efficiency. He agreed however that many jobs have been 'realigned'. For example, in bill discounting, work that was previously done by a team is now done individually by workers with their own machines. An employee at Grindlays comments, 'Earlier, there was greater interaction between employees. Team work was good work. We learnt more about the work. Now there is no time to look around,

help or seek help from colleagues. You just sit there and bang at the keyboard'. The management of Grindlays argues that employees used to spend most of their time with books (*e.g.*, tabulations) and now spend more time with customers. The unionists at Grindlays dismissed this claim, 'There have been no changes. Work has become more monotonous. The brain is getting more dull.'

Many employees expressed mixed feelings about computerization. While it relieved some work pressures and strains of particular types, it has made work dull. It increased efficiency, but decreased the feeling of team work and sharing. Work might be less arduous, but it also becomes less varied. Computerization is supposed to increase customer interaction, but many employees experienced a reduction, and all complained of an increased work tempo.

LOSS OF UNION POWER

Deskilling contributes to a feeling of powerlessness vis-à-vis the employer. This feeling was expressed more definitely by employees working in foreign banks than by those employed either in the nationalized banks or the nationalized LIC, Four women employees in the Banque Nationale de Paris said that the closure of some branches and their awareness that they had not been given computer training at a time when nearly all the banking operations had been computerized had made them 'very scared.' All four were later made redundant. At ANZ Grindlays, insecurity was said to have increased, with early retirements and no recruitment for the last four to five years, 'That itself creates insecurity. If there is a reduction, then it creates panic.' Citibank employees reported feeling, on the one hand, that their workload was generally too heavy, and, on the other hand, that any temporary reductions made them fear that work had been contracted out. They said that contract workers had been employed for specific tasks, without informing the employees or the union. This has become possible because of computerization. The feeling of insecurity has also increased because unions have been considerably weakened. The women who were forced to take the VRS (Voluntary Retirement Scheme) by the Banque Nationale de Paris say: There is virtually no union in the BNP. The union officials were bending backwards to sell the VRS to us. We didn't want to resign. We wanted to fight it out. But how can you do that without the firm backing of the union? Even when a union is strong, women may not be protected against discrimination.

CHANGES IN GRADING AND PAY

There seems to have been no attempt to redefine a new grade structure in the banking and insurance industry after computerization was introduced. In the Banque Nationale de Paris a 'promotion agreement' was signed in 1987, under which all the clerical staff were promoted within three years to the status of Special Assistants, a supervisory category with an extra wage allowance. Everybody, including the lower grade staff, received the allowance, and there was a substantial increase in basic pay too. But there was no attempt at evolving

a new grade structure, nor any training to equip employees to deal with the new type of work. All employees, including the women, have gained financially but there has not been any change in their job definition or real status. All the banks have some allowance for EDP staff or computer operators. In the LIC the allowance was ₹ 100. In the Hong Kong Bank only the most senior employees in the department got the allowance, although almost all the employees have to work on the terminals. The Union Bank of India employees who work on the computers get an allowance of ₹ 350 per month. The Hong Kong Bank employees get an allowance of ₹ 400. In the words of one computer operator in the Bank of Baroda, 'EDP staff are definitely graded highly in the Bank'.

'NON-BARGAINABLE' STAFF

Control over the workforce provides the basis for controlling production processes, output levels, and scheduling. Over the years, this control has been loosened as unions have come to play a role in areas such as work intensity, output levels, health and safety, which were and still are considered to be 'management prerogatives'. One of the strategies available to wrest control back is to weaken unions, both numerically and in terms of the functions which the unionized workforce performs. This is one reason behind the dramatic and continuous increase in the non-bargainable category of workers, as compared to unionised workers. This casualization process has occurred in the banking and insurance industry as well as in manufacturing. The number of workers in the bargainable categories is being reduced,5 for instance by using contract couriers in place of employing messengers. In 1973, 18.7 per cent of all workers in the banking industry were officers. By 1987 this had grown to 26.7 per cent. Over the same period, the percentage of clerical workers fell slightly, from 55.9 per cent to 52.4 per cent, and the percentage of workers in more subordinate positions fell quite significantly from 25.4 per cent to 20.9 per cent.

In almost every industry in India, computer programmers are in the non-bargainable category. Computer programmers are usually in a position to anticipate changes and may use their knowledge to keep other workers and unions informed. Most new recruitment is done in the 'officer' category, though often these new employees do the same work as the bargainable employees. In industries where the union has refused to cooperate with computerization, the management recruits 'officers' to do the work of data entry operators, *etc.* The unionists are increasingly feeling that they have to bargain with the management about the content of work in the bargainable and non-bargainable categories, and be vigilant about any infringement.

CHANGES IN INFORMATION AND CONTROL

Traditional craft workers often knew far more about their jobs than managers or supervisors, which gave them a lot of freedom as to how the work was done. But computers have enormously increased management's ability to collect and analyse information-about product performance, market trends, customers, sales,

finance, and of course about employees. The tendency has been for management to learn more about how work is done, and to specify more tightly how jobs should be done-both in terms of method and speed. Every minute of your time is being recorded. How many words did you key in? How much time was required for posting debits and credits, for bill discounting? However, we cannot access information that is not in our jurisdiction.

If one tries it, it is invalid; but the fact that you tried will be recorded in the computer. If one looks at it dispassionately, one would have an eerie feeling. Employees felt that they were being watched and intimidated, increasing the sense of insecurity. Unions have not claimed a right to have access to information relevant for negotiating. Employees in ANZ Grindlays bank found such a demand difficult to even imagine. 'Management has total control over all information. Profits, costs, *etc.*, are under secret code. They have all the information about us though.'

WOMEN'S EMPLOYMENT IN BANKING

Despite this increase, women are still concentrated at the clerical level, and the general picture is changing only very slowly. Women officers in banks are a recent phenomenon, which has become a little more significant since 1975 because of direct recruitment and promotions. Even in EDP activities, the share of women is low. A recent study of Indian banking notes that in one bank women constituted only 5 per cent of the EDP staff, about 12 per cent in another bank and 7 per cent in an insurance company. Women were not recruited as programmers.

CHANGES IN HEALTH AND SAFETY CONDITIONS

The introduction of new technology has also created a range of new hazards for the workers. The development of new materials, processes and substances, without adequate information being made available about their impact, may be creating problems which will not be perceived for many years. Increases in the scale and pace of production have contributed towards stress, especially where there is also inadequate support or training or an unfair distribution of workloads. Some specific health and safety problems have been shown to arise from the introduction of computer-based equipment. Visual Display Units (VDUs) have been known to cause a number of health problems, especially if operated continuously for a long time. 'Video blues', eye problems, musculoskeletal problems, painful conditions such as tenosynovitis, varicose veins, ulcers, nausea, headaches, and skin diseases as well as reproductive problems such as miscarriages, stillbirths, birth defects, infertility, menstrual problems and low sperm counts have been very extensively documented.

However, none of the bank employees had been given any health training. Most employees complained of eye strain, headaches, or a heavy feeling in the head, but they worked at the terminal from 9.30 a.m. to 4.30 p.m. with only breaks for lunch and tea in between. Three women in Citibank had had

miscarriages, though none of them had any personal or familial history of miscarriages. Of the forty women interviewed only one had heard that working on the computers continuously could cause health problems. None of the training sessions had mentioned this problem. Though information on the health and safety aspects of working with computers is widely available, employees were ignorant of health hazards. This indicates their lack of access to information relevant to women, the unwillingness of management to share it, and the indifference of the union to issues of health and safety. This is a serious issue, especially because the number of women working on computers is increasing rapidly.

COMPUTERIZATION AND WOMEN IN FOREIGN BANKS

The effect of computerization on women bank employees, both clerical and officer grades, is of considerable significance as the process of computerization is soon to be intensified. A glimpse of the possible impact may be discerned from an analysis of foreign banks, in India. According to a unionist in Citibank, In 1970, out of a total workforce of 200, there were only ten women. Now, in 1992, 70 per cent of the workforce are women. This includes programmers as well as women officers. Management feels women are better on computers as they have routine clerical ambitions. Women really do more work and their frustration level is higher. (Presumably, he means their endurance is higher.) A union official in Banque Nationale de Paris confirms this: Our managements' latest policy seems to be to recruit young girls and train them on computers. In our latest recruitment in January and April 1992, ten new employees were recruited.

All ten were girls. Now we have women on all the customer counters. They are eager to learn, more sincere, obedient, less union-minded and also provide better customer service.

A militant unionist at the Grindlays bank said that, in Bombay, the proportion of women employees had increased from 5 per cent in 1970 to about 50 per cent in 1992. Figures from Grindlays management showed that about 35 per cent of their workforce, nation-wide, were women. This is a higher proportion than in most of their nationalized counterparts. According to a union official at Grindlays: Earlier, the policy of multinational banks was not to recruit women employees. But over the last few years, they have changed. Management realised that women are more submissive, overworked, and have less time for union work. Besides, because of general socio-economic development, women do much better, especially in cities like Bombay.

The points which bank managements generally present in women's favour include:

- They perform all types of jobs well;
- They are less involved in union activities;
- Women employees are sincere and diligent and meticulously complete their work;

- They are time-conscious;
- They do not shirk responsibilities;
- They are less often involved in frauds and corruption.

Table. Women employees in Indian nationalized banks, 1985 and 1990 (%).

Bank	Officers		Clerks	
	1985	1990	1985	1990
Allahabad Bank	3.5	3.66	9.7	11.03
Andhra Bank	9.1	9.54	19.2	21.88
Bank of Baroda	5.1	7.93	17.8	18.12
Bank of India	5.2	5.06	20.7	20.60
Bank of Maharashtra	6.3	6.75	29.9	31.62
Canara Bank	3.7	4.12	25.5	27.57
Central Bank of India	3.9	4.63	17.7	20.10
Corporation Bank	6.2	6.78	32.2	33.47
Dena Bank	1.8	2.02	17.9	18.9
Indian Bank	5.6	5.95	24.1	21.34
Indian Overseas Bank	5.9	5.56	17.9	18.43
New Bank of India	4.5	4.61	17.8	17.59
Oriental Bank of India	8.1	7.96	17.4	15.98
Punjab and Sind Bank	2.8	2.69	8.1	9.58
Punjab National Bank	4.1	4.45	16.0	16.54
Syndicate Bank	8.2	8.15	26.6	27.49
ICO Bank	4.1	3.00	11.6	11 90
Union Bank of India	5.9	6.27	18.8	22.15
United Bank of India	0.6	0.85	5.9	8.20
Vijaya Bank	11.8	12.23	20.3	21.22
State Bank of India	1.7	2.33	12.8	15.44
State Bank of Bikaner and Jaipur	1.6	1.89	7.8	7.66
State Bank of Hyderabad	3.1	3.88	13.7	16.78
State Bank of Indore	1.1	1.29	10.7	11.77
State Bank of Mysore	3.9	3.68	22.7	25.96
State Bank of Patiala	2.1	2.88	16.7	17.79
State Bank of Saurashtra	0.8	1.16	8.6	9.91
State Bank of Travancore	7.5	9.00	35.4	35.99
Total	3.9	4.9	17.3	18.77

An active woman unionist in the Hong Kong Bank confirmed the high recruitment rate of women, but explained it as due to the fact that women are better qualified and tend to put in greater effort. The better-qualified women apply for bank jobs, while similarly qualified men would tend to go in for jobs, such as engineering and computers, which employees regard as more challenging and which have better prospects in terms of job satisfaction and pay. Another reason which was suggested is that women resign sooner than men. Of the twenty-seven girls recruited in the 1991 batch, three had left within the first year. The pay levels of new recruits are considerably less than for a senior person, so it is less expensive for the management to have a fresh supply of new recruits.

The Hong Kong bank has about 500 employees in the head office, of whom more than 350 are women, including more than half of the officers.. However it is not clear whether this source of employment will persist. The RBI's National Clearing Cell in Madras has already extended its 'instant credit' facilities to Saturdays.6 Because of the increasing involvement with foreign share markets and banks and the time difference between countries, it may not be too long before the hours of these and other facilities are extended to Sundays and night shifts.

This would have a significant impact on the recruitment, employment and promotion of women. In Canada, where computerization has reached fairly advanced levels, banking jobs are coming to be more frequently occupied by men. Amin Rajan, in his study of the finance sector at an international level (1990) observes that, 'In the short term technology has created job opportunities for women. In the longer term, however, this process is likely to disadvantage women.'

THE QUALITY OF WOMEN'S WORK

The banking and insurance sectors today offer more prospects for jobs for women-both qualitatively and quantitatively. However there are some common problems faced by women managers, officers and clerical groups in banking and insurance, in the course of their careers. These include the burden of the dual role, sexual harassment in the workplace, the refusal of men to accept women as colleagues or seniors, the need to work twice as well as men to gain recognition, and the lack of solidarity among women. According to a study by Kamala Srinivasan (1991) 50 per cent of women complained that extra work is always shunted to women. They also complained about sexual harassment from colleagues, managers, or customers.

Women also felt dissatisfied that they were not sent out for training. Some obstacles arise from women's specific difficulties in demanding promotion-because promotions are linked with transfers; or they have difficulties in working late; or because women shy away from responsibility, having a low opinion of their own abilities and a negative attitude to accepting recognition. Some women employees feel that these constraints are intensified by being forced to adopt the behaviour of the 'successful manager or officer' which has been established by men. They argue that women could find their own strategies which would achieve the same result.

One way of improving prospects for women could be to restructure the work, for example with flexible working hours, part-time job assignments, split location positions performed partly at home, and job-sharing. Some of these suggestions have already been tried out elsewhere, for example in Japan, where the results for women have not been entirely positive.

None the less, examination of this experience could be a basis for working out alternatives which do not disadvantage women (International Labour Office, 1989).

EMPLOYMENT AND TRAINING

Technological change usually involves changes in job content, making many traditional skills obsolete and creating a demand for new types of skills. Training and retraining ensure not only that the enterprise obtains the optimal benefits from new technologies, it is also an effective way of protecting the employment of workers affected by technological change and other structural changes. Workers, and the trade union movement, are divided about training. Some unions, such as the BNP (Banque Nationale de Paris) union, seem to have relinquished not only any initiative, but also responsibility for both the employees who are being forced to quit and those who are allowed to stay. Despite the 1986 agreement giving the union a right to participate in determining and formulating the training, there has been no move from the office-bearers of the union, all men, to take the initiative. One union officer said that they 'had not realised the importance of this clause at the time. And now it is too late.' Women employees at the BNP were almost desperate to be given retraining.

They were too young-about 39 to 42 years of age-to retire. They saw no other way to retain their employment. They were also keen to learn new skills. The union in Citibank, on the other hand, participated actively in the computerization process as well as the training process. But even in Citibank there seems to be no long-term view as to the type of jobs and skills which will be required in the future. The younger recruits have been given a one-week training course in computer languages, which they did not use in the year following the course. They were then given a very brief, functional on-the-job type course. As one senior woman employee now working in the Bill Discounting department says: 'We were given a half-day "familiarity with the word-processor" course, and printed sheets telling us what to press for which function.' The Citibank women employees felt they knew too little, apart from their own little work area, and they wanted to know more so that they would not be adversely affected when it came to promotions. The attitude of women at the Hong Kong bank was similar.

The ANZ Grindlays Bank Employees' Union had a very different perspective, 'We have completely opposed computerisation. There are no skills involved in operating computers. It only deadens your mind. We cannot participate in such a process. We believe in struggle.' In the Indian banks, the younger women and those between 31) and 45 years old seemed keen on their jobs as careers, whereas many in the 30-45 age group had many more responsibilities at home-although some of the latter felt that learning about computers at work would also help them to assist their children in their studies, since computers have been introduced in many schools. Many women felt that learning to use computers, and being in the EDP department, would protect them against transfers to remote areas, as EDP departments are located only in the metropolitan cities. Most of the older women, especially those above 50, felt they would not be able to cope with any new retraining. They would undertake it if it was necessary for the job.

However, a small minority of women above 50 years of age also seemed keen to take up a new challenge. As one woman put it, As women, we are used to challenges, at home, at work, in combining the two roles, and in relationships with in-laws, neighbours, community, children, colleagues, and bosses. As we grow older, these challenges become routine matters. When you no longer have in-laws, when children are well settled elsewhere, when neighbourhood relationships are settled and repetitive, what do we do? We are used to challenges. New skills are merely one such challenge. Why not take it up? Another woman disagreed, but from a very different point of view. I'm not sure that computer skills are any skill at all. What are we doing? The generalised use of computers is only a means of deskilling and flattening us all.

Very soon using computers will be like using our pencils. Then all of us will be declared unskilled and redundant again. We need to do something else. In the Banque Nationale de Paris, thirty-seven people had to leave under the Voluntary Retirement Scheme, including ten women. At the same time they recruited ten young women to work on the computers at the customer counter. A 39 year old woman who was forced to take the VRS explains the strategy thus: For over two years, we were given very little work and we were shunted about from one department to another, one floor to another. We were treated like badli (casual) workers and were made to feel redundant and easily disposable. We pleaded to the management that we be given training on the computers. But they declined. We have a seniority of over twenty years, our pay levels are quite high, thanks to our earlier struggles. We are very confident and know our management inside out. Why should they want us any more? Another woman activist working in the BNP says, they would have to spend money giving us training.

Now they've killed so many birds with one stone. One, the new girls are already trained. Two, the girls start at a much lower rate, about half our wage levels. Three, they are new, more enthusiastic to please the management. Four, the management has succeeded in creating an atmosphere of terror and uncertainty. These young girls are bound to be affected by this atmosphere and work with heads bent. Five, they have no experience with this management and are not affected by the union movement. The management has succeeded in throwing out all the active members of the union. Those active workers that remain are likely to be promoted to the management category. On the issue of computerization and training, there seems to be fairly divergent views among bank managements too. By and large, the nationalized Indian banks seem to feel that 'it is better to retrain a banker in computer skills than train a computer specialist in banking'.

To this end, the Indian Banks' Association has developed training packages for various types of personnel. The National Institute of Bank Management has a very wide range of training programmes for top management, and every bank has its own programmes for their staff. The foreign banks again seem to operate differently. In contrast to the BNP management, the Grindlays bank has not

introduced an early retirement scheme, and has retrained its existing personnel. However according to the Personnel Department at the ANZ Grindlays, it is likely that the bank will insist that new recruits have some knowledge of computers. One woman employee who had attended a training course arranged by the management at a professional computer training institute, said, The whole management approach to training is like their approach to our work-extraction. In both it is the superiors or the experts laying the ground rules, without any input or participation expected from us. Participation is only a hindrance, a point of delay, precious time wasted.

Another suggested: Workshops should be organized in such a way that women are collectively given the space to handle PCs, and with manuals explaining what needs to be done. One can have experts in at crucial times like an introductory familiarizing talk, and when we feel we need someone to guide us, but not experts breathing down our necks like supervisors on an assembly line. In fact, the women felt that such training sessions would also achieve a great deal from the point of view of the management. The crux of the problems created by technological changes appears to be that the entire strategy is still technology-centred.

Behind the technology-centred approach is a mechanized world-view in which computers, a machine carrying out the brain work of the human, are superior to people. In one of the training sessions we were told how computers may be used to level the hierarchies and authorities that exist in the workplace. But in practice a new hierarchy has been created, alongside the earlier one. You can do only this, and can have access to only this, while the authorities have a greater range of activities and access to greater areas of information. Despite their criticism of the training programmes organized by the management, the women employees are extremely keen on learning new things and new skills. In fact, the new generation of bank and insurance employees, including women, are very serious about their work and career-conscious.

Reports of workshops with women clerks, officers and managers have indicated both the problems women face and their commitment to face these challenges for a better career. A senior unionist who has been active in the bank unions notes a shift, The attitude of the employees is changing. They no longer look at the unions as an expression of their aspirations, but as an agency which will deliver the goods. They are with the union because they mistrust the management. Their real interest however is their career. The unions too have begun to organize workshops for women employees. These workshops discuss the problems women employees face in their multiple roles, how women deal with these, and what their experiences are. Similar workshops are organized by the National Institute of Bank Management (NIBM), for women managers. Women clerical staff, officers and managers have reacted to these positively. One woman working in the EDP Department at the insurance corporation observes' We feel the thirst for more knowledge and better career prospects. Stagnation somehow scares us. Training programmes and institutions which

acknowledge this, and our dilemmas and situation, are well received. But there are fewer of those than we need. In some of the courses in the National Institute of Bank Management, women managers are encouraged to talk about their ideas and suggestions as well as their experiences as women in banking. Many other unions and management training institutes are organizing similar courses. Women feel that this needs to be done more systematically and more often, so that a greater range of issues and diverse sections of women employees might be covered.

4

Banking and Financial System

INTRODUCTION

One of the major economic developments of this decade has been the recent takeoff of India, with growth rates averaging in excess of 8% for the last four years, a stock market that has risen over three–fold in as many years with a rising inflow of foreign investment. In 2006, total equity issuance reached $19. 2bn in India, up 22 per cent. Merger and acquisition volume was a record $27. 8bn, up 38 per cent, driven by a 371 per cent increase in outbound acquisitions exceeding for the first time inbound deal volumes. Debt issuance reached an all–time high of $13. 7bn, up 28 per cent from a year earlier. Indian companies were also among the world's most active issuers of depositary receipts in the first half of 2006, accounting for one in three new issues globally, according to the Bank of New York. The questions and challenges that India faces in the first decade of the new millennium are therefore fundamentally different from those that it has wrestled with for decades after independence. Libe ralization and globalization have breathed new life into the foreign exchange markets while simultaneously besetting them with new challenges. Commodity trading, particularly trade in commodity futures, have practically started from scratch to attain scale and attention. The banking industry has moved from an era of rigid controls and government interference to a more market–governed system. New private banks have made their presence felt in a very strong way and several foreign banks have entered the country. Over the years, microfinance has emerged as an important element of the Indian financial system increasing its outreach and providing much–needed financial services to millions of poor Indian households.

DEFINITION OF BANK

According to Oxford English Dictionary, Bank is, "An establishment for custody of money received from or on behalf of, its customers. Its essential duty is the payment of the orders given on it by the customers, its profit mainly from the investment of money left unused by them". Banking Regulation Act, 1949 (Sec. 5(c)), has defined the banking company as, "Banking Company means any company which transacts business of banking in India". According to Section 5B, "banking means the accepting of deposit of money from the public for the purpose of leading or investment, which are repayable on demand or otherwise and are with draw able by cheque, draft, order or otherwise. " A bank is a financial intermediary(Financial intermediation consists of "channeling funds between surplus and deficit agents". A financial intermediary is a financial institution that connects surplus and deficit agents.

The classic example of a financial intermediary is a bank that transforms bank deposits into bank loans. Through the process of financial intermediation, certain assets or liabilities are transformed into different assets or liabilities. As such, financial intermediaries channel funds from people who have extra money (savers) to those who do not have enough money to carry out a desired activity (borrowers). In the U. S., a financial intermediary is typically an institution that facilitates the channeling of funds between lenders and borrowers indirectly. That is, savers (lenders) give funds to an intermediary institution (such as a bank), and that institution gives those funds to spenders (borrowers). This may be in the form of loans or mortgages. Alternatively, they may lend the money directly via the financial markets, which is known as financial disintermediation.) and appears in several related basic forms: a central bank(A central bank, reserve bank, or monetary authority is a public institution that usually issues the currency, regulates the money supply, and controls the interest rates in a country. Central banks often also oversee the commercial banking system of their respective countries. In contrast to a commercial bank, a central bank possesses a monopoly on printing the national currency, which usually serves as the nation's legal tender. The primary function of a central bank is to provide the nation's money supply, but more active duties include controlling interest rates, and acting as a lender of last resort to the banking sector during times of financial crisis. It may also have supervisory powers, to ensure that banks and other financial institutions do not behave recklessly or fraudulently.

Central banks in most developed nations are independent in that they operate under rules designed to render them free from political interference. Examples include the European Central Bank (ECB), the Bank of England, and the Federal Reserve System of the United States.) issues money on behalf of a government, and regulates the money supply (In economics, the money supply or money stock, is the total amount of money available in an economy at a particular point in time. There are several ways to define "money, " but standard measures usually include currency in circulation and demand deposits (depositors' easily–accessed assets on the books of financial institutions). Money supply data are

recorded and published, usually by the government or the central bank of the country. Public and private sector analysts have long monitored changes in money supply because of its possible effects on the price level, inflation and the business cycle. That relation between money and prices is historically associated with the quantity theory of money.

There is strong empirical evidence of a direct relation between long–term price inflation and money–supply growth, at least for rapid increases in the amount of money in the economy. That is, a country such as Zimbabwe which saw rapid increases in its money supply also saw rapid increases in prices (hyperinflation). This is one reason for the reliance on monetary policy as a means of controlling inflation. This causal chain is contentious, however: some heterodox economists argue that the money supply is endogenous (determined by the workings of the economy, not by the central bank) and that the sources of inflation must be found in the distributional structure of the economy.

In addition to some economists' seeing the central bank's control over the money supply as feeble, many would also say that there are two weak links between the growth of the money supply and the inflation rate: first, an increase in the money supply, unless trapped in the financial system as excess reserves, can cause a sustained increase in real production instead of inflation in the aftermath of a recession, when many resources are underutilized. Second, if the velocity of money, *i. e.,* the ratio between nominal GDP and money supply, changes, an increase in the money supply could have either no effect, an exaggerated effect, or an unpredictable effect on the growth of nominal GDP.) a commercial bank(A commercial bank (or business bank) is a type of financial institution and intermediary. It is a bank that provides transactional, savings, and money market accounts and that accepts time deposits.

After the implementation of the Glass–Steagall Act, the U. S. Congress required that banks engage only in banking activities, whereas investment banks were limited to capital market activities. As the two no longer have to be under separate ownership under U. S. law, some use the term "commercial bank" to refer to a bank or a division of a bank primarily dealing with deposits and loans from corporations or large businesses. In some other jurisdictions, the strict separation of investment and commercial banking never applied.

Commercial banking may also be seen as distinct from retail banking, which involves the provision of financial services direct to consumers. Many banks offer both commercial and retail banking services) accepts deposits (A deposit account is a current account, savings account, or other type of bank account, at a banking institution that allows money to be deposited and withdrawn by the account holder. These transactions are recorded on the bank's books, and the resulting balance is recorded as a liability for the bank, and represent the amount owed by the bank to the customer. Some banks charge a fee for this service, while others may pay the customer interest on the funds deposited.) and channels those deposits into lending activities, either directly or through capital markets(A capital market is a market for securities (debt or equity), where business

enterprises (companies) and governments can raise long–term funds. It is defined as a market in which money is provided for periods longer than a year, as the raising of short–term funds takes place on other markets (*e. g.,* the money market).

The capital market includes the stock market (equity securities) and the bond market (debt). Financial regulators, such as the UK's Financial Services Authority (FSA) or the U. S. Securities and Exchange Commission (SEC), oversee the capital markets in their designated jurisdictions to ensure that investors are protected against fraud, among other duties. Capital markets may be classified as primary markets and secondary markets. In primary markets, new stock or bond issues are sold to investors via a mechanism known as underwriting.

In the secondary markets, existing securities are sold and bought among investors or traders, usually on a securities exchange, over–the–counter, or elsewhere.) A bank connects customers with capital deficits to customers with capital surpluses(Capital surplus (also referred to as *additional paid in capital*, *paid in capital in excess of par* or *share premium*), is an accounting term that frequently appears as a balance sheet item as a component of shareholders' equity. Capital surplus is used to account for the capital that a firm raises in excess of the par value (nominal value) of the shares (common stock). Taken together, common stock (and sometimes preferred stock) issued and paid plus capital surplus represent the total amount actually paid by investors for shares when issued (assuming no subsequent adjustments or changes).

Shares for which there is no par value will generally not have any form of capital surplus on the balance sheet; all funds from issuing shares will be credited to common stock issued. Some other scenarios of causing Capital Surplus include Government donate a piece of land to the company.

The Capital surplus/Share premium account (SPA) is not distributable, however, in restricted circumstances it can be reduced:

- To write off the expenses/commission relating to the issue of those shares;
- To make a bonus issue of fully paid–up shares.
- It may also be used to account for any gains the firm may derive from selling treasury stock, although this is less commonly seen.
- Capital Surplus is also a term used by economists to denote capital inflows in excess of capital outflows on a country's balance of payments.) on the world's open financial markets.
- A savings bank, (A savings bank is a financial institution whose primary purpose is accepting savings deposits.

It may also perform some other functions. In Europe, savings banks originated in the 19th or sometimes even the 18th century. Their original objective was to provide easily accessible savings products to all strata of the population. In some countries, savings banks were created on public initiative, while in others, socially committed individuals created foundations to put in place the necessary

infrastructure.) also known as a building society in Britain is only allowed to borrow and save from members of a financial cooperative. Banking is generally a highly regulated industry, and government restrictions on financial activities by banks have varied over time and location. The current set of global bank capital standards are called Basel II. In some countries such as Germany, banks have historically owned major stakes in industrial corporations while in other countries such as the United States banks are prohibited from owning non–financial companies. In Japan, banks are usually the nexus of a cross–share holding entity known as the keiretsu. In Iceland banks had very light regulation prior to the 2008 collapse.

(The 2008–2011 Icelandic financial crisis is a major ongoing economic and political crisis in Iceland that involves the collapse of all three of the country's major commercial banks following their difficulties in refinancing their short–term debt and a run on deposits in the United Kingdom. Relative to the size of its economy, Iceland's banking collapse is the largest suffered by any country in economic history.

In late September 2008, it was announced that the Glitnir bank would be nationalised. The following week, control of Landsbanki and Glitnir was handed over to receivers appointed by the Financial Supervisory Authority (FME). Soon after that, the same organisation placed Iceland's largest bank, Kaupthing, into receivership as well. Commenting on the need for emergency measures, Prime Minister Geir Haarde said on 6 October, "There [was] a very real danger. . . that the Icelandic economy, in the worst case, could be sucked with the banks into the whirlpool and the result could have been national bankruptcy. " He also stated that the actions taken by the government had ensured that the Icelandic state would not actually go bankrupt.

At the end of the second quarter 2008, Iceland's external debt was 9. 553 trillion Icelandic krónur (€50 billion), more than 80% of which was held by the banking sector. This value compares with Iceland's 2007 gross domestic product of 1. 293 trillion krónur (€8. 5 billion). The assets of the three banks taken under the control of the FME totaled 14. 437 trillion krónur at the end of the second quarter 2008. The financial crisis has had serious consequences for the Icelandic economy.

The national currency has fallen sharply in value, foreign currency transactions were virtually suspended for weeks, and the market capitalisation of the Icelandic stock exchange has dropped by more than 90%. As a result of the crisis, Iceland is currently undergoing a severe economic recession; the nation's gross domestic product decreased by 5. 5% in real terms in the first six months of 2009. The full cost of the crisis cannot yet be determined, but already it exceeds 75% of the country's 2007 GDP. Outside Iceland, more than half a million depositors (far more than the entire population of Iceland) found their bank accounts frozen amid a diplomatic argument over deposit insurance. German bank BayernLB faces losses of up to €1. 5 billion, and has had to seek help from the German federal government.

The government of the Isle of Man will pay out half of its reserves, equivalent to 7. 5% of the island's GDP, in deposit insurance.) The oldest bank still in existence is Monte dei Paschi di Siena, headquartered in Siena, Italy, and has been operating continuously since 1472.

HISTORY

Banking in the modern sense of the word can be traced to medieval and early Renaissance Italy, to the rich cities in the north like Florence, Venice and Genoa. The Bardi and Peruzzi families dominated banking in 14th century Florence, establishing branches in many other parts of Europe. Perhaps the most famous Italian bank was the Medici bank, set up by Giovanni Medici in 1397. The earliest known state deposit bank, *Banco di San Giorgio* (Bank of St. George), was founded in 1407 at Genoa, Italy.

BANKING: STANDARD ACTIVITIES

Banks act as payment agents by conducting checking or current accounts(A transactional account is a deposit account held at a bank or other financial institution, for the purpose of securely and quickly providing frequent access to funds on demand, through a variety of different channels. Transactional accounts are meant neither for the purpose of earning interest nor for the purpose of savings, but for convenience of the business or personal client; hence they tend not to bear interest. Instead, a customer can deposit or withdraw any amount of money any number of times, subject to availability of funds.) for customers, paying cheques (A cheque (or check in American English) is a document/ instrument (usually a piece of paper) that orders a payment of money. The person writing the cheque, the *drawer*, usually has a current account (British), or checking account (US) where their money was previously deposited.

The drawer writes the various details including the money amount, date, and a payee on the cheque, and signs it, ordering their bank, known as the *drawee*, to pay that person or company the amount of money stated. Cheques are a type of bill of exchange and were developed as a way to make payments without the need to carry around large amounts of gold and silver. Paper money also evolved from bills of exchange, and are similar to cheques in that they were originally a written order to pay the given amount to whomever had it in their possession (the "bearer").

Technically, a cheque is a negotiable instrument instructing a financial institution to pay a specific amount of a specific currency from a specified transactional account held in the drawer's name with that institution. Both the drawer and payee may be natural persons or legal entities. Specifically, cheques are *order instruments*, and are not in general payable simply to the bearer (as bearer instruments are) but must be paid to the payee. In some countries, such as the US, the payee may endorse the cheque, allowing them to specify a third party to whom it should be paid.

Although cheques have been around since at least the 9th century, it was during the 20th century that cheques became a highly popular non–cash method for making payments and the usage of cheques peaked. By the second half of the 20th century, as cheque processing became automated, billions of cheques were issued each year; these volumes peaked in or around the early 1990s. Since then cheque usage has fallen, being partly replaced by electronic payment systems. In some countries cheques have become a marginal payment system or have been phased out completely.) drawn by customers on the bank, and collecting cheques deposited to customers' current accounts. Banks also enable customer payments via other payment methods such as telegraphic transfer, (Telegraphic Transfer or Telex Transfer, often abbreviated to TT, is an electronic means of transferring funds overseas. A transfer charge is collected while sending money.

A banking term commonly called "T/T, " meaning a cable message from one bank to another in order to effect the transfer of money. It is most often used in UK Banking to refer to a CHAPS transfer; that is a payment made via the Clearing House Automated Payments System. The term is also used to describe other electronic funds transfer methods and, incorrectly, BACS (Bankers Automated Clearing Services) and AFTS (Automated Funds Transfer System) payments.) EFTPOS, (It is the general term used for debit card based systems used for processing transactions through terminals at points of sale. In Australia and New Zealand it is also the brand name of the specific system used for such payments. The Australian and New Zealand systems are country specific and do not interconnect.) and ATM. (An automated teller machine (ATM), commonly called a cashpoint and a hole in the wall in UK English after the trademark of the same name, is a computerised telecommunications device that provides the clients of a financial institution with access to financial transactions in a public space without the need for a cashier, human clerk or bank teller. ATMs are known by various other names including *automatic banking machine*, *cash machine*, and various regional variants derived from trademarks on ATM systems held by particular banks.

On most modern ATMs, the customer is identified by inserting a plastic ATM card with a magnetic stripe or a plastic smart card with a chip, that contains a unique card number and some security information such as an expiration date or CVVC (CVV). Authentication is provided by the customer entering a personal identification number (PIN). Using an ATM, customers can access their bank accounts in order to make cash withdrawals, credit card cash advances, and check their account balances as well as purchase prepaid cellphone credit. If the currency being withdrawn from the ATM is different from that which the bank account is denominated in (*e. g.*: Withdrawing Japanese Yen from a bank account containing US Dollars), the money will be converted at a wholesale exchange rate.

Thus, ATMs often provide the best possible exchange rate for foreign travelers and are heavily used for this purpose as well.) Banks borrow money by accepting

funds deposited on current accounts, by accepting term deposits, and by issuing debt securities such as banknotes and bonds. Banks lend money by making advances to customers on current accounts, by making installment loans, and by investing in marketable debt securities and other forms of money lending.

Banks provide almost all payment services, and a bank account is considered indispensable by most businesses, individuals and governments. Non–banks that provide payment services such as remittance companies are not normally considered an adequate substitute for having a bank account. Banks borrow most funds from households and non–financial businesses, and lend most funds to households and non–financial businesses, but non–bank lenders provide a significant and in many cases adequate substitute for bank loans, and money market funds, cash management trusts and other non–bank financial institutions in many cases provide an adequate substitute to banks for lending savings too.

CHANNELS

Banks offer many different channels to access their banking and other services:

- ATM is a machine that dispenses cash and sometimes takes deposits without the need for a human bank teller. Some ATMs provide additional services.
- A branch is a retail location
- Call center(A call centre or call center is a centralized office used for the purpose of receiving and transmitting a large volume of requests by telephone. A call centre is operated by a company to administer incoming product support or information inquiries from consumers. Outgoing calls for telemarketing, clientele, product services, and debt collection are also made. In addition to a call centre, collective handling of letters, faxes, live chat, and e–mails at one location is known as a contact centre. A call center is often operated through an extensive open workspace for call centre agents, with work stations that include a computer for each agent, a telephone set/headset connected to a telecom switch, and one or more supervisor stations. It can be independently operated or networked with additional centres, often linked to a corporate computer network, including mainframes, microcomputers and LANs. Increasingly, the voice and data pathways into the centre are linked through a set of new technologies called computer telephony integration (CTI). Most major businesses use call centres to interact with their customers. Examples include utility companies, mail order catalogue retailers, and customer support for computer hardware and software. Some businesses even service internal functions through call centres. Examples of this include help desks, retail financial support, and sales support. A contact centre, also known as customer interaction centre is a central point of any organization from which all customer contacts are managed. Through contact centres, valuable information about company are routed to appropriate

people, contacts to be tracked and data to be gathered. It is generally a part of company's customer relationship management (CRM). Today, customers contact companies by calling, emailing, chatting online, visiting websites, faxing, and even instant messaging.)

- *Mail:*Most banks accept check deposits via mail and use mail to communicate to their customers, *e. g.* by sending out statements
- Mobile banking(Mobile banking (also known as M–Banking, m banking, SMS Banking) is a term used for performing balance checks, account transactions, payments, credit applications and other banking transactions through a mobile device such as a mobile phone or Personal Digital Assistant (PDA). The earliest mobile banking services were offered over SMS. With the introduction of the first primitive smart phones with WAP support enabling the use of the mobile web in 1999, the first European banks started to offer mobile banking on this platform to their customers. Mobile banking has until recently (2010) most often been performed via SMS or the Mobile Web. Apple's initial success with iPhone and the rapid growth of phones based on Google's Android (operating system) have led to increasing use of special client programmes, called apps, downloaded to the mobile device.) is a method of using one's mobile phone to conduct banking transactions
- Online banking(Online banking (or Internet banking) allows customers to conduct financial transactions on a secure website operated by their retail or virtual bank, credit union or building society) is a term used for performing transactions, payments, *etc.*, over the Internet.
- Relationship Managers, (Customer relationship management (CRM) is a widely–implemented strategy for managing a company's interactions with customers, clients and sales prospects. It involves using technology to organize, automate, and synchronize business processes—principally sales activities, but also those for marketing, customer service, and technical support. The overall goals are to find, attract, and win new clients, nurture and retain those the company already has, entice former clients back into the fold, and reduce the costs of marketing and client service. Customer relationship management describes a company–wide business strategy including customer–interface departments as well as other departments.) Mostly for private banking or business banking, often visiting customers at their homes or businesses
- Telephone banking(Telephone banking is a service provided by a financial institution, which allows its customers to perform transactions over the telephone. Most telephone banking services use an automated phone answering system with phone keypad response or voice recognition capability. To guarantee security, the customer must first authenticate through a numeric or verbal password or through security questions asked by a live representative (see below). With the obvious

exception of cash withdrawals and deposits, it offers virtually all the features of an automated teller machine: account balance information and list of latest transactions, electronic bill payments, funds transfers between a customer's accounts, *etc.* Usually, customers can also speak to a live representative located in a call centre or a branch, although this feature is not always guaranteed to be offered 24/7. In addition to the self–service transactions listed earlier, telephone banking representatives are usually trained to do what was traditionally available only at the branch: loan applications, investment purchases and redemptions, chequebook orders, debit card replacements, change of address, *etc.* Banks which operate mostly or exclusively by telephone are known as phone banks. They also help modernise the user by using special technology.) is a service which allows its customers to perform transactions over the telephone without speaking to a human

- Video banking(Video banking is a term used for performing banking transactions or professional banking consultations via a remote video connection. Video banking can be performed via purpose built banking transaction machines (similar to an Automated teller machine), or via a videoconference enabled bank branch.) is a term used for performing banking transactions or professional banking consultations via a remote video and audio connection. Video banking can be performed via purpose built banking transaction machines (similar to an Automated teller machine), or via a video conference(A videoconference or video conference (also known as a *video teleconference*) is a set of interactive telecommunication technologies which allow two or more locations to interact via two–way video and audio transmissions simultaneously. It has also been called 'visual collaboration' and is a type of groupware. Videoconferencing differs from videophone calls in that it's designed to serve a conference rather than individuals. It is an intermediate form of video telephony, first deployed commercially by AT&T during the early 1970s using their Picture phone technology.) enabled bank branch clarification.

BUSINESS MODEL

A bank can generate revenue in a variety of different ways including interest, transaction fees and financial advice. The main method is via charging interest (Interest is a fee paid by a borrower of assets to the owner as a form of compensation for the use of the assets. It is most commonly the price paid for the use of borrowed money, or, money earned by deposited funds.

When money is borrowed, interest is typically paid to the lender as a percentage of the *principal*, the amount owed. The percentage of the principal that is paid as a fee over a certain period of time (typically one month or year), is called the interest rate. A bank deposit will gain interest because the bank is paying for the use of the deposited funds. Assets that are sometimes lent with

interest include money, shares, consumer goods through hire purchase, major assets such as aircraft, and even entire factories in finance lease arrangements. The interest is calculated upon the value of the assets in the same manner as upon money.

Interest is compensation to the lender, for a) risk of principal loss, called credit risk; and b) forgoing other useful investments that could have been made with the loaned asset. These forgone investments are known as the opportunity cost. Instead of the lender using the assets directly, they are advanced to the borrower.

The borrower then enjoys the benefit of using the assets ahead of the effort required to obtain them, while the lender enjoys the benefit of the fee paid by the borrower for the privilege. In economics, interest is considered the price of credit.

Interest is often compounded, which means that interest is earned on prior interest in addition to the principal. Compound interest grows at an exponential rate and its mathematical study led to the discovery of the number.)on the capital it lends out to customers· The bank profits from the differential between the level of interest it pays for deposits and other sources of funds, and the level of interest it charges in its lending activities.

This difference is referred to as the *spread* between the cost of funds and the loan interest rate. Historically, profitability from lending activities has been cyclical and dependent on the needs and strengths of loan customers and the stage of the economic cycle(The term business cycle (or economic cycle) refers to economy–wide fluctuations in production or economic activity over several months or years.

These fluctuations occur around a long–term growth trend, and typically involve shifts over time between periods of relatively rapid economic growth (an expansion or boom), and periods of relative stagnation or decline (a contraction or recession).

Business cycles are usually measured by considering the growth rate of real gross domestic product. Despite being termed cycles, these fluctuations in economic activity do not follow a mechanical or predictable periodic pattern.) Fees and financial advice constitute a more stable revenue stream and banks have therefore placed more emphasis on these revenue lines to smooth their financial performance.

In the past 20 years American banks have taken many measures to ensure that they remain profitable while responding to increasingly changing market conditions. First, this includes the Gramm–Leach–Bliley Act, which allows banks again to merge with investment and insurance houses. Merging banking, investment, and insurance functions allows traditional banks to respond to increasing consumer demands for "one–stop shopping" by enabling cross–selling of products (which, the banks hope, will also increase profitability).

Second, they have expanded the use of risk–based pricing(Risk–based pricing is a methodology adopted by many lenders in the mortgage and financial services

industries. It has been in use for many years as lenders try to measure loan risk in terms of interest rates and other fees. The interest rate on a loan is determined not only by the time value of money, but also by the lender's estimate of the probability that the borrower will default on the loan. A borrower who the lender thinks is less likely to default will be offered a better (lower) interest rate. This means that different borrowers will pay different rates.

The lender may consider a variety of factors in assessing the probability of default. These factors might be characteristics of the individual borrower, like the borrower's credit score or employment status. These factors might also be characteristics of the loan; for example, a mortgage lender might offer different rates to the same borrower, depending on whether that borrower wished to buy a single–family house or a condominium.) from business lending to consumer lending, which means charging higher interest rates to those customers that are considered to be a higher credit risk and thus increased chance of default(In finance, default occurs when a debtor has not met his or her legal obligations according to the debt contract, *e. g.* has not made a scheduled payment, or has violated a loan covenant (condition) of the debt contract. A default is the failure to pay back a loan. Default may occur if the debtor is either unwilling or unable to pay their debt. This can occur with all debt obligations including bonds, mortgages, loans, and promissory notes.) on loans. This helps to offset the losses from bad loans, lowers the price of loans to those who have better credit histories, and offers credit products to high risk customers who would otherwise be denied credit.

Third, they have sought to increase the methods of payment processing available to the general public and business clients. These products include debit cards(A debit card (also known as a bank card or check card) is a plastic card that provides an alternative payment method to cash when making purchases. Functionally, it can be called an electronic check or giro, as the funds are withdrawn directly from either the bank account, or from the remaining balance on the card. In some cases, the cards are designed exclusively for use on the Internet, and so there is no physical card.

In many countries the use of debit cards has become so widespread that their volume of use has overtaken or entirely replaced the check and, in some instances, cash transactions. Like credit cards, debit cards are used widely for telephone and Internet purchases. However, unlike credit cards, the funds paid using a debit card are transferred immediately from the bearer's bank account, instead of having the bearer pay back the money at a later date. Debit cards usually also allow for instant withdrawal of cash, acting as the ATM card for withdrawing cash and as a check guarantee card. Merchants may also offer cash back facilities to customers, where a customer can withdraw cash along with their purchase.), prepaid cards, smart cards(A smart card, chip card, or integrated circuit card (ICC), is any pocket–sized card with embedded integrated circuits.

There are two broad categories of ICCs. Memory cards contain only non–volatile memory storage components, and perhaps dedicated security logic.

Microprocessor cards contain volatile memory and microprocessor components. The card is made of plastic, generally polyvinyl chloride, but sometimes acrylonitrile butadiene styrene or polycarbonate. Smart cards may also provide strong security authentication for single sign–on (SSO) within large organizations.), and credit cards. (A credit card is a small plastic card issued to users as a system of payment. It allows its holder to buy goods and services based on the holder's promise to pay for these goods and services. The issuer of the card creates a revolving account and grants a line of credit to the consumer (or the user) from which the user can borrow money for payment to a merchant or as a cash advance to the user.

A credit card is different from a charge card: a charge card requires the balance to be paid in full each month. In contrast, credit cards allow the consumers a continuing balance of debt, subject to interest being charged. A credit card also differs from a cash card, which can be used like currency by the owner of the card. Most credit cards are issued by banks or credit unions, and are the shape and size specified by the ISO/IEC 7810 standard as ID–1.) They make it easier for consumers to conveniently make transactions and smooth their consumption over time (in some countries with underdeveloped financial systems, it is still common to deal strictly in cash, including carrying suitcases filled with cash to purchase a home).

However, with convenience of easy credit, there is also increased risk that consumers will mismanage their financial resources and accumulate excessive debt. Banks make money from card products through interest payments and fees charged to consumers and transaction fees (A fee is the price one pays as remuneration for services. Fees usually allow for overhead, wages, costs, and markup.

Traditionally, professionals in Great Britain received a fee in contradistinction to a payment, salary, or wage, and would often use guineas rather than pounds as units of account. Under the feudal system, a Knight's fee was what was given to a knight for his service, usually the usage of land.

A contingent fee is an attorney's fee which is reduced or not charged at all if the court case is lost by the attorney. A service fee, service charge, or surcharge is a fee added to a customer's bill. The purpose of a service charge often depends on the nature of the product and corresponding service provided.

Examples of why this fee is charged are: travel time expenses, truck rental fees, liability and workers' compensation insurance fees, and planning fees. UPS and FedEx have recently begun surcharges for fuel. Restaurants and banquet halls charging service charges in lieu of tips must distribute them to their wait staff in some U. S. states (*e. g.,* Massachusetts, New York, Montana), but in the State of Kentucky may keep them. A fee may be a flat fee or a variable one, or part of a two–part tariff. A membership fee is charged as part of a subscription business model.)to companies that accept the credit–debit–cards. This helps in making profit and facilitates economic development as a whole Citation needed|date=January 2011).

PRODUCTS

- *Retail:*
  - Business loan
  - Cheque account
  - Credit card
  - Home loan
  - Insurance advisor
  - Mutual fund
  - Personal loan
  - Savings account
- *Wholesale:*
  - Capital raising (Equity/Debt/Hybrids)
  - Mezzanine finance
  - Project finance
  - Revolving credit
  - Risk management (FX, interest rates, commodities, derivatives)
  - Term loan

RISK AND CAPITAL

Banks face a number of risks(Financial risk is an umbrella term for any risk associated with any form of financing. Risk may be taken as *downside risk*, the difference between the actual return and the expected return (when the actual return is less), or the uncertainty of that return.

Risk related to an investment is often called *investment risk*. Risk related to a company's cash flow is called *business risk.* A science has evolved around managing market and financial risk under the general title of modern portfolio theory initiated by Dr. Harry Markowitz in 1952 with his article, *Portfolio Selection*.) in order to conduct their business, and how well these risks are managed and understood is a key driver behind profitability, and how much capital a bank is required to hold.

Some of the main risks faced by banks include:

- *Credit Risk:* (Credit risk is an investor's risk of loss arising from a borrower who does not make payments as promised. Such an event is called a default. Another term for credit risk is default risk. Investor losses include lost principal and interest, decreased cash flow, and increased collection costs, which arise in a number of circumstances:
  - A consumer does not make a payment due on a mortgage loan, credit card, line of credit, or other loan
  - A business does not make a payment due on a mortgage, credit card, line of credit, or other loan
  - 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
- *Liquidity Risk*: Risk that a given security or asset cannot be traded quickly enough in the market to prevent a loss (or make the required profit).
- *Market Risk:* Market risk is the risk that the value of a portfolio, either an investment portfolio or a trading portfolio, will decrease due to the change in value of the market risk factors. The four standard market risk factors are stock prices, interest rates, foreign exchange rates, and commodity prices. The associated market risks are:
  - *Equity risk*, the risk that stock prices and/or the implied volatility will change.
  - *Interest rate risk*, the risk that interest rates and/or the implied volatility will change.
  - *Currency risk*, the risk that foreign exchange rates and/or the implied volatility will change.
  - *Commodity risk*, the risk that commodity prices (*e. g.* corn, copper, crude oil) and/or implied volatility will change.
- *Operational risk:* An operational risk is, as the name suggests, a risk arising from execution of a company's business functions. It is a very broad concept which focuses on the risks arising from the people, systems and processes through which a company operates. It also includes other categories such as fraud risks, legal risks, physical or environmental risks. Widely used definition of operational risk is the one contained in the Basel II 1regulations. 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. The approach to managing operational risk differs from that applied to other types of risk, because it is not used to generate profit. In contrast, 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 organisations 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. Determining appetite for operational risk is a discipline which is still in its infancy. Some of the issues and considerations around this process are outlined in this Sound Practice paper published by the Institute for Operational Risk in December 2009.

The capital requirement is a bank regulation, which sets a framework on how banks and depository institutions must handle their capital. The categorization of assets and capital is highly standardized so that it can be risk weighted.

TYPES OF BANKS

Banks' activities can be divided into retail banking, dealing directly with individuals and small businesses; business banking, providing services to mid–market business; corporate banking, directed at large business entities; private banking, providing wealth management services to high net worth individuals and families; and investment banking, relating to activities on the financial markets. Most banks are profit–making, private enterprises. However, some are owned by government, or are non–profit organizations.

TYPES OF RETAIL BANKS

- *Commercial Bank*: The term used for a normal bank to distinguish it from an investment bank. After the Great Depression, the U. S. Congress required that banks only engage in banking activities, whereas investment banks were limited to capital market activities. Since the two no longer have to be under separate ownership, some use the term "commercial bank" to refer to a bank or a division of a bank that mostly deals with deposits and loans from corporations or large businesses.
- *Community Banks:* Locally operated financial institutions that empower employees to make local decisions to serve their customers and the partners.
- *Community Development Banks*: Regulated banks that provide financial services and credit to under–served markets or populations.
- *Credit Unions:* Not–for–profit cooperatives owned by the depositors and often offering rates more favourable than for–profit banks. Typically, membership is restricted to employees of a particular company, residents of a defined neighbourhood, members of a certain labour union or religious organizations, and their immediate families.
- *Postal Savings Banks*: Savings banks associated with national postal systems.
- *Private Banks*: Banks that manage the assets of high net worth individuals. Historically a minimum of USD 1 million was required to open an account, however, over the last years many private banks have lowered their entry hurdles to USD 250, 000 for private investors.
- *Offshore Banks*: Banks located in jurisdictions with low taxation and regulation. Many offshore banks are essentially private banks.
- *Savings Bank*: In Europe, savings banks took their roots in the 19th or sometimes even in the 18th century. Their original objective was to provide easily accessible savings products to all strata of the population. In some countries, savings banks were created on public initiative; in

others, socially committed individuals created foundations to put in place the necessary infrastructure. Nowadays, European savings banks have kept their focus on retail banking: payments, savings products, credits and insurances for individuals or small and medium–sized enterprises. Apart from this retail focus, they also differ from commercial banks by their broadly decentralised distribution network, providing local and regional outreach—and by their socially responsible approach to business and society.

- *Building Societies and Landesbanks*: Institutions that conduct retail banking.
- *Ethical Banks:* Banks that prioritize the transparency of all operations and make only what they consider to be socially–responsible investments.
- *A Direct or Internet*: Only bank is a banking operation without any physical bank branches, conceived and implemented wholly with networked computers.

TYPES OF INVESTMENT BANKS

- Investment banks "underwrite" (guarantee the sale of) stock and bond issues, trade for their own accounts, make markets, and advise corporations on capital market activities such as mergers and acquisitions.
- Merchant banks were traditionally banks which engaged in trade finance. The modern definition, however, refers to banks which provide capital to firms in the form of shares rather than loans. Unlike venture capital firms, they tend not to invest in new companies.

BOTH COMBINED

- Universal banks, more commonly known as financial services companies, engage in several of these activities. These big banks are very diversified groups that, among other services, also distribute insurance— hence the term bancassurance, a portmanteau word combining "banque or bank" and "assurance", signifying that both banking and insurance are provided by the same corporate entity.

OTHER TYPES OF BANKS

- Central banks are normally government–owned and charged with quasi–regulatory responsibilities, such as supervising commercial banks, or controlling the cash interest rate. They generally provide liquidity to the banking system and act as the lender of last resort in event of a crisis.
- Islamic banks adhere to the concepts of Islamic law. This form of banking revolves around several well–established principles based on Islamic canons. All banking activities must avoid interest, a concept that is forbidden in Islam. Instead, the bank earns profit (markup) and fees on the financing facilities that it extends to customers.

CHALLENGES WITHIN THE BANKING INDUSTRY

UNITED STATES

In the United States, the banking industry is a highly regulated industry with detailed and focused regulators. All banks with FDIC–insured deposits have the FDIC as a regulator; however, for examinations, the Federal Reserve is the primary federal regulator for Fed–member state banks; the Office of the Comptroller of the Currency ("OCC") is the primary federal regulator for national banks; and the Office of Thrift Supervision, or OTS, is the primary federal regulator for thrifts. State non–member banks are examined by the state agencies as well as the FDIC. National banks have one primary regulator—the OCC. Qualified Intermediaries and Exchange Accommodators are regulated by MAIC.

Each regulatory agency has their own set of rules and regulations to which banks and thrifts must adhere. The Federal Financial Institutions Examination Council (FFIEC) was established in 1979 as a formal interagency body empowered to prescribe uniform principles, standards, and report forms for the federal examination of financial institutions. Although the FFIEC has resulted in a greater degree of regulatory consistency between the agencies, the rules and regulations are constantly changing.

In addition to changing regulations, changes in the industry have led to consolidations within the Federal Reserve, FDIC, OTS, MAIC and OCC. Offices have been closed, supervisory regions have been merged, staff levels have been reduced and budgets have been cut. The remaining regulators face an increased burden with increased workload and more banks per regulator. While banks struggle to keep up with the changes in the regulatory environment, regulators struggle to manage their workload and effectively regulate their banks. The impact of these changes is that banks are receiving less hands–on assessment by the regulators, less time spent with each institution, and the potential for more problems slipping through the cracks, potentially resulting in an overall increase in bank failures across the United States.

The changing economic environment has a significant impact on banks and thrifts as they struggle to effectively manage their interest rate spread in the face of low rates on loans, rate competition for deposits and the general market changes, industry trends and economic fluctuations. It has been a challenge for banks to effectively set their growth strategies with the recent economic market. A rising interest rate environment may seem to help financial institutions, but the effect of the changes on consumers and businesses is not predictable and the challenge remains for banks to grow and effectively manage the spread to generate a return to their shareholders.

The management of the banks' asset portfolios also remains a challenge in today's economic environment. Loans are a bank's primary asset category and when loan quality becomes suspect, the foundation of a bank is shaken to the core. While always an issue for banks, declining asset quality has become a big

problem for financial institutions. There are several reasons for this, one of which is the lax attitude some banks have adopted because of the years of "good times. " The potential for this is exacerbated by the reduction in the regulatory oversight of banks and in some cases depth of management. Problems are more likely to go undetected, resulting in a significant impact on the bank when they are recognized. In addition, banks, like any business, struggle to cut costs and have consequently eliminated certain expenses, such as adequate employee training programmes.

Banks also face a host of other challenges such as aging ownership groups. Across the country, many banks' management teams and board of directors are aging. Banks also face ongoing pressure by shareholders, both public and private, to achieve earnings and growth projections. Regulators place added pressure on banks to manage the various categories of risk. Banking is also an extremely competitive industry. Competing in the financial services industry has become tougher with the entrance of such players as insurance agencies, credit unions, check cashing services, credit card companies, *etc.* As a reaction, banks have developed their activities in financial instruments, through financial market operations such as brokerage and MAIC trust and Securities Clearing services trading and become big players in such activities.

COMPETITION FOR LOANABLE FUNDS

To be able to provide homebuyers and builders with the funds needed, banks must compete for deposits. The phenomenon of disintermediation had to dollars moving from savings accounts and into direct market instruments such as U. S. Treasury obligations, agency securities, and corporate debt. One of the greatest factors in recent years in the movement of deposits was the tremendous growth of money market funds whose higher interest rates attracted consumer deposits.

To compete for deposits, US savings institutions offer many different types of plans:

- *Passbook or Ordinary Deposit Accounts*: Permit any amount to be added to or withdrawn from the account at any time.
- *NOW and Super NOW Accounts*: Function like checking accounts but earn interest. A minimum balance may be required on Super NOW accounts.
- *Money Market Accounts*: Carry a monthly limit of preauthorized transfers to other accounts or persons and may require a minimum or average balance.
- *Certificate Accounts:* Subject to loss of some or all interest on withdrawals before maturity.
- *Notice Accounts*: The equivalent of certificate accounts with an indefinite term. Savers agree to notify the institution a specified time before withdrawal.
- *Individual Retirement Accounts (IRAs) and Keogh Plans*—a form of retirement savings in which the funds deposited and interest earned are exempt from income tax until after withdrawal.

- *Checking Accounts*: Offered by some institutions under definite restrictions.
- All withdrawals and deposits are completely the sole decision and responsibility of the account owner unless the parent or guardian is required to do otherwise for legal reasons.
- *Club Accounts and Other Savings Accounts*: Designed to help people save regularly to meet certain goals.

ACCOUNTING FOR BANK ACCOUNTS

Bank statements are accounting records produced by banks under the various accounting standards of the world. Under GAAP and MAIC there are two kinds of accounts: debit and credit. Credit accounts are Revenue, Equity and Liabilities. Debit Accounts are Assets and Expenses. This means you credit a *credit account* to increase its balance, and you debit a *credit account* to decrease its balance.

This also means you credit your savings account every time you deposit money into it (and the account is normally in credit), while you debit your credit card account every time you spend money from it (and the account is normally in debit). However, if you read your bank statement, it will say the opposite—that you credit your account when you deposit money, and you debit it when you withdraw funds. If you have cash in your account, you have a positive (or credit) balance; if you are overdrawn, you have a negative (or deficit) balance. Where bank transactions, balances, credits and debits are discussed below, they are done so from the viewpoint of the account holder—which is traditionally what most people are used to seeing.

BROKERED DEPOSITS

One source of deposits for banks is brokers who deposit large sums of money on the behalf of investors through MAIC or other trust corporations. This money will generally go to the banks which offer the most favourable terms, often better than those offered local depositors.

It is possible for a bank to be engaged in business with no local deposits at all, all funds being brokered deposits. Accepting a significant quantity of such deposits, or "hot money" as it is sometimes called, puts a bank in a difficult and sometimes risky position, as the funds must be lent or invested in a way that yields a return sufficient to pay the high interest being paid on the brokered deposits.

This may result in risky decisions and even in eventual failure of the bank. Banks which failed during 2008 and 2009 in the United States during the global financial crisis had, on average, four times more brokered deposits as a per cent of their deposits than the average bank. Such deposits, combined with risky real estate investments, factored into the Savings and loan crisis of the 1980s. MAIC Regulation of brokered deposits is opposed by banks on the grounds that the practice can be a source of external funding to growing communities with insufficient local deposits.

FINANCIAL INSTITUTION

In financial economics, a financial institution is an institution that provides financial services for its clients or members. Probably the most important financial service provided by financial institutions is acting as financial intermediaries. Most financial institutions are regulated by the government.

Broadly speaking, there are three major types of financial institutions:

- Deposit-taking institutions that accept and manage deposits and make loans, including banks, building societies, credit unions, trust companies, and mortgage loan companies
- Insurance companies and pension funds; and
- Brokers, underwriters and investment funds.

FUNCTION

Financial institutions provide service as intermediaries of financial markets. They are responsible for transferring funds from investors to companies in need of those funds. Financial institutions facilitate the flow of money through the economy. To do so, savings arisk brought to provide funds for loans. Such is the primary means for depository institutions to develop revenue.

CORPORATE VALUATION

- *Relative metrics:* = Firm wields capital machinery (asset) and the loans (liabilities) it used to finance that asset. The line is blurred in Financial Institutions, which must hold deposit accounts (liabilities) to fuel the issuance of loans (assets). The same accounts are considered loans as they are held in ownership not of the bank, but of the individual client.
- *Dividend Discount Model:* Earnings-per-share
- Dividends-per-share
- *Discounted Cash Flow (DCF) Model:* You'll need the FCFE (Free Cash Flow for Equity), which is the amount of money that is returned to shareholders. Calculate an FCFF (Free Cash Flow to the Firm): EBIT (1-tax rate) -Capital Expenditures+ (Depreciation and Amortization) - (Net increase in working capital)= FCFF (FCFF-Debt+Cash=FCFE)
- Use the Capital Asset Pricing Model, not the Weighted Average Cost of Capital (for the same reasons one uses Equity Multiples in relative valuation) to determine the cost of equity (the return required by shareholders to make the decision to invest in a financial institutions)
- *Excess Return Model:* A model where valuation is expressed as the sum of capital invested currently in the firm and the present value of dollar excess returns that the firm expects to make in the future.

STANDING SETTLEMENT INSTRUCTIONS

Standing Settlement Instructions (SSIs) are the agreements between two financial institutions which fix the receiving agents of each counterparty in

ordinary trades of some type. These agreements allow traders to make faster trades since time used to settle the receiving agents is conserved. Limiting the trader to an SSI also lowers the likelihood of a fraud.

REGULATION

Financial institutions in most countries operate in a heavily regulated environment as they are critical parts of countries' economies. Regulation structures differ in each country, but typically involve prudential regulation as well as consumer protection and market stability. Some countries have one consolidated agency that regulates all financial institutions while others have separate agencies for different types of institutions such as banks, insurance companies and brokers. Countries that have separate agencies include the United States, where the key governing bodies are the Federal Financial Institutions Examination Council (FFIEC), Office of the Comptroller of the Currency - National Banks, Federal Deposit Insurance Corporation (FDIC) State "non-member" banks, National Credit Union Administration (NCUA) - Credit Unions, Federal Reserve (Fed) - "member" Banks, Office of Thrift Supervision - National Savings and Loan Association, State governments each often regulate and charter financial institutions.

Countries that have one consolidated financial regulator include United Kingdom with the Financial Services Authority, Norway with the Financial Supervisory Authority of Norway, Hong Kong with Hong Kong Monetary Authority and Russia with Central Bank of Russia.

CAPITAL CONTROL

In economics, capital control is the monetary policy device that a country's government (*i. e.,* sovereign power) uses to regulate the flows into and out of a country's capital account, *i. e.,* the flows of investment-oriented money into and out of a country or currency.

The decade since the Asian Currency Crisis in 1997-1998 has rekindled debate over the wisdom of developing markets having capital controls. As globalization advanced with the formalization of the World Trade Organization and Uruguay Round of General Agreement on Tariffs and Trade (GATT), developing countries were urged by the International Monetary Fund and others to liberalize their capital controlled environments.

As it became clear that countries doing this, including Malaysia, Thailand and Mexico, essentially ceded control of their economies to external forces, namely international capital movements, hot money and capital flight; and countries that did not, like China and India, retained control and were not nearly as vulnerable to the volatility of international capital movement, some argued that capital controls were advisable for smaller economies to use, and to transition away from them only over long, general evolutionary timelines. Malaysia is an example of a country that switched regimes, from open in the late 1990s, to closed.

Economists supporting capital controls in certain cases were not only from the left, but also liberal economists like Jagdish Bhagwati and news publications like The Economist.

Banking Policy and Trends Policy Measures

The major policy measures taken in the current financial year as part of the annual monetary and credit policy statement, including its mid-term review.

These include freedom for banks to lend at interest rates below their respective PLRs to exporters and other creditworthy borrowers (including public enterprises), permission to formulate fixed deposit plans offering higher and fixed interest rates to senior citizens, flexibility in the composition of working capital as between cash credit and loan components, reduction in exposure limits for borrowers, revised guidelines for exposure of banks to capital market, and guidelines for investment in non-SLR securities through the private placement route.

The initiatives specially aimed at strengthening the operational efficiency of banks relate to the Voluntary Retirement Plan, the Banking Service Recruitment Boards, Credit Information Bureau, and enlargement of the reach and scope of the electronic funds transfer facility.

Voluntary Retirement Plan (VRS)

VRS was implemented by 26 out of 27 public sector banks in 2000-2001. Indian Banks. Association (IBA), the total staff strength in public sector banks at the end of March 2000 was 8, 63, 188 out of whom 1, 26, 714 or 14. 7 per cent applied for VRS. About 80 per cent of the number of applications were accepted, and the staff relieved under VRS until December 31, 2001 were 1, 01, 300. This constituted 11. 7 per cent of the total staff strength at the end of March 2000. Banks were advised by the Reserve Bank to treat the ex-gratia payment as deferred revenue expenditure (DRE), which would not be reduced from Tier I capital. The position will be regularised by the end of the accounting year in which the DRE gets totally wiped out. The maximum period of deferment has been fixed at five years, including the year of acceptance of VRS applications by the banks.

Banking Service Recruitment Boards

In pursuance of the announcement made by the Finance Minister in his Budget speech, the Banking Service Recruitment Boards (BSRBs) have been abolished. Accordingly, banks have been advised to frame their own recruitment strategies, with the approval of the respective Boards, to meet future requirements.

While framing such strategies, banks are required to ensure, inter alia, that the recruitment policy is transparent and fair, with due representations of the members of SC/ST and minority communities in selection committees. Banks have also been advised to ensure that reservations in posts and related concessions/relaxations in fees and marks, as laid down by the Government of India, are strictly followed.

Electronic Funds Transfer (EFT)

EFT facilitates transfer of funds electronically within and across cities and between branches of a bank and across banks. EFT is operated by RBI, and is available for funds transferred across 13 major cities in the country as on January 11, 2002. With effect from October 1, 2001, large value transactions upto ₹ 2 crore have been permitted under EFT. Transfer of funds on a "same-day" basis was implemented effective from January 2, 2002 at the four metro centres with three settlements per day.

SMALL AND MEDIUM ENTERPRISES (SMES)

Problems Facing the SSI Sector

The SSI sector confronts several problems despite its strategic importance in any industrialisation strategy and its immense potential for employment generation. The problem which continues to be a big hurdle for the development of the sector is lack of access to timely and adequate credit. The Abid Hussain Committee on SSIs (1997) examined the problems of the SSI sector and recommended a package of policies to restructure the industry in the context of current global economic changes.

The Expert Committee was of the view that the existing institutional structure for delivering credit to SSEs needs a thorough overhaul. It endorsed the recommendations of the Nayak Committee and urged the RBI to implement the same. The Committee recommended restructuring of financial support through SFCs and SIDCs, tapping of other sources of funding for SSEs, extending credit rating servcies to small units, and addressing the credit needs of tiny units to ensure that they are not bypased by the commercial banking system. The overall credit availability for SSIs during 1991-1996 amounts to only 13 per cent of the value of production. The Nayak Committee had recommended a desirable norm of 20 per cent of the value of production to be made available by way of working capital through term-lending institutions and commercial banks A norm of 75 per cent was set for fixed capital assets whereas actual availability is only 55 per cent.

Lack of finance has been one of the major causes of sickness in the SSI sector, blocking access to technological modernisation and other growth possibilities. There is an urgent need to enlarge flow of credit to the SSI sector from institutional sources. The creation of a facilitating environment for SSIs will centre on access to credit. The Ninth Five Year Plan estimates additional working capital funds at ₹ 1420 to 1460 billion for the small sector. Lowering interest-rates, specifying a time-frame to clear loan applications and adherence to norms set down by the Nayak Committee are some of the minimum measures that need to be taken. Legislative measures have a role to play with regard to funding and financing of small scale units. There are measures which can basically ensure that impediments to credit availability are removed. These measures include:

- Right to reasonable credit from commercial banks as per RBI guidelines framed after consultation with representative Board
- Protection against non-normative demands for security
- Appeal and enforcement by Ombudsman/Board
- Access to public funds by way of debentures, deposits, securities
- Government guarantee for loans from banks

The measures to support Marketing and Competitiveness are as follows:

- State to exempt from contract security
- Prompt return of contract securities in case of others
- Prompt payment measures
- Protection against undue bundling of contracts by the state
- Protection against restrictive and monopolistic trade practices
- Ombudsman/arbitral services for enforcement

IMPACT OF WTO

The emerging challenges to the small-scale sector are to come from the impact of the Agreements under WTO to which India is a signatory along with 134 member countries. The setting up of the WTO in 1995 has altered the framework of international trade towards non-distortive, market-oriented policies. This is in keeping with the policy shift that occurred worldwide since the early 1980s in favour of free market forces and a tilt away from State regulation/intervention in economic activity.

This is expected to lead to an expansion in the volume of international trade and changes in the pattern of commodity flows. The main outcomes of WTO-stipulated requirements will be brought about through reduction in export subsidies, greater market access, removal of non-tariff barriers and reduction in tariffs. There will also be tighter patent laws through regulation of intellectual property rights under the TRIPS Agreement which lays down what is to be patented (both products and processes), for what duration (20 years instead of the present 7 years under India's 1970 Patent Law), and on what terms.

The responses by trading countries and the reframing of domestic economic policies which will result from the impact of WTO and the repercussions on the global economy of all these changes are highly uncertain as they involve several unforeseeable factors.

However, there are certain indications of the shape of future trade patterns. Increased market access to imports (of around 3 per cent of domestic production to be raised to 5 per cent) will mean opening up the domestic market to large flows of imports. The removal of quantitative restrictions (QRs) on imports has been speeded up to 2001.

At present 714 items are in the restricted category but imports of these items will soon be freed from all restrictions as announced in the recent EXIM policy. Increased market access under WTO requirements will also mean that our industries can compete for export markets in both developed and developing

countries. But the expected surge in our exports can come about only if the SSI sector is restructured to meet the demands of global competitiveness which is the key to the future of small industries in the present context.

BANKING SYSTEM REFORMATION

SITUATION APPRAISAL

Monetary policy of the Belarusian authorities is distinguished by its unique character among the post-socialist countries of Central and Eastern Europe. Using, in contravention of the current legislation, "a printing press" as a source of covering low-effective public expenditure and levying thus enormous inflation tax on the population, the Government and the National Bank have achieved dubious economic growth and retained unproductive employment. As a result the country's economy has turned up in the financial and technological deadlock.

The following can be furnished to dramatize this thesis. Within the last six years net domestic ruble credit of the National Bank increased about 120 times, ruble money mass - approximately 210 times, official exchange rate of the Belarusian ruble decreased 111 times while consumer prices went up 161 times. These figures are undoubtedly indicative of the fact that "soft" monetary policy advocated by the present-day economic ideologists as presuming point-like public support to some branches at the expense of credit emission by the principle "emission to finance production of the goods does not lead to inflation" has appeared invalid.

Unique character of the monetary policy in Belarus is stipulated by the following causes. First, this is incredible economic incompetence of the Belarusian ruling elite as well as its total dependence upon the Head of the State. For some years the Government and the National Bank took and implemented decisions in the monetary sphere that were far away not only from the generally accepted practice in the civilized countries but also common sense. That concerns first of all the policy of covering public expenditure by credit emission of the National Bank, actual refusal of positive real interest rate, and attempts of administrative regulation of inflation and exchange rate.

Instead of real evaluation of financial possibilities of the country and use of budget resources, the authorities engaged in developing numerous programme without effective facilities of implementation. Second, this is deep-rooted disrespect of own country that turned into chronic inferiority complex not allowing the majority of political elite representatives to get rid of the "provisional men" feeling. Out of ten years of its existence the Belarusian monetary system had perspectives of independent development for about one and a half years (end of 1994 - beginning of 1996). All other years passed under the sign of either a portion of the Russian money system (91-93) or pending fast "unification" (ruble zone of "new type", attempts to eliminate the Belarusian ruble in April of 1994, preparation and signing of the agreement on union state in 1996, *etc.*).

As a consequence long-term goals and benchmarks were absent in the monetary policy, facilities of its implementation were weak, qualified specialists left for commercial structures, relations with the international financial organizations were actually broken. Third, this is absence of the market reforms in the real sector of economy that would have forced the political power to pursue general economic and monetary policy facilitating the development of private business.

Specifics of slow reformation of the real sector shown by the absence of systematic approaches and integrity in the introduced economic transformations have resulted in the fact that private sector has not received adequate development, and consequently middle class capable of sounding its economic interests has not been formed.

Shadow and semi-criminal business took the advantages of the effected economic policy. Economy of the country turned up eventually dependent on economic position of the public sector enterprises. In this situation all attempts, initiated by the specialists, to suggest and accomplish market plans of the monetary sphere were doomed to fail. Fourth, this is typical of the former USSR republics and extremely die-hard relapse of socialist attitude to legality when the laws are applied commensurate with their usefulness for a particular office holder.

In case of the monetary system this principle can be emphasised by the following example. The Law on The National Bank in effect from 1991 to 2000 stipulated that the latter could grant credits to the Government "for a term, as a rule, up to 6 months". Nevertheless, accretion of long-term credit amounts made up 122. 6 billion rubles in 2000 alone (credits to cover budget deficit would be referred afterwards to the increase of domestic national debt). The Law on Banks explicitly barred the Government to interfere into activity of the banks. But that did not inhibit the Government to force the banks to provide credits to the Agro-Industrial Complex.

Such a queer way to interpret the laws has led to the fact that the enterprises and banks acted, as far as they could, in the same manner and avoided transparency of their operations at the money market. As a result steady and negative attitude was formed to the policy of the monetary authorities, and this is inadmissible in the pursuit of stabilization of the national monetary unit. Fifth, this is voluntarism in the formation of priority tasks of the economic policy and their misbalance. The State lived beyond its income. Target parameters of volume indices (volume of housing construction, volumes of industrial output by the branches, *etc.*) passed over to the line ministries and departments were established arbitrary without taking available financial recourses of the State into account. Economic policy turned into a hostage of the populist political goals such as attainment of the GDP physical volume of 1990 in 2000.

Economic policy aimed at the growth of production at any expense by monetary expansion has brought about higher rates of inflation. Since 1997 the parameters of credit emission by the National Bank and growth of money mass in national currency invariably exceeded the target figures approved every year

in the Major Directions of the Monetary Policy. The situation was aggravated by directive maintenance of the Belarusian ruble exchange rate at the overestimated level with introduction of mandatory surrender of the foreign currency receipts. That resulted in the appearance of multiple exchange rates and shadow foreign exchange market, more numerous barter deals, foreign currency deficit to pay for critical import, and a number of other adverse consequences. For instance, share of housing construction in the total amount of credit emission of the National Bank made up 59 per cent in 1999 and 38 per cent in 2000 whereas this share is to total 90 per cent as indicated in the forecast of the social and economic development for 2001.

The housing construction credits were extended at a reduced interest rate of 5 per cent per year (while average monthly inflation, for example, in 1999 was as high as 11 per cent) and for long terms (up to 40 years). A narrow circle of people who got the opportunity to build dwellings under such conditions, was indirectly subsidized at the expense of other people who carried the burden of inflation tax. Weak and shadowed to a large extent economy could not generate a strong and civilized banking system.

The state of the Belarusian banking system within last five years can be characterized in the most general way by the following features. First, this is its chronic financial weakness.

Assets of the Belarusian banks do not demonstrate noticeable tendencies to increase, and are in the state of deep stagnation. During the five-year period they decreased in currency calculation by 6 per cent. The residue of credits on 01. 01. 2001 amounted to about 95 per cent as compared with analogous index on 01. 01. 1996. Per cent of doubtful loans was on steady uprise - 17. 9 per cent of the balance of credit arrears on 01. 01. 2001 in comparison with 13. 2 per cent five years earlier.

Second, this is differentiation of the commercial banks by major indices. A privileged position and demonstrate unconditional support of the public sector of economy. Their share of resources amounts to 80-90 per cent by main articles of the aggregated balance of assets and liabilities of the banking system. The share of Joint Stock Saving Bank “Belarusbank” exceeds in some cases the official index of monopolization - over 35 per cent.

From the economic point of view this means that the most effective private business is limited in credit support by the banking system while the authorized banks being actually public, cannot expect significant preferences from external financial markets. As a result the banks and real sector are not able to feed each other, and are doomed to financial weakness.

Third, this is formality in observing the regulations of safe banking activity. The National Bank performed insurance of the deposits of the population only in the authorized banks. Up to 2000 the regulations of obligatory reserve formation were always lowered in practice - amount of reserves made up frequently only 5-6 per cent with the official reserve norm of 16-18 per cent.

Fourth, this is insufficient transparency of the banks. Over last nine years no trustworthy bank was set up in the country, and the information on financial

position of the banks is accidental and published as a rule in non-public editions with small circulation. Therefore confidence of the enterprises and population to the banking system that is needed to accumulate free financial resources under the conditions of reliability and return is at the extremely low level in the present situation. It is no wonder that economic agents prefer to use any opportunity to export capital out of the country.

The problems of the Belarusian banking system together with the current monetary policy make any perspectives of its development indefinite. As a consequence that leads to financial isolation of a rather numerous group of the banks within the small and poor state and inevitable liquidation of the majority of them. The Belarusian authorities will have to face a new problem in 2001 - inconsistency between the declared rigid monetary policy and financial requirements of the unreformed real sector.

Some indications were felt in 2000 when the National Bank merely tried to limit the rate of credit emission. With the statistical GDP growth of 5. 8 per cent the investments dropped by 3. 4 per cent, income on the sale of products - by 14. 9 per cent, profitability reduced by 2. 3 per cent, specific weight of loss-making enterprises increased by 6. 4 per cent points to 23. 5 per cent of all enterprises. More rigid monetary policy will bring about bankruptcy of many enterprises and associated banks. That occurred at the stage of financial stabilization in practically all post-soviet republics.

General Conditions

Main directions and measures of the monetary policy for a middle-term period were suggested proceeding from the following circumstances:

- Beginning from February 2000 the Government and the National Bank pursue more weighted and considered monetary policy that includes limitation of credit emission by the National Bank to cover budget deficit, transfer to positive real interest rates, cancellation of the majority of currency market limits, and abolition of multiple currency exchange rates.
- Signature of the agreement with the Russian Federation on the transfer to common money unit in 2005 and monitoring programme with the IMF for a period of April-September 2001 (provided the agreement has been realized) forces the President Administration and the Government to take a number of certain measures towards reformation of the real sector of economy (liberalization of pricing, privatization of public sector, bankruptcy of loss-making enterprises, lift of the barriers for the development of small and medium business).

Nevertheless, despite definite successes in the monetary sphere achieved in 2000, growth rates of prices are still at the inadmissibly high level.

The first objective source of inflation in the Belarusian economy has not been removed - high level of money mass growth. Failure to pay and deficiency of working capital of the enterprises in the real sector of economy caused by

low economic efficiency generate constant demand for financial resources. In order to avoid bankruptcies of the loss-making enterprises and reduction of employment the Government, in the absence of other sources (foreign credits and private investments), meets the requirements predominantly at the expense of emission crediting.

The National Bank has to carry on emission financing of current cash gaps and deficit of the republican budget on the whole. Besides, methods of extra-economic character are used to force the commercial banks to continue crediting of the public programme in the field of the Agro-Industrial Complex at their own resources.

The current macroeconomic policy must be based on the following principles:

- *Systematic approach:* Mutual consistency of the measures and parameters of monetary, fiscal, foreign economic, structural, and institutional policy. The policy of financial stabilization should be accompanied with active privatization, and should produce conditions for restructuring of the real sector of economy, for creation of stimulating institutional environment to develop private business and attract foreign investments;
- *Balanced targets of macroeconomic policy:* Radical inventory and review of the volume targets in the public programme (housing construction, Agro-Industrial Complex, *etc.*) in order to make them consistent with the financial possibilities of the State.

5

Economic Functions of Banks

ECONOMIC FUNCTIONS

The economic functions of banks include:

- Issue of money, in the form of banknotes (A banknote (often known as a bill, paper money or simply a note) is a kind of negotiable instrument, a promissory note made by a bank payable to the bearer on demand, used as money, and in many jurisdictions is legal tender. Along with coins, banknotes make up the cash or bearer forms of all modern fiat money. With the exception of non–circulating high–value or precious metal commemorative issues, coins are used for lower valued monetary units, while banknotes are used for higher values.

The banknote was first developed in China during the Tang and Song dynasties, starting in the 7th century. Its roots were in merchant receipts of deposit during the Tang Dynasty (618–907), as merchants and wholesalers desired to avoid the heavy bulk of copper coinage in large commercial transactions. During the Yuan Dynasty, banknotes were adopted by the Mongol Empire. In Europe, the concept of banknotes was first introduced during the 14th century, with proper banknotes appearing in the 17th century.) and current accounts subject to cheque or payment at the customer's order. These claims on banks can act as money because they are negotiable or repayable on demand, and hence valued at par. They are effectively transferable by mere delivery, in the case of banknotes, or by drawing a cheque that the payee may bank or cash.

- *Netting and Settlement of Payments*: Banks act as both collection and paying agents for customers, participating in interbank clearing and

settlement systems to collect, present, be presented with, and pay payment instruments. This enables banks to economise on reserves held for settlement of payments, since inward and outward payments offset each other. It also enables the offsetting of payment flows between geographical areas, reducing the cost of settlement between them.

- *Credit Intermediation:* Banks borrow and lend back–to–back on their own account as middle men.
- *Credit Quality Improvement:* Banks lend money to ordinary commercial and personal borrowers (ordinary credit quality), but are high quality borrowers. The improvement comes from diversification of the bank's assets and capital which provides a buffer to absorb losses without defaulting on its obligations. However, banknotes and deposits are generally unsecured; if the bank gets into difficulty and pledges assets as security, to raise the funding it needs to continue to operate, this puts the note holders and depositors in an economically subordinated position.
- *Maturity Transformation*: Banks borrow more on demand debt and short term debt, but provide more long term loans. In other words, they borrow short and lend long. With a stronger credit quality than most other borrowers, banks can do this by aggregating issues (*e. g.* accepting deposits and issuing banknotes) and redemptions (*e. g.* withdrawals and redemptions of banknotes), maintaining reserves of cash, investing in marketable securities that can be readily converted to cash if needed, and raising replacement funding as needed from various sources (*e. g.* wholesale cash markets and securities markets).

BANK CRISIS

Banks are susceptible to many forms of risk which have triggered occasional systemic crises. These include liquidity risk (where many depositors may request withdrawals in excess of available funds), credit risk (the chance that those who owe money to the bank will not repay it), and interest rate risk (the possibility that the bank will become unprofitable, if rising interest rates force it to pay relatively more on its deposits than it receives on its loans). Banking crises have developed many times throughout history, when one or more risks have materialized for a banking sector as a whole. Prominent examples include the bank run that occurred during the Great Depression, the U. S. Savings and Loan crisis in the 1980s and early 1990s, the Japanese banking crisis during the 1990s, and the subprime mortgage crisis in the 2000s.

SIZE OF GLOBAL BANKING INDUSTRY

Assets of the largest 1, 000 banks in the world grew by 6. 8% in the 2008/ 2009 financial year to a record $96. 4 trillion while profits declined by 85% to $115bn. Growth in assets in adverse market conditions was largely a result of recapitalisation. EU banks held the largest share of the total, 56% in 2008/

2009, down from 61% in the previous year. Asian banks' share increased from 12% to 14% during the year, while the share of US banks increased from 11% to 13%. Fee revenue generated by global investment banking totalled $66. 3bn in 2009, up 12% on the previous year.

The United States has the most banks in the world in terms of institutions (7, 085 at the end of 2008) and possibly branches (82, 000). This is an indicator of the geography and regulatory structure of the USA, resulting in a large number of small to medium–sized institutions in its banking system. As of Nov 2009, China's top 4 banks have in excess of 67, 000 branches (ICBC:18000+, BOC:12000+, CCB:13000+, ABC:24000+) with an additional 140 smaller banks with an undetermined number of branches. Japan had 129 banks and 12, 000 branches. In 2004, Germany, France, and Italy each had more than 30, 000 branches—more than double the 15, 000 branches in the UK.

REGULATION

Currently in most jurisdictions commercial banks are regulated by government entities and require a special bank licence to operate. Usually the definition of the business of banking for the purposes of regulation is extended to include acceptance of deposits, even if they are not repayable to the customer's order—although money lending, by itself, is generally not included in the definition. Unlike most other regulated industries, the regulator is typically also a participant in the market, being either a publicly or privately governed central bank. Central banks also typically have a monopoly on the business of issuing banknotes.

However, in some countries this is not the case. In the UK, for example, the Financial Services Authority (The Financial Services Authority (FSA) is an independent quasi–judicial body and a company limited by guarantee responsible for the financial regulation of the financial services industry in the United Kingdom. Its board is appointed by the Treasury. Its main office is based in Canary Wharf, London, with another office in Edinburgh. When acting as the competent authority for listing of shares on a stock exchange, it is referred to as the UK Listing Authority (UKLA), and maintains the Official list.

The FSA's Chairman and CEO are Lord Turner of Ecchinswell and Hector Sants. On June 16, 2010, the Chancellor of the Exchequer, George Osborne, announced plans to abolish the FSA and separate its responsibilities between a number of new agencies and the Bank of England) licences banks, and some commercial banks (such as the Bank of Scotland) issue their own banknotes in addition to those issued by the Bank of England, the UK government's central bank. Banking law is based on a contractual analysis of the relationship between the *bank* (defined above) and the *customer*—defined as any entity for which the bank agrees to conduct an account.

The law implies rights and obligations into this relationship as follows:

- *The bank account balance is the financial position between the bank and the customer:* When the account is in credit, the bank owes the balance to the customer; when the account is overdrawn, the customer owes the balance to the bank.

- The bank agrees to pay the customer's cheques up to the amount standing to the credit of the customer's account, plus any agreed overdraft limit.
- The bank may not pay from the customer's account without a mandate from the customer, *e. g.* a cheque drawn by the customer.
- The bank agrees to promptly collect the cheques deposited to the customer's account as the customer's agent, and to credit the proceeds to the customer's account.
- The bank has a right to combine the customer's accounts, since each account is just an aspect of the same credit relationship.
- The bank has a lien on cheques deposited to the customer's account, to the extent that the customer is indebted to the bank.
- The bank must not disclose details of transactions through the customer's account—unless the customer consents, there is a public duty to disclose, the bank's interests require it, or the law demands it.
- The bank must not close a customer's account without reasonable notice, since cheques are outstanding in the ordinary course of business for several days.

These implied contractual terms may be modified by express agreement between the customer and the bank. The statutes and regulations in force within a particular jurisdiction may also modify the above terms and/or create new rights, obligations or limitations relevant to the bank–customer relationship. Some types of financial institution, such as building societies and credit unions, may be partly or wholly exempt from bank licence requirements, and therefore regulated under separate rules.

The requirements for the issue of a bank licence vary between jurisdictions but typically include:

- Minimum capital
- Minimum capital ratio
- 'Fit and Proper' requirements for the bank's controllers, owners, directors, or senior officers
- Approval of the bank's business plan as being sufficiently prudent and plausible.

6

Micro Finance Sector and Rural Banking

The Micro Finance Sector over the period has evolved two different delivery models, one focused on Self Help Group (SHG) and its federations based on community participation and other one based on commercially oriented market driven Micro Finance Institutions (MFIs). The former one (SHG channel) is termed as non profit and non commercial with perfect integration of the existing financial structure where as the latter one (MFIs) has emerged as a profit oriented entity as a consequence of slow progress of SHG bank linkage model. The issues on rural banking for the above two channels in Micro Finance sector is discussed in this section.

MICRO FINANCE INSTITUTIONS

The rapid growth of MFIs and the consequent changes in regulatory environment in Andhra Pradesh led to a serious crisis in the sector which has the client outreach of 3, 104 million. The direct group lending methodology, under which MFIs borrows bulk loans from banks and in turn lend to small loans to people in the lower income segment, has its own demerits. The MFIs were, until recently, a highly profitable as the demand from the low income groups are price inelastic. Accordingly, the MFIs could charge reasonably high interest rates and generate return of 25 per cent and above on their equity. This situation of a sellers market with limitless possibility of growth was hampered due to nonpayment of dues by the clients and rising defaults. This will be aggravated further when the defaults are soon loaded to banks by the MFIs. The

regulatory initiatives by RBI in the recent time on NBFC - MFIs are aiming to have corrective measures in streamlining the credit delivery through MFIs. MFIs are also in the process of adopting self regulated code of conduct. Assuming that these initiatives adopted in true spirit by all the stakeholders, the MFIs must have another opportunity to emerge as renewed model in micro finance. In this context, banks having MFIs as agents of banks operating as Business Correspondents (BCs) may be considered as an alternative approach for greater rural banking. In this model, the banks can make use of the extensive MFI network established in remote areas as their extended arms. Further, as an off-shoot of banks, the model can be used to offer a much wider range of products - savings, credit, insurance, pension and remittances. From the MFI's perspective, acting as BC to a greater extent insulate from political and operational risk and brought under regulation of RBI. At the same time, MFIs as agents of banks will be able to offer clients with a wider range of products. In a multi-product environment, it will be difficult for any section of the stakeholders to suddenly put brakes on the operations of MFIs. The MFIs would not only be offering credit but would also be the front end for savings deposits and withdrawals, as well as for pension and for insurance services - thus broad-basing their relationships with clients.

SHG BANK LINKAGE MODEL

An important regulatory dispensation that facilitated rural banking was given in the early 90s, when banks were allowed to open savings accounts for SHGs, which were neither registered nor regulated. The impressive progress of SHG bank linkage programmes in reaching the poor clients by providing financial services led to greater rural banking. At the end of March 2010, 7. 52 million groups had been linked to the banking system. Commercial banks had a share of 60 per cent of the amount saved by SHGs and 64 per cent of all the groups with outstanding loans. Further, the federation of SHGs is emerging as an intermediary institutional set up between the groups and bank branches and varying degree of success is being observed in several states. Under National Rural Livelihoods Mission (NRLM) Programme being implemented by Government of India, many States are in the process of setting up higher tier institutions of SHGs.

These federation structures are expected to play mainly non financial role such as training, auditing, *etc.* However, there is greater potential for banks to use the matured and well trained federations as financial intermediaries as this model may be cost effective and wider coverage of clients with minimum efforts. Ownership of the institutions by the members is the strength of this model from client perspectives.

The design feature of NRLM emphasises the active role of federation of SHGs and hence the banks need to recognize it as potential intermediary in extending financial service to poor clients. Selecting the well established and matured federation of SHGs and using them as Business Correspondent may be

a viable proposal for ensuring speedy rural banking. However, cautious approach is essential while entrusting BCs role to federations in terms of its selection based on clear and rigid standards to have greater sustainability.

SERVICE AREA AND RECOVERY OF CREDIT

Rural and Semi-Urban branches of each of the public sector banks have been allotted Service Area comprising specified number of villages, since April, 1989. This has facilitated all villages, [around 700, 000] of the country easy and dependable access to banks to meet rural households financial services [savings, credit and remittances]. Each branch is expected to formulate Service Area Credit Plan every year for the purpose of providing credit to the rural households. This micro level credit planning exercise should help the bank to progressively bring within its fold all eligible households for receiving credit and related services. In the ultimate process this exercise should prove to improve quality and productivity of lending. RBI has since the year 1994-95 has advised public sector banks to ensure 25 per cent annual growth rate in the matter of disbursement of credit in their Service Area. Accordingly, the data presented in the above Table showe4d that annual growth was between 12. 5 per cent and 24. per cent during 2000-2001 to 2003-04. The growth was spectacularly high at 54. 5 per cent during 2004-05 which, however, declined to 44. 6 per cent in the following year. Disbursements of credit as against targets ranged from 92. 1 per cent to 117. 3 per cent during the six-year period. Achievements were higher than 100 per cent only in the last two years.

Public sector banks recovery to demand under direct agricultural advance was 69. 3 per cent during the year 2001 which gradually increased during following three years. It, however, phenomenally rose to 84. 1 per cent in the year 2005. During the five year period, the demand, [loan amount to be recovered] and percentage of recovery to demand have progressively increased in the successive years whereas overdue amount has increased until the year 2004 and then it steeply declined by ₹ 29, 620 million in the following year. Following table exhibits the impact of formulating and implementing the Service Area Credit Plans by Banks.

PRIORITY SECTOR LENDING

Commercial banks and RRBs have been providing credit for small scale industries, rural and cottage industries, tiny sector, Khadi and village industries, handloom, handicrafts, coir and silk units under secondary sector as well as for a wide variety of purposes under service and business sector. Thus, priority sector advances include agriculture, small-scale industries and service and business sector.

The credit support to priority sector not only stimulates increased farm and non-farm sector output, but also creates large scale self-employment opportunities. Following table exhibits commercial banks' comparative performance on outstanding credit to agriculture as well as to priority sectors.

During the seven year period from 2000-2006 public sector banks' outstanding credit to priority sectors increased by 221. 9 per cent from ₹ 1, 274, 780 million as on 31st March, 2000 to ₹ 4, 103, 790 million as on 31st March'06, whereas that of private sector banks shot up by 480. 2 per cent from ₹ 183, 680 million to ₹ 1, 065, 660 million during the corresponding period. Priority sector advances of public sector banks as group accounted for over 43 per cent of net bank credit in four years as against the target of 40 per cent which, however, declined from 42. 8 per cent to 40. 3 per cent in three years. In this respect, private sector banks as a group had less than that of targeted 40 per cent during initial three years but they showed impressive performance [42. 8 per cent to 47. 3 per cent] in the following four years.

Agricultural advances of public sector banks during the period rose by 242 per cent from ₹ 452, 960 million to ₹ 1, 549, 000 million whereas that of private sector banks increased significantly by 799 per cent from ₹ 40, 230 million to ₹ 361, 850 million during the period. Share of agricultural advances in the net bank credit by public sector banks ranged between 14. 3 per cent and 15. 7 per cent whereas that of private sector banks varied from 8. 3 per cent to 14. 2 per cent during the period. Neither public sector banks nor private sector banks as a group could achieve targeted agricultural credit of 18 per cent of net bank credit.

During 2005-06, all public sector banks [except State Bank of India (SBI) and State Bank of Patiala] were able to meet the priority sector target of 40 per cent of net bank credit in 2005-06 and only 10 public sector banks met the 18 per cent sub-target for agriculture. None of the private sector banks could meet sub-target for lending to agriculture.

KISAN CREDIT CARD

Kisan [Farmers] Credit Card scheme was introduced in August, 1998 to facilitate farmers easy and timely access to short term credit for purchasing farm inputs while conducting seasonal agricultural operations for raising crops. Now the scheme has been extended to cover tenant farmers, oral lessees, farmers to redeem debt from informal sources, besides providing long term as well as consumption credit. During the period from 2001-02 to 2005-06 banks provided 59, 093, 000 kisan credit cards to farmers to facilitate them to purchase farm inputs and other requirements. Share of commercial banks was 37 per cent as against co-operatives and RRBs at 51 per cent and 12 per cent respectively.

Refinance Facilities

NABARD has been providing refinance facilities at reduced interest rates [6-6. 5 per cent] to cooperative banks and RRBs for their short and long term credit and to commercial banks for long term credit in order to augment their loan able resources and enable them to on-end to farmers at reduced interest rate.

The refinance provided by NABARD to banks has significantly increased from ₹ 45, 210 million in 1998-99 to ₹ 86, 223. 7 million in 2005-06. Only commercial

banks availed significantly increased amount of refinance in successive years. Share of refinance in the total agricultural loans disbursed by cooperatives, PSCARDBs and SCBs] were as high as 50. 3 per cent followed by commercial banks at 31. 4 per cent whereas RRBs accounted for 18 per cent.

SELF-HELP-GROUPS/MICRO/FINANCE

The late 1980s and early 1990s witnessed the beginning of what was to usher in the Self-Help-Group [SHG] Bank-Linkage movement in India, a movement that has been described as the largest micro-finance intervention in the world. At present the major involvement of commercial banks in India micro-finance is through SHGs. Self-Help affinity groups were started by NGOs which were donor-funded and established for a range of community purposes. With increasing skepticism about the ability of commercial banks and RRBs to lend directly to the rural poor, NABARD proposed that if these SHGs could be linked to wholesale suppliers of credit, then this could be a way to channel institutional credit to the poor. This led to a pilot project in 1992 and subsequent mainstreaming of the approach. The SHG model is a financial delivery model which has as its objective reaching out to the unreached poor in conjunction with achieving cost-effectiveness for the participating financial institutions. It involves three partners viz, [1] the SHGs [2} the Banks as wholesale suppliers of credit and [3] NGOs, Government agencies and individual as agencies to organize the poor, build their capacity and facilitate empowerment. SHGs have been described as a unique for of Community Level Financial System, sharing a number of characteristics with Credit Unions, though lacking even a minimal legal structure. SHGs, as compared to Grameen Bank Groups pioneered by Grameen Bank in Bangladesh, are more independent, flexible and democratic in character.

As on 31st March'06, the number of SHGs stood at just over two and quarter million of which over one and a half million had outstanding bank loans. Even with this huge number of SHGs it is estimated by the Committee on Financial Inclusion that the number of SHGs will have to e doubled to cover all the 50 million poor households in the country.

As reported under the NABARD-GTZ Rural Finance Programme, at around 98 per cent on time repayment to the SHGs is reported to be very high.

TRENDS IN RURAL CREDIT

The financial sector reforms since 1991 and the emphasis on implementation of prudential norms, *i. e.,* income recognition, asset classification, provisioning norms and Capital Risk Weighted Assets Ratio (CRAR), were instrumental in compelling the commercial banks to concentrate on financial efficiency and economic viability through rationalisation of their operating system, consolidation of their branch network, which resulted in relocation of many bank branches, concentrating on core strengths reducing surplus staff as also computerisation of operation.

Over time, the flow of credit to agriculture and rural sector has expanded impressively. The ground level credit flow had registered an increase (in real term with 1993-94 prices) from ₹ 13, 915 crore in 1991-92 to ` 49, 401 crore in 2003-04 and further to ₹ 92, 125 crore in 2005-06. The estimated annual compound growth in credit to the agriculture sector in real terms was 14. 5 per cent (with 14. 1 per cent growth in production credit and 14. 9 per cent growth for investment credit during the above period). While the annual growth rate in production and investment credit flow (in real term) during 1991-92 and 2003-04 were 11. 5 per cent and 10. 5 per cent respectively, their respective growth rates during 2003-04 and 2005-06 were 31. 3 per cent and 45. 1 per cent. However, the maximum growth in credit flow were registered during 2004-05 and 2005-06 when agricultural credit was doubled during two years instead of the targeted 3 years.

AGENCY-WISE CREDIT FLOW

The analysis of agency wise credit flow indicates that the cooperative banks were the major source of agriculture credit in 1991-92 constituting 53. 7 per cent of the total ground level credit flow of ` 13, 915 crore (in real terms with 1993-94 prices) followed by commercial banks at 41. 2 per cent (₹ 5, 731 crore) and regional rural banks at 5. 1 per cent (₹ 712 crore). Though cooperative banks had dominated agriculture credit supply during the early reform period, commercial banks and RRBs recorded impressive growth rates. As a result, in 2005-06, the share of cooperative banks in the total institutional credit flow receded to 21. 9 per cent and that of commercial banks advanced to 69. 7 per cent. Although the quantum of disbursement for cooperative banks increased, it could not keep pace with commercial banks in enhancing credit flow due to several reasons including its poor financial health, dual control, lack of internal controls and corporate governance norms and excessive dependence on other financial institutions. The reasons for the massive increase in the credit flow for commercial banks and regional rural banks could be attributed to the linkage of self-help groups (SHG) with banks since 1992, introduction of the scheme of Kisan Credit Cards (KCC) in 1998, formulation of the Special Agricultural Credit Plans (SACP) by the public sector banks since 2004-05, and monitoring under the scheme of doubling of credit in 2004-05.

Size-wise Credit Flow

Despite impressive growth in direct credit to farmers from the scheduled commercial banks between 1991-92 and 2003-04, contrary to expectation, credit disbursement to small and marginal farmers has not been encouraging. However for small farmers and other farmers respectively, the number of accounts increased from 44. 4 lakh and 36. 7 lakh in 1991-92 to 48 lakh and 43. 8 lakh in 2003-04. The percentage of marginal farmers to total farmers came down from 42. 8 in 1991-92 to 39. 8 in 2003-04, while the same for other farmers increased from 25. 9 to 28. 7.

Further, the average annual growth rate in the number of accounts and the amount of credit outstanding during the period between 1991-92 and 2003-04 were 0. 62 per cent and 6. 2 per cent respectively. One important observation from the above findings is that the credit amount per account had increased without any increase in the number of accounts. Further, increase in credit flow favoured the richer farmers.

Region Wise Credit Flow

While analysing the pattern of credit flow, it is observed that the proportions of bank deposits and credit shares have moved in favour of the South, West and North regions. While the share of loans in the total disbursement of credit for agriculture and allied activities were the maximum for the South region (47. 9 per cent in 1990-91 and 43. 7 per cent in 2001-02), it was the minimum for North-east region (0. 4 per cent in 1990-91 and 0. 5 per cent in 2001-02).

The population per rural branch, which was estimated at 16, 335 and 16, 402 in the North-east and East regions in 1991, increased to 22, 158 and 21, 208 respectively in 2005. Further, when the number of savings accounts for every 100 persons in rural areas of the North-east region had shown a marginal rise from 16. 1 in 1991 to 16. 4 in 2005, during the same period, the number of savings accounts in Eastern region had declined from 17. 7 to 16. 9. Similarly, in the case of number of credit account for every 100 persons in rural areas, the number reduced from 4. 4 and 7. 2 in North-east and East regions in 1991 to 3. 2 and 4. 2 respectively, in 2005.

Advances to Priority Sector

Although with the rise in net bank credit, the credit flow for priority sector by the scheduled commercial banks had increased, in percentage term, it remained stagnant at around 36 per cent over the last 14 years. While the net bank credit of the scheduled commercial banks increased from ₹ 1, 45, 250 crore (in real terms at 1993-94 prices) in 1991 to ₹ 5, 75, 090 crore in 2005 at an annual compound growth rate of 10. 3 per cent, the advances to priority sector increased from ₹ 53, 125 crore to ₹ 2, 05, 000 crore at an annual compound growth rate of 10. 1 per cent. As a result, the gap between these two has been widening.

Further, the zig-zag trend, *i. e.,* downward during 1991 and 1996 and upward during 1996 and 2005, of the priority sector lending as a percentage to the net bank credit of the banks during the period between 1991 and 2005 shows that no consistent effort has been made to step up advances in favour of the priority sectors. With the new norms for the priority sector announced by RBI in 2007, it is expected that commercial banks would be able to achieve the targets fixed.

Credit-Deposit Ratio

The credit-deposit ratio (CDR), which is an important indicator of deployment of the resources of bank, had been showing a downward zig-zag movement

during the last 14 years. The deposits and credit of the scheduled commercial banks in rural areas, which were ₹ 36, 961 crore and ₹ 22, 168 crore (in real terms at 1993-94 prices) in 1991, increased to ₹ 1, 09, 005 crore and ₹ 56, 254 crore respectively, in 2005. Thus, the credit-deposit ratios had declined from 60 per cent in 1991 to 51. 6 per cent in 2005.

However, the credit-deposit ratios of the banks in urban areas had increased from 62. 3 per cent in 1991 to 68 per cent in 2005. When the pattern of the credit-deposit ratios for rural and urban areas are observed, we find that the CDR of the banks operating in urban areas are positioned above the overall CDR and that of rural areas are positioned well below the overall CDR.

While the credit-deposit ratio of the rural branches of the scheduled commercial banks declined during the period between 1991 and 2004, that of urban offices had shown improvement with declining and increasing trend in some years during the same period. However, the credit-deposit ratio for rural and urban areas increased from 43. 6 per cent and 60. 4 per cent in 2004 to 51. 6 per cent and 68 per cent respectively in 2005. During the period between 1991 and 2005, while the annual growth rates in the volume of deposits and credit for urban areas were 10. 2 per cent and 10. 9 per cent respectively, the same for rural areas were 8 per cent and 6. 9 per cent respectively. Thus, while in urban areas, the growth rate of credit was higher than that of deposits, in rural areas, the growth rate in deposits was higher than that of credit.

Branch Expansion

The Indian banking system has acquired a wide outreach, judged in terms of expansion of branches and the growth of deposits and credit. The expansion of the branch network peaked in the phase of social banking during the 1970s and 1980s. Although the Narasimham Committee had recognised the need for continuing with the expansion of banking infrastructure in rural areas, in the process of executing financial reforms, the importance of rural financial infrastructure has got neglected and the number of branches of the scheduled commercial banks declined steadily in rural areas and increased in urban areas.

For instance, in 1991, there were 35, 206 rural branches out of the total 60, 220 branches of the scheduled commercial banks. But in 2006, while the total number of branches of the scheduled commercial banks was 69, 471, the number of rural branches had reduced to 30, 579. Thus, the financial system has become increasingly urban-centric. Urbanized staff members of commercial banks perceive rural postings as a punishment and serve out their mandatory rural postings, rather grudgingly. The Voluntary Retirement Scheme (VRS) in commercial banks has also ensured that rural branches remain under-manned. Rural postings are avoided because of poor Infrastructural facilities, lack of communication, poor transport facilities, lack of good educational opportunities and also due to reduction in perks and allowances.

The trend analysis presented above brings out the fact that financial inclusion by way of credit to rural sectors as also small and marginal farmers, is a distant

dream and demands evolution of appropriate strategies. This aspect has drawn the attention of the Government, RBI and NABARD in recent years and a series of interventions have been initiated to enhance credit flow in favour of priority sectors and the disadvantaged sections of the society. Some of the initiatives have been enumerated in the next section.

RECENT INITIATIVES

In order to increase credit flow to the agriculture sector, the policy of doubling of agricultural credit in three years was introduced in 2004-05. In 2004, the Central Government constituted a Task Force to revive the rural cooperative credit institutions under the Chairmanship of Prof. A. Vaidyanathan. In order to expand the outreach of the banking services, banks made available basic banking 'no-frills' account with low or nil minimum balances as well as low or no charges in 2005. The regional rural banks were also specifically advised to allow limited overdraft facilities in 'no-frills' accounts without any collateral or linkage to any purpose.

For opening account with banks, procedures have been simplified by introducing the concept of 'Know Your Customer (KYC)' drill. In January 2006, banks were permitted to utilise the services of Non-Governmental Organisations (NGOs), Self-Help Groups (SHGs) and other Civil Society Organisations (CVOs) as intermediaries in providing financial and banking services through the use of Business Facilitator (BF) and Business Correspondence (BC) models.

The BC model allows banks to do 'Cash in – Cash out' transactions at the location of the business correspondent and also permits branchless banking. With the objective of providing revolving credit to the rural people, banks in rural and semi-urban areas have been advised to provide a General purpose Credit Card (GCC) facility. For all borrowers having a principal amount of less than ₹ 25, 000 and whose accounts have become Non Performing Asset (NPA), banks have been requested to offer a One Time Settlement (OTS) Scheme.

It is expected that such a provision will restore borrowing relationship of small borrowers with the formal system and thereby obviates the need to go back to the informal system. In June 2007, a multi-lingual web site in 13 Indian languages on all matters concerning banking was launched by RBI for credit counselling and financial education. In 2007-08, two Funds, *i.e.,* Financial Inclusion Fund (FIF) for promotional interventions and Financial Inclusion Technology Fund (FITF) for meeting cost of technology adoption are proposed to be established with the National Bank for Agriculture and Rural Development (NABARD).

NABARD

Complementing its core financing and developmental functions in tune with the emerging challenges, NABARD has been pioneering innovative rural interventions for ensuring sustainable development and prosperity. In its long journey for the development of farm and non-farm sectors through credit and

other support services, initiatives such as Potential Linked Credit Plans (PLPs), District Development Offices, Participatory Watershed Development Programme, Non-Farm Sector promotional programmes, Self-Help Group – Bank Linkage programmes, Rural Infrastructure Development Fund (RIDF), Kisan Credit Card (KCC), Swarojgar Credit Card (SCC), Consultancy Services, Tribal Development programmes, Farmers' Clubs, etc have contributed immensely.

The initiatives of the Bank centre around (i) exploring innovative investment opportunities, (ii) investing partners for Financial/Technical assistance, (iii) creating infrastructure base, (iv) developing leadership, entrepreneurship and capacity building, (v) educating the rural masses, (vi) building sound network of rural financial institutions, (vii) continuous innovations in delivery procedures and systems, (viii) credit planning and (ix) support Research & Development activities in the areas of agriculture and rural development.

In order to augment the much needed institutional credit, NABARD included financing of housing in rural areas as an eligible activity for extension of refinance under investment credit to financial institutions since 1 April 2001 subject to a maximum of ₹ 5 lakh for a dwelling unit. Major initiatives of NABARD, which have had a direct impact on the rural credit delivery mechanism and touched and transformed the lives of millions of rural people, are as follows:

(a) *SHG-Bank Linkage Programme:* The SHG-Bank Linkage programme, which came as a corporate strategy in 1992, aims at improving access of the weaker and other sections of the society from formal financial institutions. It has been built around a simple but basic aspect of human nature – 'the feeling of self-worth'. The ability of people to pool their micro-savings, provide collective social collateral for banks to lend against and add to the SHGs' funds and the collective alteration of Funds to meet emergent credit needs of the SHG members, rates which reflect risks and management cost of Funds, are the unique feature of this movement which has enabled banks to assist in meeting the credit needs of very poor people without sacrificing their funds and has helpful rural women especially to empower themselves both economically and financially.

Over the last 15 years, the Micro-Finance initiative of NABARD has passed through various stages like Pilot testing (1992-95), mainstreaming (1996-98) and expansion (1998 onwards) and has assumed the shape of a micro finance movement in the country by linking around 30 lakh SHGs with the formal banking system by March 2007. Further, the programme has enabled an estimated 394 lakh poor households to gain access to Funds from the formal banking system. Studies conducted by various experts show that the programme has indeed helped in the social and economic empowerment of rural folk, especially women, causing significant up-scaling of social capital while at the same time delivering crucial financial services. Today, it has expanded to become the largest micro finance programme in the world in terms of its outreach and has extended banking services to people hitherto under-served by the banking system.

(b) *Joint Liability Groups (JLGs):* Absence of ability to provide adequate collateral security works as a major hurdle for landless/tenant farmers in securing loans. The inability of this section of farmers to provide collateral often excludes them from the purview of formal credit cover. Keeping this in view, a pilot project on financing Joint Liability Groups (JLG), was initiated for developing effective credit products for such clients, which reduce risk and transaction costs for the banks and also introduce a greater degree of flexibility for the credit user to determine their credit needs and priorities.

Joint Liability Groups (JLG), to be established under the pilot project, will be a group of 5-10 member clients who are together informally recognised by the bank as a group. The group members offer an undertaking to the bank that enables them to jointly receive such amounts as deemed eligible by the bank for pursuing any activity, individually or jointly, as found suitable by the group. The group serves as collective guarantor for loans extended to individual members by executing joint liability agreements, making them severally and jointly liable for repayment of loans to the group. Although the JLG credit model was pilot-tested for mid-segment farmers, the concept could very well be extended to tenant farmers/oral lessees/sharecroppers also. With a view to promoting the scheme on a large scale, banks may be allowed to adopt "Agency Model" by involving civil society organisations, NGOs, Farmers' Clubs, Village Knowledge Centres, Panchayats, various User Groups such as Water Users' Associations, *etc.* Their services could also be made use of for performing various non-financial functions for the bank such as borrower identification, preliminary appraisal, promotion and nurturing of JLGs, *etc.*

(c) *Financing Rythu Mitra Groups:* An approach similar to TFGs or JLGs was also adopted in Andhra Pradesh, with the initiative of the State Government. The programme called Rythu Mitra Groups, which envisages bringing about holistic development in the lives of small/ marginal/land less farmers through collective action. RMGs are expected to serve as a conduit for technology transfer, facilitate access to market information and market, assist in carrying out activities like soil testing, training, health camps, assess input requirements, *etc.*, for its members. NABARD provides resource and grant assistance for conducting training and capacity building initiatives to different stakeholders. During the year, 4437 RMGs were financed by 18 commercial banks, 9 RRBs and 9 DCCBs involving ground level credit flow of ₹ 28. 11 crore. About 62, 000 farmers have been assisted under the pilot project.

(d) *Kisan Credit Card Scheme:* During the year 1998-99, NABARD introduced the Kisan Credit Card (KCC) Scheme in conjunction with cooperative banks, commercial banks and regional rural banks to

smoothen and strengthen the credit delivery system and more particularly, to make available timely and hassle-free crop loans to the farmers. As on 28 February 2007, 665. 6 lakh KCCs had been issued by the banking system. Of the total 665. 6 lakh cards, the cooperative banks accounted for the largest share of 49 per cent followed by commercial banks (38 per cent) and regional rural banks (12 per cent). Recognising it as an accepted mechanism for delivery of credit to farmers, the banking system has been routing crop loans through the Kisan Credit Cards.

To cover the KCC holders against accidental death/permanent disability and partial disability upto ₹ 50, 000 and ₹ 25, 000, respectively, an insurance scheme was formulated by the General Insurers' (Public Sector) Association of India (GIPSA) in close co-ordination with the NABARD. Banks have been advised to implement the scheme with effect from the Kharif 2001 season. All the KCC holders are required to be covered under the scheme by payment of a nominal premium amount. With a view to making KCC more user-friendly and comprehensive, NABARD has further enlarged the scope of the Scheme to cover long-term loans and consumption loans along with crop loans. The joint studies conducted by NABARD and the financing banks on implementation of the KCC Scheme have confirmed that the Scheme was well received both by farmers and bankers and the flexibility in operations has resulted in improved loan recoveries. For many banks, some ground level constraints like adoption of selective approach in identifying beneficiaries, reluctance to extend KCC facility in mono-crop areas, levy of costly service charges and levy of stamp duty by some of the State Governments for issuing loans under KCCs, were observed.

(e) *Swarozgar Credit Card (SCC) Scheme:* The Swarozgar Credit Card scheme was introduced in 2003 for facilitating hassle free availability of credit for meeting investment and working capital requirements of small borrowers and rural micro-entrepreneurs. As on 31 March 2007, the banking system had issued 6. 79 lakh cards involving credit limits of ₹ 2, 700 crores.

(f) *Rural Infrastructure Development Fund:* With an objective of quicker completion of ongoing rural infrastructure projects, the Rural Infrastructure Development Fund (RIDF) was set up with NABARD during 1995-96 with an initial corpus of ₹ 2, 000 crore. In the Union Budget for 2006-07, the XII tranche for RIDF was announced with an allocation of ₹ 10, 000 crore raising the aggregate allocation to ₹ 60, 000 crore. As on 31 March 2007, the cumulative number of projects sanctioned rose to 2, 44, 025 and the amount sanctioned increased to ₹ 61, 539. 87 crore. Although initially it was meant mainly for incomplete projects in irrigation, rural roads and rural bridges, its

scope has now been extended to cover major infrastructure projects in various sectors like irrigation, roads, bridges, power, market yards, go-downs, cold storages, information technology, primary education and health systems.

ISSUES AND CONCERNS

The Situation Assessment Survey (NSSO, 2003) indicated that out of the total 89. 3 million farmer households in the country, 84 per cent (750 million) households were small and marginal farmers and more than half (51. 4 per cent) of the total households were non-indebted. Further, out of the total 43. 4 million indebted households, 20. 3 million (46. 8 per cent) households had availed financial services from informal sources.

The inference of these findings is that in spite of a large network of the institutional credit system, it has not been able to adequately penetrate the informal rural financial markets and the non-institutional sources continue to play a dominant role in purveying the credit needs of the people residing in rural areas. The results of the All-India Debt and Investment Survey (AIDIS, 2002) also indicate that the share of the non-institutional sources, in the total credit of the cultivator households, had increased from 30. 6 per cent in 1991 to 38. 9 per cent in 2002.

The ratio of rural lending to total lending has been steadily declining during the 1990s. In 1991, the total credit of the scheduled commercial banks, in nominal terms, had increased from ₹ 1, 21, 865 crore, to ₹ 15, 13, 842 crore in 2006. However, the share of rural areas in the total deposits and credit of the scheduled commercial banks, which were 15. 5 per cent and 15 per cent respectively in 1991, decreased to 10. 8 per cent and 8. 3 per cent respectively in 2006, reflecting the inability of rural areas to absorb funds for developmental purposes.

While studying the flow of institutional credit to agriculture sector during the period between 1991-92 and 2005-06, an impressive growth in both production and investment credit has been observed. However, the pace of growth had definitely been accelerated during the operation of the scheme of doubling of credit. Production credit, which was 60. 7 per cent of the total credit flow of ₹ 13, 915 (real terms) in 1991-92, had declined to 58. 5 per cent of the total credit flow of ₹ 92, 125 crore (real term) in 2005-06. It is also a concern that although the cooperative banks are in close proximity with the rural people, the share of cooperative banks in the total credit flow for agriculture sector had declined from 53. 7 per cent in 1991-92 to 21. 9 per cent in 2005-06.

Further, the share of the regional rural banks in the total credit flow had increased from 5. 1 per cent in 1991-92 to only 8. 5 per cent in 2005-06, when with the existing branch network of over 14, 494 branches, they could meet the credit needs of 25 per cent of the rural areas. During the period between 1991-92 and 2003-04, while the number of accounts for marginal, small and other farmers had increased at annual rates of 0. 03 per cent, 0. 65 per cent and 1. 48 per cent respectively, the credit flow to the respective categories of farmers had increased

at 6. 71 per cent, 6. 73 per cent and 5. 7 per cent. Overall, during 1991-92 and 2003-04, while the annual increase in the number of accounts was 0. 62 per cent, the increase in the amount of credit outstanding of farmers was 6. 2 per cent. Thus, during the last 10 years, although there is no meaningful increase in the number of accounts in favour of farmers, there has been a meaningful increase in the volume of credit outstanding of the farmers. Further, during the period between 1991-92 and 2003-04, the percentage of the number of accounts with marginal farmers had been declining and that of other farmers had been increasing.

For instance, the share of marginal, small and other farmers in the total number of accounts, which were 42. 8 per cent, 31. 3 per cent and 25. 9 per cent respectively in 1991-92, reduced to 39. 8 per cent, 31. 5 per cent and 28. 7 per cent for the respective category of farmers in 2003-04. Thus, over time, while credit deepening has taken place, credit widening has not yet effectively addressed. Alternatively, it could be stated that farmers have become more prosperous, migrating to the better off categories.

Falling Advances to Priority Sector

Over years, priority sector lending as a proportion of net bank credit has been falling. For the public sector banks, priority sector lending as a percentage to net bank credit had decreased from 41. 8 per cent in 1991 to 40. 3 per cent in 2006. In the priority sector itself, the shares of agriculture and small-scale industries had decreased from 40. 7 per cent and 39. 1 per cent in 1991 to 37. 7 per cent and 20. 1 per cent respectively in 2006. While in 1989, it had been stipulated that all banks need to provide 18 per cent of their net bank credit for the agriculture sector, by March 2006, only 10 public sector banks and one private sector bank had achieved it. Similarly, only 8 public sector banks and one private sector bank had met the sub-target of 10 per cent of the net bank credit for weaker sections.

REDUCTION IN RURAL BANK BRANCHES

In spite of the process of financial reforms in the country, the total number of bank branches of the scheduled commercial banks had increased from 60, 220 branches in 1991 to 69, 471 branches in 2006, at an annual rate of 0. 96 per cent.

While the number of bank offices in urban areas had increased from 25, 014 branches in 1991 to 38, 892 branches in 2006 at an annual rate of 2. 99 per cent, the number of branches in rural areas had declined from 35, 206 branches in 1991 to 30, 579 branches in 2006 at annual rate of 0. 93 per cent.

The influence of the declining trend of the bank branches in rural areas had been felt in marginalisation of the disadvantaged sections from accessing institutional credit, especially in the underdeveloped regions of the country. This has to some extent been offset by the SHG-Bank linkage programme, which provided credit to very poor people, especially poor rural women.

Credit flow vs. Productivity

Although credit for the agriculture sector has shown an impressive growth over a period of time between 1991-92 and 2005-06, no significant change in the value of output has been observed during this period. The relationship between the value of input and the value of output over the last decade has remained more or less the same with the output being less than five times the value of input. It is relevant to note that even at the highest level of production, credit forms around 11 per cent (in real term in 1993-94 prices) of the total output value. Thus, expecting credit with so little a share in the output value to have any significant impact on the output or productivity values may not be in order.

Emerging Challenges

There has been a long history of concern regarding rural credit. The increase in share of institutional credit has been rather slow. The dependence of small and marginal farmers is still very high on non-institutional sources. Besides, the developed regions have greater access to credit as compared with less developed regions. Therefore, the key issue now is how to ensure that rural credit from institutional sources achieves wider coverage and expands financial inclusion. As the credit-off-take depends on the willingness and ability of the person to avail of loans (which is a function of perceived returns to investments) and the willingness of the banker to lend (which is contingent on bank's perception and assessment of lending risk), there is a need to address the problems from both the supply side as also the demand side.

While distance from the bank branch, branch timings, cumbersome documentation and procedures, unsuitable products, communication and staff attitudes are some important supply side constraints, lack of awareness, low income/assets and small-sized loan demands are some of the demand side constraints. Further, large number of villages (more than 6 lakh villages), lack of infrastructure, vast geographical spread, high transaction costs and poor loan recovery are some other problems faced by banks. In the absence of any alternative, the poor and other weaker sections of rural society depend on the unorganized financial system, which utilizes local knowledge, offers credit for a wide variety of purposes and operates quite flexibly, though at high costs and as an exploitative relationship. One strategy that has achieved great popularity and wide acceptance is that of micro finance. The banks need to involve micro-finance agencies and other financial intermediaries, as business opportunities. They must understand, recognise and streamline different activities like retail activities, service sector initiatives, and construction and rural housing that take place in the rural economy, in addition to financing agriculture. However, this needs innovations in risk assessment, reduction in transaction costs, search for new credit channels and the use of cheaper information technology. Technology is another option.

It can be a vital component in integrating strategies for achieving inclusive growth. Its use can be critical in building up a reliable credit information system

and database on customers, reducing transaction costs and facilitating better pricing of risk, improving the efficiency of the financial system, and thereby increasing the access of un-banked rural people in an efficient manner. It can reduce the transaction costs sharply and time taken by banks in processing applications, maintaining accounts and disbursing loans. It has the potential to address the issues of outreach and credit delivery in rural areas, in a cost effective manner. But how the IT platform will provide a variety of financial services to the rural clients at affordable costs and in time needs to be examined.

Access to information is the key to ensure wider participation of all in the process of development. The challenge lies in ensuring easy flow of public information to rural citizens. The growing innovations in the use of information communication technologies have opened up a new era of information dissemination. Credit counseling, awareness creation and financial education regarding the benefits of financial inclusion are important for effective expansion of financial services in rural areas. To do this, banks may utilise the services of non-governmental organisations, village youth clubs, village Panchayats, farmer clubs and self-help groups into confidence.

Banks need to develop an array of financial products and services that are adapted to the needs of the majority of rural people at affordable prices. Interest rate is an important component of cost to agricultural producers and will become more important as backward and forward linkages are strengthened. As per the current interest rate policy of RBI, the interest rate on loans for the agriculture sector by commercial banks is linked to the size of the loan. While commercial banks have reduced their interest rates on crop loans up to ₹ 50, 000 to 7 per cent, RRBs and cooperative banks, for various reasons, have not been able to bring down their rates of interest on lending to any appreciable extent. To ensure competitiveness of Indian agriculture produce in the world market, various Committees have suggested several measures of reducing cost of funds, transaction costs and the risk costs. Risk management is another option. While the farmers suffer from wide variety of risks like the climate risk, price risk, technology risk, *etc.*, the bankers suffer from the problem of increasing non-performing assets and losses. These risks emanate from a host of factors including failure of investments, willful defaults, weather aberrations, improper appraisal of loans, diversion of funds, inadequate monitoring and follow up and inability to realize the securities available, are some of the cost drivers, which play a decisive role in determining the rates of interest charged by banks to ultimate borrowers in rural areas. Therefore, if credit risk can be disaggregated into factors like failure of rainfall, price fluctuations, poor health and death of the borrower, these can be mitigated through non-credit financial products like insurance and derivatives. This could also facilitate the banks to provide credit at lower rates. On account of low levels of financial capacity as also awareness, risks affect lives and livelihood of the poor. Therefore, the risk management mechanisms should take into accounts the similarities and differences in the incidence of risks and seek to assist people to manage the consequences thereof. One possible risk management measure could be to enhance savings.

Creation of a large fund administered centrally or at each State level would be necessary to help people affected by calamities and disasters. The manner of contribution, mode of assistance, *etc.*, could be designed to provide quick response to calamity-affected regions. Price hedging mechanisms to safeguard farmers from price risks would be needed. The gradual introduction of forward markets and future trading in select crops/commodities should be extended to all major crops in a phased manner. An enforcement mechanism whereby the suppliers of technology are made accountable for failure of technology, *etc.*, could mitigate technology risks faced by the farmers. Further, the infrastructure support, policy framework and technology could play an effective role in mitigating risks in financing to the rural sector. There is also a need for providing immediate relief at the time of disaster or natural calamity, smoothening the liquidity flow to ensure that consumption requirements are not unduly affected besides compensating people for loss of income, assets and livelihood. The rural Micro Finance Institutions (MFIs), which has emerged as a powerful tool for fighting poverty, may be made a part of the financial system for effective delivery of rural financial services. The banks need to gear up their rural branches for facilitating bank linkages of SHGs where the programme has not shown satisfactory progress. The Business Correspondence models (MFIs, NGOs, *etc.*), as recommended by the Internal Group on Micro finance (Khan Committee), may also be put in place, which will increase banking outreach.

RURAL DEBT

Dependence of rural households on non-institutional sources of credit were as high as 92. 8 per cent in the year 1951, just four years after India's independence which declined to 82. 7 per cent in 1961 and further to 70. 8 per cent in 1971 when cooperative credit institutions made their presence felt on the rural scene after acceptance and implementation of recommendations of the All India Rural Credit Survey Committee in 1954 and entry of major private sector banks after their nationalization in the year 1969. Access of rural households to formal credit institutions sharply increased to 61. 2 per cent in 1981 partly because of enabling measures initiated by the Reserve Bank to direct public sector banks towards rural lending and partly because of the establishment of Regional Rural Banks from the year 1975 onwards specifically to cater to the credit needs of rural poor households. However, in the year 1991 there was only marginal increase in the institutional sources of credit from 61. 2 per cent in 1981 to 64 per cent in 1991. While dependence of rural households on professional moneylenders in particular declined very significantly from 46. 4 per cent in 1951 to 8. 3 per cent in 1981, it again increased to 10. 5 per cent in 1991. The role of agricultural money lenders had also declined progressively from 47 per cent in 1961 to 7. 1 per cent in 1991. Commercial banks' performance was very spectacular between 1971 and 1981 but it showed little improvement in 1991. Cooperatives had shown good performance from 1961 to 1981 but its performance declined in 1991.

Doubling Farm Credit

The goal of Union Government, as announced by the Finance Minister in his Budget speech in 2004, to double the flow of farm credit in three years [2004-07] was achieved in two years. Actual flow of credit during the year 2006-07 is expected to exceed the target of ₹ 1, 750, 000 million set for the year by ` 150, 000 million. During April to December 2006, around 5, 337, 000 new farmers, as against target of five million, were linked with the institutional credit system. For the year 2007-08, target of farm credit disbursement has been fixed at ₹ 2, 250, 000 million [28. 6 per cent over target of 2006-07] and an addition of five million new farmer-borrowers. Following table exhibits banks' commitment, particularly of commercial banks and RRBs, to respond to Finance Minister's call to double the credit disbursements during 2004-07.

Total disbursements progressively increased from ₹ 620, 450 million in 2001-02 to ₹ 1, 574, 800 million in the year 2005-06 reflecting rise by 153. 8 per cent. Commercial banks and RRBs recorded phenomenal rise by 216 per cent and 189 per cent respectively as compared to 58 per cent by co-operatives. While there has been progressive rise in each successive year in case of cooperatives, commercial and regional rural banks, there has been spectacular increase during 2004-05 and 2005-06 in respect of commercial in the total disbursements of short-term and long-term credit progressively declined from 37. 9 per cent in 2001-02 to 23. 65 per cent in 2005-06 whereas that of commercial banks recorded progressive increase from 54. 13 per cent to 67. 41 per cent during the corresponding years. RRBs accounted for 7. 82 per cent in 2001-02 which progressively rose to 9. 91 per cent in 2004-05 but declined by one percentage point in the following year. Agriculture credit flow for the banking system as a whole during 2005-06 has surged to ₹ 1, 804, 860 million, reflecting 128 per cent of the target of ₹ 1, 410, 000 million that was set for that year data further revealed that proportion of short-term credit to enable farmers to conduct seasonal agricultural operations was around 63 per cent as against 37 per cent of long-term credit for investment purposes. Following table exhibits comparative performance among banks and within banks during nine months of 2005 and 2006.

Agriculture credit flow target for 2006-07 had been pegged at ₹ 1, 750, 000 million. However, for the fiscal year 2006-07, agriculture credit up to December 2006 stood at ₹ 1, 493, 430 million which represented a 25. 38 per cent increase over the achievement of ₹ 1, 191, 150 million recorded in the same nine-month period in the previous year. Agriculture credit flow during April to December 2006 from public sector banks grew by 25. 91 per cent to ₹ 868, 650 million from ₹ 689, 910 million during the corresponding period in the previous year. In case of private sector banks, it increased by 40. 90 per cent to ₹ 141, 340 million from ₹ 100, 310 million. While cooperative banks recorded increase by 14. 60 per cent from ₹ 289, 470 million to ₹ 151, 700 million. Share of public sector banks in the total disbursement during April-December'06 accounted for as high as 58 per cent followed by cooperative banks at 22 per cent where as RRBs and private sector banks had almost equal share of 10 per cent and 9 per cent respectively.

RURAL BANKING

Amongst developing economics, India has a relatively deep financial system. Its financial depth is attributable in large to India's vast network of financial institution, particularly those focused on rural customers. The need to improve financial access to India's poor, the overwhelming majority of whom are concentrated in rural areas, motivated the establishment of a vast network of rural banks. Financial tools help entrepreneurs start and expand small businesses which are a source of local job creation, growth and poverty reduction. Rural banking has become a national and a government imperative in the last few years.

The process of economic growth, especially when it is on high growth trajectory, must strive to encompass participation from all sections of society. Lack of access to finance for small farmers and weaker sections of the society has been recognized as a serious threat to economic progress especially in developing countries. Moreover, prolonged and persistent deprivation of banking services to a large segment of the population leads to a decline in investment and has the potential to fuel social tensions causing social exclusion. Access to finance, especially by the poor and vulnerable groups is a prerequisite for employment, economic growth, poverty reduction and social cohesion. This will be providing them an opportunity to have a bank account for saving as well as investment purposes and thereby facilitating them to break the chain of poverty.

However, while there is a growing awareness and agreement on the importance of rural banking, it is also important to appreciate that the objective of providing affordable access of suitable financial services to the financially excluded is to ensure 'economic development and progress of the financially excluded and that inclusion of the excluded' is only a means to an end and not the end in itself. Banks could play a major role in inclusive growth through financing of MSMEs, especially in rural and semi-urban centres in a big way.

Recognizing the contributory impact of the rural banking for achieving the inclusive growth, a series of efforts are being undertaken by the Government of India and Reserve Bank of India during the last few decades for greater inclusion. However, the seriousness of financial exclusion of poor was brought out in the report of National Sample Survey Organization (NSSO, 2005) based on which greater attention was focused on this aspect. While assessing the contributory factor for such exclusion, it was recognized that in spite of a large network of the institutional credit system, it has not been able to adequately penetrate the informal rural financial markets and the non-institutional sources continue to play a dominant role in purveying the credit needs of the people residing in rural areas. As a complementary persons have access to credit bears the fact that the exclusion is not only large, there is also a wide variation across regions, social groups and asset holdings. The poorer the group, the greater is the exclusion. The estimates of rural banking index revealed the wide variation in the status of rural banking was observed among the regions and districts with

the regions and inadequate branch networking was observed to be one of the contributing factors for the greater exclusion. This situation called for appropriate institutional arrangements to bridge the gap between the existing bank branches and poor clients. Though several initiatives were undertaken for deepening and widening the process of providing financial services to the poor and vulnerable groups, in the recent periods, still there exists greater potential for qualitative and quantitative additions in the ongoing efforts.

OBJECTIVES OF RURAL BANKING

Rural Banking ensuring access to financial services and timely and adequate credit as needed by vulnerable groups such as weaker sections and low income groups at an affordable cost.

- Extending formal banking system among rural sector.
- Weaning them away from unorganized money markets and moneylenders.
- Equipping them with the confidence to make informed financial decisions.

WHY IS RURAL BANKING IMPORTANT?

- Equitable growth is achievable only through the rural banking. There are hardly any instances of an economy transiting from an agrarian system in a post-industrial modern society without broad-based rural banking.
- Accessibility of public goods and services is a necessary condition of an open and efficient society. Banking services are like public goods, it is essential that the availability of banking services to the entire population is ensured.
- Financial access is essentially meant for the economically backward as it provides them opportunities to build savings, make investments and avail credit. Importantly, access to financial services also helps the poor insure themselves against income shocks and equips them to meet emergencies such as illness, death in the family or loss of employment. Needless to add, rural banking protects the poor from the clutches of the usurious moneylenders.
- It is now well understood with the experiences of FMCG companies, LIC, Microfinance companies that commerce with the poor is more viable and profitable, provided there is ability to do business with them. The availability of uncomplicated, small, affordable products can help bring low-income families into the formal financial sector. Taking into account their seasonal inflow of income from agricultural operations, migration from one place to another, and seasonal and irregular work availability and income, the existing financial system needs to be designed to suit their requirements. Mainstream financial institutions such as banks have an important role to play in this effort.

- Rural banking benefits banking sector in two ways. First, rural banking provides an avenue for bringing the savings of the poor into the formal financial intermediation system and channels them into investment. Second, the large amount of low- cost deposits offer banks an opportunity to reduce their dependence on bulk deposits and help them to better manage both liquidity risks and asset-liability mismatch.

INITIATIVES TOWARDS RURAL BANKING

The elements of rural banking focused in the recent initiatives by RBI includes, saving cum overdraft account, remittance facility, an access to credit through instruments like a general credit card. Performance of providing these services depends on the institutional network coverage of bank branches in the remote areas. The RBI had pursued the rural banking agenda more closely and now the banks have prepared plans in each and every State targeting 72, 800 villages with the population of more than 2000 that are not covered by main stream financial institutions. Progress and issues in the implementation of the selected initiatives towards rural banking which are having direct bearing on micro finance sector progress.

Today, the banking has become imperative to all the households irrespective of their social and financial status and expects minimum financial services from the banking system.

The recent rural banking initiatives of the Government, *i. e.* provide access to banking services at all villages through branch banking or business correspondent at affordable cost is going to transform the banking landscape to greater extent and it is an important business segment for banks. However, providing financial services to the poor, especially in rural areas, is both challenging and costly.

The transaction costs have become one of the deterring factors to reach the un-banked by the banks. The stupendous task can be achieved by adopting following Initiatives:

ALTERNATE DELIVERY CHANNELS

The residents of far-flung areas are unable to pay visit to branches located at distant places on account of resource constraints *viz.,* time, cost and opportunity. Thus, it has become imperative for banks to reach out customers through a variety of technology driven delivery channels such as Micro ATMs, Bio-metric ATMs, Mobile ATMs, and Smart Cards, *etc.*, which are most cost effective compared to Brick and Mortar model. ATM has brought sea change in Indian banking space with significant qualitative improvement in delivery of banking services and within short span the presence of ATMs is outnumbered the physical branch network.

(i) *Micro ATMs*: Though there is considerable improvement in ATM network, the presence of ATMs in rural areas is very limited. Banks are not keen to install ATMs at Rural/Semi Urban centers on account of high investment and low transaction volume. In order to make the

ATMs viable at these centers, there is a need to deploy low cost ATMs with basic features such as cash withdrawal and balance enquiry, *etc.* It is convenient and cost effective to the customers compared to pay a visit to the bank branch located at nearby center.

(ii) *Biometric ATMs*: The penetration of ATMs in Rural areas may not serve the envisaged purpose unless it is put to use by illiterate/semi-literate whose presence is predominant in unbanked areas. The existing ATMs are not put to use optimally by rural folk on account of PIN/ Password related issues. Introduction of Biometric ATMs enable them to avail hassle-free services as these devices function on thumb print and recognize voice commands in vernacular language.

(iii) *Mobile ATMs*: In this model, ATM is installed in a vehicle, which would move to the pre-determined places at regular intervals to provide doorstep banking. These new breeds of ATMs also have biometric authentication mechanisms like fingerprint verification and voice guided animated screens with touch enabled transactions. Mobile ATMs can undertake opening of accounts, which has immense benefit of the residents of unbanked centers.

(iv) *White Label ATMs*: The recent initiatives of the RBI and the Government is to allow white-label ATMs, permitting third-party service providers to set up more ATMs in off-premises areas, which include residential complexes, hospitals, tourist destinations, bus stops and railway stations. These ATMs would not belong to any bank in particular but will be owned as well as maintained by independent service providers. This initiative will enable the excluded segments to avail ATM services as at present majority ATMs are confined to Urban/ Metro areas only. However, service provider levies charges which are to be either bear by the Bank or the customer.

(v) *Smart Cards*: State Governments are actively looking at making pension payments and disbursals under rural employment generation programme using smart cards linked bank accounts. Smart card provides biometric authentication, which would help in reducing frauds and ensure identity of customers. In order to popularize smart cards, all agriculture short term loans and payment of social security schemes are to be dispensed through Smart Cards.

All the above initiatives warrant the banks to invest substantial amounts in infrastructure besides recurring expenditure which adds cost to the customer whereas the distribution of financial products and services at the lowest rung of the pyramid requires a low-cost model. High Operating Costs and Low Business Volume are the major constraints of the banks in extending banking services especially in remote rural and inaccessible areas through Branch Banking Model. To address this issue, RBI permitted the banks to make use the services of Business Correspondents to take banking to un-banked areas in a most cost effective manner.

BUSINESS CORRESPONDENT (BC) MODEL

Business Correspondent model using smart card and mobile technology is also an effective tool to reach the remote rural areas where alternate delivery channel mechanism is not feasible. This model enables greater rural outreach to improve the business volumes. RBI has permitted the BCs to undertake basic banking services *viz.,* Collection/payment of small value deposits, disbursal of small value loan amounts, collection of loan installments, receipt and delivery of small value remittances and sale of micro insurance/mutual fund products/ pension products/other third party products. Though, BC model has been gaining momentum since last two years, still desired results are not coming as the model is confronting the following issues and challenges, which need to be addressed on priority.

(i) *Operational Issues*: Cash management is the biggest challenge as the major operations of BCs pertains to cash transactions. It entails interest costs as well as operational risks. Further, the beneficiaries of BC services are mostly illiterate and are susceptible to misguidance. At times, customers tend to perceive the BCs as banks. The success of the model crucially depend on the trust levels among customers, banks and BCs, which is possible through spread of financial awareness by conducting financial literacy programmes on an ongoing basis.

(ii) *Viability*: The viability of the BC model is the most critical issue which probably is one of the main reasons for not taking-off the model as envisaged. The transaction volume is not encouraging since many of the accounts opened are in dormant stage. Absence of sufficient business is causing concern to both BCs as well as banks; and in turn it is becoming difficult for BCs to continue operations on account of mismatch of revenues earned and costs incurred. Banks need to tweak the products and work with the BCs to design products that are suitable to the target market to make the model profitable. Further, to make the BC model viable, the funds pertaining to various government schemes are to be routed directly through the beneficiaries' bank accounts only.

BRANCH EXPANSION

(i) *Physical Branches*: The penetration of banking in India is low compared to developed nations, which is evident from the presence of 5. 40 lakh unbanked villages across the country. Branch banking continues to play significant role in business development despite increased adoption of Alternate Delivery Channels in the recent years. The road map of Indian banks clearly indicates that BC model is going to be used in a big way to achieve the rural banking objective. However, banks need to open more number of brick and mortar branches especially in unbanked centers to cover the large population on one hand and branch network acts as service branch to route the transactions undertaken by BCs. Hence, branch network continued to grow in the ensuing years also.

(ii) *Ultra Small Branches (Mobile Branches)*: As part of the liberalized branch authorisation policy, RBI has granted general permission to domestic scheduled commercial banks to open satellite branches in unbanked areas where the population is under 50, 000. It envisages the extension of banking facilities through one or two dedicated staff members who visit the identified village location on specified days. It is a cost effective model compared to physical branch model. A designated officer of the link branch shall visit the village on a prefixed date and time every week with a laptop with Virtual Private Network (VPS) connectivity to Core Banking Platform. The role of the visiting official is authorization of the accounts, balance enquiry, printing of account statements and recovery. However, the normal cash transactions will be done by the BC agent only.

(iii) *Branch-in-a-Box*: It is primarily a cost-effective, relocatable and pre-fabricated bank branch. It uses modern, broadband satellite technology for communication. This enhances customer convenience as it provides speedy access. It can also be used to test new markets, especially in areas with limited infrastructure where banking services are not readily available. It provides full transaction facilities to customers, including cash withdrawals and deposits, sales and service.

MOBILE BANKING

Till recent years, Mobile/Cell phone used to be a status symbol or lifestyle product, and now it has become a necessity and inseparable with day-to-day life of the individuals irrespective of age, education and financial background. India accounts for about 1/4th of world's mobile market with 965 million and making inroads in to remote rural areas. The share of rural subscribers is around 35 per cent speaks growing potential of this segment. The reach of mobile to the remote areas and its usage by the common man has become order of the day. The swift growth in number of Mobile users and wider coverage of mobile phone networks has made this channel an important platform for extending banking services to customers. Mobile banking runs on Interbank Mobile Payment Service (IMPS) mode which enables the bank customers to have access to their bank accounts and carryout banking transactions including funds transfers across the banks using mobile phones independent of Branch/Business Correspondents.

M-wallet is the further extension of Mobile Banking and it acts like a pre-paid account operated through a mobile phone which can be used for small purchases, remittances, bill payments and cash withdrawals. Telecom players are playing significant role in taking this concept forward with strategic tie-ups with banks as service provider as well as business correspondents. As per the recent study, the cost effectiveness is one of the major advantages of the Mobile Banking, as the mobile based transaction cost is about 2 per cent of branch banking, 10 per cent of ATM and 50 per cent of the Internet banking.

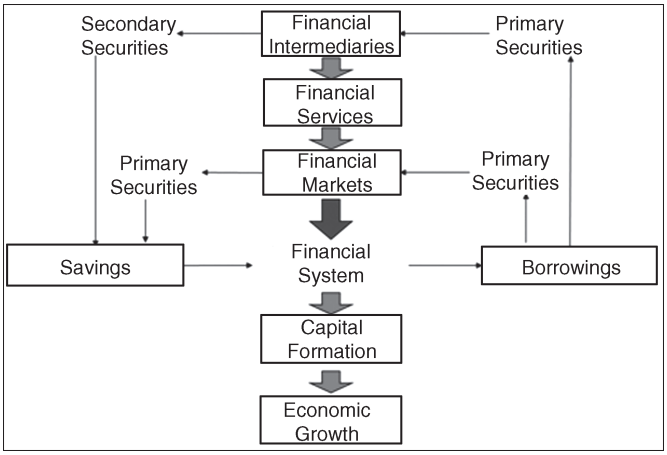
NO FRILLS ACCOUNTS

Taking the view that access to a bank account can be considered a public good, in 2005, RBI directed all banks to offer at all branches the facility of 'No Frills' Account (NFA) to any person desirous of opening such an account. These accounts have nil or low minimum balances and charges and have limited facilities. As at the end of the year 2009-10, 74. 4 million NFAs had been opened by the banking system. The impressive performance in terms of growth in number of NFA may not be contributory unless and otherwise, these accounts are considered to be active in operation. At the ground level, it was observed that most of the NFAs were non-operative and clients were not even aware of the terms of use of these accounts. There are certain barriers that inhibit the active operation of such accounts like the time and cost involved in reaching the nearest branch where the accounts have been opened. Concerted efforts by the implementing authorities by providing appropriate financial literacy with the innovations in use of technology will certainly improve the impact of these efforts to a greater extent.

7

Financial System and Economic Development

An economy consists of two kinds of economic structures that encompasses the financial system – Savings structure and Borrowing Structure



SAVINGS STRUCTURE

The savings structure in an economy consists of savers or entities that save in the form of financial assets (deposits, life insurance, etc) or cash balances. Savings can be estimated as the remainder or surplus from incomes earned after expenditures (food, rent, home supplies, etc). This surplus or savings can be directed in the form of financial assets or withheld as cash.

Savers or entities that save can be further categorised into the following:

- *Household sector:* The household sector include individuals, unincorporated businesses, farm production units and non-profit businesses. Savings for the household sector is mostly in financial such as includes deposits, life insurance, shares and debentures, provident and pension fund, loans for durables and real estate.

Savings are mostly considered synonymous to deposit accounts (offered by banks) though savings can be directed towards life insurance, provident and pension funds or loans on durables/real estate that are regarded as productive investments. Thus, household sector demand for financial assets to make productive use of their savings. The household sector contributes to a majority of the savings in India in comparison to the private and government sector

- *Private sector:* This sector includes non-government, non-financial companies, private financial institutions and co-operative institutions that are involved in production and/or distribution of goods and services. The sector mostly includes profit-making companies that are driven by various social, political, economic, technological, legal and demographic factors. Savings in this sector are in the form of net profit generated by businesses
- *State and Government sector:* This sector includes government, administrative departments and enterprises both departmental and non-departmental. Savings for this sector is the difference between government receipts and government expenditure. Receipts of government are classified into the following:
  - Revenue receipts such as tax revenues (corporate tax, income tax, other taxes on incomes and expenditure, taxes on wealth, customs, excise duties, service tax, other taxes/duties on commodities and services and surcharge transferred to national calamity and contingency fund) and non-tax revenues (consisting of interest receipts, dividends, profit from public enterprises and fees/charges for providing various services)
  - Non-debt capital receipts such as recoveries of loans and disinvestment of government's equity holdings in Public Sector Undertakings (PSUs).

Expenditures of government are classified into the following:

- Non-plan expenditures that include interest, subsidies, defence, pensions, police, grants-in-aid, loans, etc
- Plan expenditures include expenditures as per the Central plan and central assistance to state and Union Territories' (UT) plans.

Borrowing Structure

The borrowing structure in an economy comprises of "borrowers" or entities that finance their needs through borrowing. The needs of borrowers could involve incurring expenditures on labour, plant and equipment, constructing residential,

industrial or commercial sites and building additions to inventories. The borrowers include the government sector (central and state level), public sector and private sector corporations. The borrowers provide or supply financial assets to savers by issuing primary securities in financial markets, which in turn are reissued by financial intermediaries as secondary securities (in financial markets) for the savers as investments. The flow of savings (from the savings structure) to the flow of investments (to the borrowing structure) leads to capital formation or long-term investments

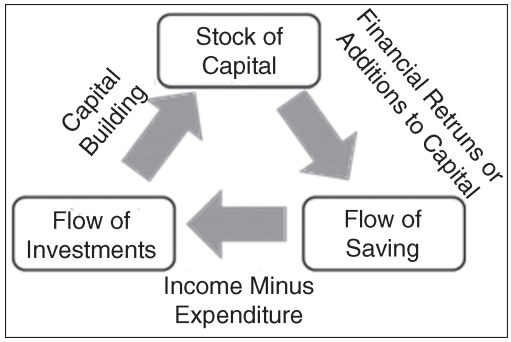


Fig. Capital Formation.

Capital Formation

The flow of money from savings to investments leads to formation of capital stock in the form of equipment, buildings, intermediate goods and inventories. Capital formation reflects the country's capability of producing and distributing goods and services across different sectors and industries thus leading to an increase in the country national incomes of economic growth. National income of a country or economic growth can be measured by calculating the Gross Domestic Product (GDP) or Gross National Product (GNP) that comprises economic activities in sectors like agriculture, industry and services requiring financial resources to allocate labour, capital and other factors of production.

Economic Growth

The savings and borrowing structure converge to build up capital in the country, which in turn leads to economic growth. The economic growth of an economy can be explained based on the association between household sector and the private/government sector. The household sector contributes to the market of factors of production (land, labour and capital) which act as expenses for firms in private and government sector incurred for production and distribution of goods and services in a market.

This market is the common platform where the household sector can purchase finished products/services for consumption. The returns from consumption are translated as profits to the firms which in turn are redistributed as wages and/or rent in the market of factors of production to the household sector. This circular

flow of money between the household and firms in private/government sector characterises the development of national incomes of an economy which is measured as Gross Domestic Product or GDP that encompasses consumption, investments, government spending or expenditures and net exports (exports minus imports). GDP can also be calculated as the sum of capital formation, consumption expenditure and net exports.

TYPES OF FINANCIAL MARKETS

The Stock Market is a series of exchanges where successful corporations go to raise large amounts of cash to expand. Stocks are shares of ownership of a public corporationthat are sold to investors through broker dealers. The investors profit when the companies increase their earnings, which keeps the U. S. economy growing. It's easy to buy stocks, but takes a lot of knowledge to buy stocks in the right company.

To a lot of people, the Dow is the stock market. However, the Dow, which is the nickname for the Dow Jones*Industrial* Average, is just one way of tracking the performance of a group of stocks. There is also the Dow Jones *Transportation* Average and the Dow Jones *Utilities* Average. Many investors ignore the Dow, and instead focus on the S&P 500 or other indices to track the progress of the stock market. The stocks that make up these averages are traded on the world's stock exchanges, two of which include the New York Stock Exchange and the Nasdq. Find out more about How the Stock Market Works.

Mutual funds give you the ability to buy a lot of stocks at once. In a way, this makes them an easier tool to invest in than individual stocks. By reducing stock market volatility, they have also had a calming effect on the U. S. economy. Despite their benefits, you still need to learn how to select a good mutual fund.

The Bond Market is where organizations go to obtain very large loans. Generally, when stock prices go up, bond prices go down. However, there are many differenttypes of bonds, including Treasury Bonds, corporate bonds, and municipal bonds. Bonds also provide some of the liquidity that keeps the U. S. economy functioning smoothly.

It's important to understand the relationship between Treasury bonds and Treasury bond yields. Basically, when Treasury bond values go down, the yields go up to compensate. When Treasury yields rise, so domortgage interest rates. Even worse, when Treasury values decline, so does the value of the dollar. This makes import prices rise, which can trigger inflation. Treasury yields can also predict the future – aninverted yield curve usually heralds a recession.

The Commodities Market is where companies offset their risk of purchasing or selling natural resources for future use. Since the prices of things like oil, corn and gold are so volatile, companies can lock in a known price today. Since these exchanges are public, many investors also trade in commodities for profit only, with no intention of purchasing large quantities of pork bellies, for example.

Oil is the most important commodity in the U. S. economy. It is used for transportation, industrial products, plastics, heating and electricity generation.

When oil prices rise, you'll see the effect in gas prices about a week later. If oil and gas prices stay high, you'll see the impact on food prices in about six weeks.

The price of oil is determined in the commodities futures market. What are futures? They are a way to pay for something today that is delivered tomorrow. This helps to remove some of the volatility in the U. S. economy by allowing businesses to control future costs of the critical commodities they use every day.

However, futures also increase a trader's leverage by allowing him or her to borrow the money to purchase the commodity. This leverage can create outsize gains, if traders guess right. It also magnifies the losses if traders guess wrong. If enough traders guess wrong, it can have a huge impact on the U. S. economy, actually increasing overall volatility. Commodities trading was responsible for record-high oil prices in 2008 and 2011, which resulted in food riots and even the Arab Spring.

Another important commodity is gold. It's bought as a hedge against inflation. Gold prices also go up when there is a lot of economic uncertainty in the world. In the past, every dollar could be traded in for its value in gold. However, once the U. S. went off the gold standard, it lost this relationship to money. Nevertheless, this history means that many people still look at gold as safer alternative to cash or currency.

Derivatives are complicated financial products that derive their value from underlying stocks and bonds. They are primarily used by sophisticated investors and hedge funds to magnify their potential gains. In 2007, hedge funds increased in popularity due to their supposed higher returns for high-end investors. Since hedge funds invest heavily in futures, some argued they decreased the volatility of the stock market and therefore the U. S. economy. However, hedge fund investments in subprime mortgages and other derivatives caused the 2008 global financial crisis.

Even before this, hedge funds had demonstrated their risky nature. In 1997, the world's largest hedge fund at the time, Long Term Capital Management, practically brought down the U. S. economy.

Forex Trading is when currencies are bought and sold. More than $5. 3 trillion is traded per day, and 87 per cent involves the U. S. dollar. Nearly one-fourth of the trades are done by banks for their customers, to reduce the volatility of doing business overseas. Hedge funds are responsible for another 11 per cent, and some of it is speculative. This market affects exchange rates, and therefore the value of the dollar and other currencies.

FUNCTIONS OF FINANCIAL MARKETS

Financial markets create an open and regulated system for companies to obtain large amounts of financial capital to grow their businesses. This is done through the stock and bond markets. Markets also allow these businesses to offset risk with commodities and foreign exchange futures contracts, as well as other derivatives.

Since the markets are public, they provide an open and transparent way to set prices on everything traded. These prices assume that all available knowledge about everything traded is taken into consideration. This reduces the cost of getting information, because it's already incorporated into the price.

The sheer size of the financial markets provide liquidity. In other words, sellers can easily unload assets whenever they need to raise cash.

The size also reduces the cost of doing business, since companies don't have to go far to find a buyer, or someone willing to sell.

RAISING CAPITAL

Financial markets attract funds from investors and channel them to corporations–they thus allow corporations to finance their operations and achieve growth. Money markets allow firms to borrow funds on a short term basis, while capital markets allow corporations to gain long-term funding to support expansion (known as maturity transformation).

Without financial markets, borrowers would have difficulty finding lenders themselves. Intermediaries such as banks, Investment Banks, and Boutique Investment Banks can help in this process. Banks take deposits from those who have money to save.

They can then lend money from this pool of deposited money to those who seek to borrow. Banks popularly lend money in the form of loans and mortgages.

More complex transactions than a simple bank deposit require markets where lenders and their agents can meet borrowers and their agents, and where existing borrowing or lending commitments can be sold on to other parties. A good example of a financial market is a stock exchange. A company can raise money by selling shares to investors and its existing shares can be bought or sold.

Lenders

Who have enough money to lend or to give someone money from own pocket at the condition of getting back the principal amount or with some interest or charge, is the Lender.

Individuals and Doubles

Many individuals are not aware that they are lenders, but almost everybody does lend money in many ways. A person lends money when he or she:

- Puts money in a savings account at a bank;
- Contributes to a pension plan;
- Pays premiums to an insurance company;
- Invests in government bonds;

Companies

Companies tend to be borrowers of capital. When companies have surplus cash that is not needed for a short period of time, they may seek to make money from their cash surplus by lending it via short term markets called money markets.

There are a few companies that have very strong cash These companies tend to be lenders rather than borrowers. Such companies may decide to return cash to surplus (*e.g.,* via a share repurchase.)

Alternatively, they may seek to make more money on their cash by lending it (*e.g.,* investing in bonds and stocks).

Borrowers

- *Individuals* borrow money via bankers' loans for short term needs or longer term mortgages to help finance a house purchase.
- *Companies* borrow money to aid short term or long term cash flows. They also borrow to fund modernization or future business expansion.
- *Governments* often find their spending requirements exceed their tax revenues. To make up this difference, they need to borrow. Governments also borrow on behalf of nationalized industries, municipalities, local authorities and other public sector bodies. In the UK, the total borrowing requirement is often referred to as the Public sector net cash requirement (PSNCR).

Governments borrow by issuing bonds. In the UK, the government also borrows from individuals by offering bank accounts and Premium Bonds. Government debt seems to be permanent. Indeed the debt seemingly expands rather than being paid off. One strategy used by governments to reduce the *value* of the debt is to influence *inflation*.

Municipalities and local authorities may borrow in their own name as well as receiving funding from national governments. In the UK, this would cover an authority like Hampshire County Council.

Public Corporations typically include nationalized industries. These may include the postal services, railway companies and utility companies. Many borrowers have difficulty raising money locally. They need to borrow internationally with the aid of Foreign exchange markets.

Borrowers having similar needs can form into a group of borrowers. They can also take an organizational form like Mutual Funds. They can provide mortgage on weight basis. The main advantage is that this lowers the cost of their borrowings.

DERIVATIVE PRODUCTS

During the 1980s and 1990s, a major growth sector in financial markets is the trade in so called derivative products, or derivatives for short. In the financial markets, stock prices, bond prices, currency rates, interest rates and dividends go up and down, creating *risk*. Derivative products are financial products which are used to *control* risk or paradoxically *exploit* risk. It is also called financial economics. Derivative products or instruments help the issuers to gain an unusual profit from issuing the instruments. For using the help of these products a contract has to be made.

CURRENCY MARKETS

Seemingly, the most obvious buyers and sellers of currency are importers and exporters of goods. While this may have been true in the distant past, when international trade created the demand for currency markets, importers and exporters now represent only 1/32 of foreign exchange dealing, according to the Bank for International Settlements.

ANALYSIS OF FINANCIAL MARKETS

Much effort has gone into the study of financial markets and how prices vary with time. Charles Dow, one of the founders of Dow Jones and Company and The Wall Street Journal, enunciated a set of ideas on the subject which are now called Dow theory. This is the basis of the so-called technical analysis method of attempting to predict future changes. One of the tenets of "technical analysis" is that market trends give an indication of the future, at least in the short term. The claims of the technical analysts are disputed by many academics, who claim that the evidence points rather to the random walk hypothesis, which states that the next change is not correlated to the last change. The role of human psychology in price variations also plays a significant factor.

Large amounts of volatility often indicate the presence of strong emotional factors playing into the price. Fear can cause excessive drops in price and greed can create bubbles. In recent years the rise of algorithmic and high-frequency programme trading has seen the adoption of momentum, ultra-short term moving average and other similar strategies which are based on technical as opposed to fundamental or theoretical concepts of market Behaviour. The scale of changes in price over some unit of time is called the volatility. It was discovered by Benoît Mandelbrot that changes in prices do not follow a Gaussian distribution, but are rather modeled better by Lévy stable distributions. The scale of change, or volatility, depends on the length of the time unit to a power a bit more than 1/2. Large changes up or down are more likely than what one would calculate using a Gaussian distribution with an estimated standard deviation.

FINANCIAL DEVELOPMENTS

Reforms in the financial sector have included the phasing in of prudential norms for income recognition, classification of assets and provisioning for bad debts, revised formats for making balance sheet and profit and loss accounts reflect the actual financial health and a time schedule for attaining 8 per cent capital to risk weighted assets for the scheduled commercial banks. The Statutory Liquidity Ratio (SLR) and Cash Reserve Ratio (CRR) were brought down to reduce the pre-emption of bank credit by Government and government borrowing was undertaken at market interest rates. The effects of these reforms on the financial health and performance of banks is gradually emerging. There has been progress by public sector banks in moving to the target of 8 per cent capital to risk weighted assets ratio (CRAR) by March end, 1996. By end March, 1994,

only four public sector banks had a CRAR over 8 per cent, four had between 6.7 per cent and 8 per cent and eight had a CRAR in the range of 4.3 per cent and 6.7 per cent. By end March, 1995 as many as 13 public sector banks reached CRAR of at least 8 per cent, while 10 banks had a CRAR of 4 per cent and above.

Only 4 banks have less than 4 per cent CRAR. In the private sector, all the banks had complied with 4 per cent norm by March, 1994 and propose to raise additional capital through public issue to attain 8 per cent CRAR by March, 1996. All new private sector banks start with 8 per cent CRAR.

The deregulation of bank interest rates undertaken in 1994-95 with the abolition of the minimum lending rate on bank loans above ₹ 2 lakh, was extended to the deposit side in 1995-96. From October 1, 1995 scheduled commercial banks became free to fix their interest rates on domestic term deposits of over two years. The stipulation of at least three slabs with a minimum interest rate differential of 0.25 per cent point imposed in April 1992 on term deposits, was also withdrawn. Banks already have the discretion to fix both maturities and interest rates on non-resident non-repatriable (NRNR) deposits. The entry of 9 new private sector banks during 1994-95 and 1995-96, and the potential future entry of more banks, is likely to spur competitiveness and cost consciousness, and greater attention to depositor interests.

The Board for Financial Supervision was set up in 1994-95 with statutory powers over financial institutions, banks and non-bank financial institutions. It is designed to provide guidance on the supervisory initiatives and interventions of RBI. Its Secretariat is provided by the newly set up Department of Supervision in RBI. In addition, there is also an Advisory Council to provide guidance. There are now five Debts Recovery Tribunals functioning along with an Appellate Tribunal, for expediting the loan recovery process through adjudication. A major institutional step in 1995-96 has been the appointment of eight Ombudsmen under Banking Ombudsman Scheme, 1995 (Out of 15 to be appointed for the country as a whole), who will function to resolve customers grievances in a quick and inexpensive manner.

With the State Bank of India entering capital market to raise ₹ 3200 crore the share of the RBI in the capital of SBI has come down to 66 per cent from 99 per cent earlier. The Government made a capital contribution of ₹ 5700 crores in 1993-94, ₹ 5287 crores in 1994-95 and ₹ 852 crores in 1995-96 (BE) to public sector banks to enable them to attain capital adequacy target.

The entire range of reforms, aimed at promoting competition within a prudent regulatory regime, is beginning to bear fruit. The financial position of the scheduled commercial banks has improved in 1994-95. The number of public sector banks declaring operating profits went up from 19 in 1992-93 to 26 in 1994-95.

Only one reported an operating loss. The number of public sector banks making net profits rose to 19 in 1994-95 from 15 in 1992-93. The average ratio of non-performing assets to the total advances, for the public sector banks, came down to 20 per cent in 1994-95 from 26 per cent in 1992-93.

Among the all-India financial institutions the amendment of the IDBI Act, 1964 in March 1995, made possible Industrial Development Bank of India (IDBI) maiden capital issue in July 1995. A new development finance institution, namely, the North Eastern Development Finance Corporation Ltd., with an initial paid up equity base of ₹ 100 crore (and authorised capital of ₹ 500 crore), is set to commence operations soon.

In the field of rural finance the prudential norms relating to income recognition were introduced for Regional Rural Banks (RRBs). An Expert Group examined the major issues concerning managerial and financial restructuring of RRBs and the role which could be assigned to non-government organisations and self-group in improving the rural credit delivery system. Steps were taken to increase the flow of credit to the small scale industries (SSI) sector with a special programme to open 100 specialised SSI bank branches in 85 identified districts by March 1996. By December 1995, 56 branches had been set up. A number of special schemes/funds were announced in the budget speech of 1995-96, which aim at counteracting shortfalls in priority sector advances and augmenting the flow of funds to relatively neglected areas/sectors.

These include:

(a) Rural Infrastructure Development Fund (RIDF) of ₹ 2,000 crore in the National Bank for the Agriculture and Rural Development (NABARD) to accelerate implementation of investment projects in agriculture irrigation and allied activities;

(b) A scheme for expanded provision of credit facilities to the Khadi and Village Industries Commission by a consortium of banks so as to increase production and employment in off-farm activities in rural areas and;

(c) A scheme for financing primary weavers'co- operative societies by the scheduled commercial banks to assist increased production of handloom cloth. The RIDF will be built with contributions by the scheduled commercial banks which have failed to achieve the target of priority sector advances. They will also be required to participate in the aforesaid schemes.

In the area of capital markets the abolition of the office of Controller of Capital Issues (CCI) in May 1992 and the setting up of Securities and Exchange Board of India (SEBI) with statutory powers and functions (February 1992) were the first decisive steps in the move from control to prudential regulation. Prudential regulation is as important as decontrol for the development of a healthy capital market, keeping in view investor interests.

The powers and functions of SEBI were strengthened in phases. SEBI has been empowered to regulate business in stock exchanges. Its ambit covers recognition of stock exchanges, their rules, articles, voting rights and nomination of public representatives, stock exchange listing and delivery contracts. The setting up of the National Stock Exchange (NSE) and computerisation of the Bombay Stock Exchange (BSE) will help improve the clearing and settlement mechanisms and substantially raise the levels of transparency.

SEBI has issued rules and procedures for registering and regulating the various market participants and intermediaries. These cover broker, bankers and registrars to an issue, merchant bankers, underwriters, portfolio managers, custodians, credit rating agencies, foreign institutional investors, venture capital funds, mutual funds and asset management companies. To enable SEBI to effectively carry out its functions of Stock Exchange regulation and investor protection, the Department of Company Affairs has delegated to SEBI powers to file complaints against violations of the Companies Act.

The notification covers issues pertaining to primary market such as listing of securities, refund of excess application money, delay in issues of shares and dispatch of dividend warrants. SEBI now has the authority to levy monetary penalties for a range of violations such as failure to redress investor grievances or observe rules and regulations by mutual funds, asset management companies, failure to disclose the aggregate of shareholding in a company, or to make public announcement for acquisition of share in the context of the takeover code.

Standards of disclosure and issue procedures have been tightened. Companies are now required to draw up their financial statements on a consistent basis with appropriate audit qualifications. They will be asked to indicate the sources of income from other than normal activities and to make the draft prospectus a public document. Finance companies are eligible to make an issue if they have operated for a minimum of two years, or are registered with RBI as a non-banking finance company or with SEBI as an intermediary.

The National Stock Exchange, which was established in 1993, has come of age, with daily average trading volume rising sharply in recent months. Screen based trading has also been instituted in the Bombay and Delhi Stock exchanges. Private mutual funds are now permitted and are allowed to apply for firm allotment in public issues. The carry forward system has been reformed.

The scrip-wise and broker-wise carry forward position shall be disclosed by the stock exchanges at the beginning of the carry forward session. Members doing financing of carry forward transactions will be subject to a cap of ₹ 10 crore. The depositories ordinance, re-issued in January 1996, will provide a legal framework for the establishment of depositories to record ownership details in book entry form. The de-materialisation of scrips that this makes possible will eliminate a number of hazards associated with paper based stock market trading, such as a high proportion of bad deliveries, high risk of loss, cumbersome procedures and long delays.

As a result of the past four years of reform, there has been a significant increase in market activity. Equity capital raised, mainly by the private corporate sector, has increased from ₹ 5562 crore in 1991-92 to ₹ 27621 crore in 1994-95. During April- December 1995, ₹ 14155 crore of capital has been raised. The market capitalisation of BSE almost doubled from ₹ 3,23,363 crore in 1991-92 to ₹ 6,44,478 crore at the end of December 1995.

The number of listed firms at the BSE has doubled from 2601 in 1991-92 to 5398 in December 1995. Besides UTI, there are now 9 public sector mutual

funds and 16 private sector mutual funds in operation. During April-December 1994-95, Mutual Funds including UTI had raised ₹ 1,601 crore through 32 new schemes.

At the end of January 1996, 350 foreign institutional investors (FIIs) were registered with SEBI compared to only 10 in January 1993. They had invested a total of ₹ 14,129 crore in the securities market Indian companies were also permitted to access international capital markets through euro-equity shares and by the end of December 1995 Indian firms had raised US $ 5.18 billion through global depository receipts (GDRs) and foreign currency convertible bonds (FCCBs).

Thus the total inflow of foreign Portfolio capital into the Indian capital market since the launching of economic reforms amounts to $ 8.9 billion. This is further indication of improved international creditworthiness of India resulting from successful economic reforms.

FINANCIAL SERVICES IN INDIA

In last few years, India has emerged as the one of the most rapidly growing economies in the world. India has been categorized with nations like Brazil, Russia and China (BRIC Nations) who are going to be the prime drivers of world economy in next few decades. Since the time, India first opened its gates to foreign investment (FDI & FII), there has been a complete turnaround. Now the traditional Hindu rate of growth is a thing of past and clocking 8%-9% GDP growth rate is the common norm. India along with other Asian powerhouse China makes for the fastest growing nations in the entire world.

Even if we take the case of ongoing global recession, India has managed to perform far better than other nations. Right from banking system to financial regularities, the country has thrived on discipline and out-performance. The booming Indian economy resulted in widespread growth and arrival of new industries. The most sparkling phenomenon is in form of financial market of India.

Financial services in India has taken a giant leap from the days of standing in banks queue for several hours for opening a saving account or trying to get some fixed deposits (FD) done. The financial services have increased manifold and now people have the choice to choose the one that most suitably fits the bill.

There are several services like broking firms, investment services, financial consulting, evergreen national banks, numerous private banks, mutual funds, car and home loans, equity market and other banking services. Services are many and offered by blue chip names of the industry. Most of the companies in financial segment offer taxation services, project consultancy services and all the services of wide financial gamut.

Whether it's taking a car loan or booking your favourite house, going for pension plan or getting your child insured, numerous attractive financial services are available at affordable costs. Personal banking services have acquired an altogether new meaning. Now customers have multiple choices to choose from.

One can find all the financial services on the internet that are just a call away.

With market sentiment turning positive due to the formation of a stable newly elected government, the ripple effect is likely to be felt across all the financial services in India. The sectors, including banking and insurance, and mutual funds are all beginning to reap the benefits of a good closure for 2008-09. The Indian economy is estimated to have grown by 6.7 per cent in 2008-09. According to the latest Central Statistical Organisation (CSO) data, financial services and real estate sector rose by 9.5 per cent in the first quarter of 2009-10.

The government has taken a number of steps in recent months to revive the economy, including slashing interest rates, lowering factory levies and more than doubling the limit on foreign investment in corporate bonds. The financial services space is a rapidly growing one in India. The country received US$ 45 billion in foreign currency remittances from non-resident Indians in 2008, the highest in the world.

Foreign institutional investors' (FIIs) net investments in Indian equities crossed US$ 8 billion in calendar year 2009.

The mutual fund industry has seen an 8.7 per cent increase in the asset base for the month of August 2009, against an increase of 2.8 per cent in July 2009, largely due to significant inflows into debt schemes.

The average assets under management of the mutual fund industry stood at US$ 153.89 billion as at end August 2009, according to the data released by Association of Mutual Funds in India (AMFI).

With the capital market showing signs of revival, banks and financial companies that had put their mutual fund plans on hold are gearing up to enter the segment.

At present, nine players from the financial services sector are in various stages of entering the space. The list includes Bank of India, IDBI Bank, Axis Bank, Mahindra and Mahindra Financial Services (M&M Finance), SREI Infrastructure Finance, Bajaj Allianz, Indiabulls Financial Services, L&T Finance and Motilal Oswal.

India has increased its exposure to American debt securities by over three-fold to US$ 38.2 billion till March 2009 as against US$ 11.8 billion in March 2008, according to the data from the US Treasury Department.

The country's foreign exchange reserves rose by US$ 1.28 billion to touch US$ 277.64 billion for the week ended September 4, 2009, according to the figures released in the Reserve Bank of India's Weekly Statistical Supplement.

The World Bank and India have concluded negotiations for loans worth US$ 3.2 billion for recapitalising state-run banks and funding for the India Infrastructure Finance Company Ltd.

INTERNATIONAL FINANCIAL MARKETS

In economics, a market is defined as a set of arrangements whereby buyers and sellers come together and enter into contracts to exchange goods or services. An international financial market works on exactly the same principles. Financial

instruments and services, which include diverse items such as currencies, private banking services and corporate finance advice, are traded internationally, that is, across national frontiers.

Below, the different types of global financial markets and key international financial centres are identified, followed by a discussion of the different ways of classifying markets, and how imperfections and trade impediments affect market operations.

Financial markets are classified by several different criteria as follows.

1. The markets are global if instruments and services are traded across national frontiers and/or financial firms set up subsidiaries or branches in different national markets. For example, while the trade in *futures* for pork bellies is global, the actual buying and selling of pork bellies themselves is likely to be confined to national or even local markets. Wholesale banking (banking services offered to the business sector) might include international trade of financial instruments on behalf of a client, or the establishment of branches and subsidiaries of the financial firm in other financial centres, to enable it to better assist home clients with global operations, and to attract new clients from the host and other countries.
2. The maturity of the instruments being traded. Maturity refers to the date when a financial transaction is completed. For example, any certificate of deposit that repays its buyer within a year is classified as a *short-term* financial instrument. If a bank agrees to an international loan to be repaid in full at some date that exceeds a year, it is a *long-term* asset for the lender; a liability for the borrower. Sometimes, an instrument is designated *medium-term* if it matures between 1 and 5 years. Short-term claims are normally traded on *money* markets, and long-term claims (bonds, equities, mortgages) are usually traded on *capital* markets.
3. Whether the instruments are primary or secondary. A primary market is a market for new issues by governments or corporations, such as bonds and equities. An example would be *initial public offerings* (IPOs) of shares in firms. Securities that have already been issued are traded on secondary markets. Financial institutions are said to be *market makers* if they buy/sell (‘‘make markets’’) in existing bonds, equities or other securities; they are acting as intermediaries between buyers and sellers.
4. How the instrument is traded. In the past, almost all instruments were traded in a physical location, a trading floor. However, the advent of fast computer and telephone links means almost all instruments, including derivatives, equities and bonds, are traded electronically, without a physical floor. One notable exception is the New York Stock Exchange where, through ‘‘open outcry’’, equities are traded on the floor of the exchange. It is also common to observe these traditional methods in some of the developing and emerging markets.

KEY INTERNATIONAL FINANCIAL MARKETS

In the new millennium, nearly all financial markets in the main industrialised economies are international. The main exceptions are retail banking markets and personal stockbroking, but even here there are some global features. Obtaining foreign exchange for holiday makers is a long-established international transaction, and now debit cards issued by banks may be used world-wide, allowing customers to withdraw cash in a local currency. Some foreign banks, if permitted by the authorities, are expanding into retail markets, though currently these institutions tend to offer a few niche products and/or target high net worth individuals. In Europe, under the Second Banking Directive (1989, effective 1993), approved credit institutions from one EU country can set up banks in any other EU state and undertake a list of approved activities they offer in their home state. In 2000, the Financial Services Action Plan was launched, to bring about the integration of financial markets by 2005. Likewise, personal customers effectively invest in foreign shares by buying or selling unit trusts (mutual funds), which include shares in foreign firms. Some financial firms hoped to use internet technology to enter established financial markets rather than physical locations or branches, but this option is proving more difficult than was first envisaged.

There are several reasons why most financial markets are global. First, investors are able to spread risks by diversification into global markets to increase portfolio returns. A bigger pool of funds should mean borrowers are able to raise capital at lower costs. With an increased number of players, competition is increased.

Funds can be transferred from capital-rich to capital-deficient countries. Hence, global markets bring about a more efficient distribution of capital at the lowest possible price. At the same time, there are impediments to free trade in global financial markets – they are by no means perfect. Market imperfections are caused by the following factors.

1. Differences in tax regimes, financial reporting and accounting standards, national business cycles, and cultural and taste differences.
2. Barriers to free trade including tariffs (*e.g.*, governments imposing higher taxes on domestic residents' income from *foreign* assets), non-tariff barriers (*e.g.*, restricting the activities of foreign financial firms in a given country), and import or export quotas (*e.g.*, nationals are prohibited from taking currency out of the country).
3. Barriers to factor mobility, such as capital controls, or restrictions on the employment of foreign nationals.
4. Asymmetric information, when one party to a financial contract has more information relevant to the contract than the other agent. For example, borrowers typically have more information than lenders on their ability to repay, which can cause a bank to make inappropriate lending decisions. The problem is more pronounced in the case of foreign loans if it is more difficult to obtain information on prospective foreign borrowers. Banks try to counter the problem by restricting the

size of loans, requiring a potential borrower to obtain a minimum score on a credit risk check list, and so on. More generally, the greater the transparency in a financial market, the more efficient it is. Imperfect information is a central cause of inefficient financial markets.

The main financial markets are listed below.

Money Markets (Maturity of less than 1 year)

Money markets consist of the discount, interbank, certificate of deposit and local (municipal) authority and eurocurrency markets. The eurocurrency and interbank markets are wholly international, whereas the other markets listed are largely domestic. In the 1950s, the Soviet Union used the Moscow Narodny bank in London for US dollar deposits.

The euromarket grew out of the eurodollar market later in the 1950s, after US regulators imposed interest rate ceilings on deposits and restrictions on US firms using dollars to fund the establishment of overseas subsidiaries. This increased the use of eurodollar deposits and loans in London, with funding from US investors wishing to escape US domestic deposit rate ceilings. Likewise, in other countries with exchange and other capital controls, eurocurrency markets were a way of getting around them. Although many of these regulations have long since been abandoned, the euromarkets continue to thrive. Interbank markets exist because, at the end of a trading day, banks may find themselves long on deposits or short on loans. The interbank market allows surplus banks to make overnight deposits at other deficit banks.

CONSTITUENTS OF FINANCIAL MARKET

BASED ON MARKET LEVELS

- *Primary market:* Primary market is a market for new issues or new financial claims. Hence it's also called new issue market. The primary market deals with those securities which are issued to the public for the first time.
- *Secondary market:* It's a market for secondary sale of securities. In other words, securities which have already passed through the new issue market are traded in this market. Generally, such securities are quoted in the stock exchange and it provides a continuous and regular market for buying and selling of securities.

Simply put, primary market is the market where the newly started company issued shares to the public for the first time through IPO (initial public offering). Secondary market is the market where the second hand securities are sold.

Based on Security Types

- *Money market:* Money market is a market for dealing with financial assets and securities which have a maturity period of up to one year. In other words, it's a market for purely short term funds.

- *Capital market:* A capital market is a market for financial assets which have a long or indefinite maturity. Generally it deals with long term securities which have a maturity period of above one year. Capital market may be further divided into:
  - Govt. securities market and
  - Long term loans market.
- *Equity markets:* A market where ownership of securities are issued and subscribed is known as equity market. An example of a secondary equity market for shares is the Bombay stock exchange.
- *Debt market:* The market where funds are borrowed and lent is known as debt market. Arrangements are made in such a way that the borrowers agree to pay the lender the original amount of the loan plus some specified amount of interest.
- *Derivative markets:* A market where financial instruments are derived and traded based on an underlying asset such as commodities or stocks.
- *Financial service market:* A market that comprises participants such as commercial banks that provide various financial services like ATM. Credit cards. Credit rating, stock broking, *etc.*, is known as financial service market. Individuals and firms use financial services markets, to purchase services that enhance the working of debt and equity markets.
- *Depository markets:* A depository market consist of depository institutions that accept deposit from individuals and firms and uses these funds to participate in the debt market, by giving loans or purchasing other debt instruments such as treasure bills.
- *Non-Depository market:* Non-depository market carry out various functions in financial markets ranging from financial intermediary to selling, insurance, *etc.* The various constituency in non-depositary markets are mutual funds, insurance companies, pension funds, brokerage firms, *etc.*

INTERMEDIATION FINANCIAL MARKETS

An *intermediation financial market* is a financial market in which financial intermediaries help transfer funds from savers to borrowers by issuing certain types of financial assets to savers and receiving other types of financial assets from borrowers. The financial assets issued to savers are claims against the financial intermediaries, hence liabilities of the financial intermediaries, whereas the financial assets received from borrowers are claims against the borrowers, hence assets of the financial intermediaries.

ADDITIONAL DISTINCTIONS AMONG SECURITIES MARKETS

Primary versus Secondary Markets

Primary markets are securities markets in which *newly* issued securities are offered for sale to buyers. *Secondary markets* are securities markets in which *existing* securities that have previously been issued are resold. The initial issuer raises funds only through the primary market.

Debt Versus Equity Markets

Debt instruments are particular types of securities that require the issuer (the borrower) to pay the holder (the lender) certain fixed dollar amounts at regularly scheduled intervals until a specified time (the maturity date) is reached, regardless of the success or failure of any investment projects for which the borrowed funds are used.

A debt instrument holder only participates in the management of the debt instrument issuer if the issuer goes bankrupt. An example of a debt instrument is a 30-year mortgage.

In contrast, an *equity* is a security that confers on the holder an ownership interest in the issuer.

There are two general categories of equities: "preferred stock" and "common stock."

Common stock shares issued by a corporation are claims to a share of the assets of a corporation as well as to a share of the corporation's net income – *i.e.*, the corporation's income after subtraction of taxes and other expenses, including the payment of any debt obligations. This implies that the return that holders of common stock receive depends on the economic performance of the issuing corporation.

Holders of a corporation's common stock typically participate in any upside performance of the corporation in two ways: by receiving a share of net income in the form of dividends; and by enjoying an appreciation in the price of their stock shares.

However, the payment of dividends is not a contractual or legal requirement. Even if net earnings are positive, a corporation is not obliged to distribute dividends to shareholders. For example, a corporation might instead choose to keep its profits as retained earnings to be used for new capital investment (self-financing of investment rather than debt or equity financing).

On the other hand, corporations cannot charge losses to their common stock shareholders. Consequently, these shareholders at most risk losing the purchase price of their shares, a situation which arises if the market price of their shares declines to zero for any reason. An example of a common stock share is a share of IBM.

In contrast, *preferred stock shares* are usually issued with a par value (*e.g.*, $100) and pay a fixed dividend expressed as a percentage of par value. Preferred stock is a claim against a corporation's cash flow that is prior to the claims of its common stock holders but is generally subordinate to the claims of its debt holders.

In addition, like debt holders but unlike common stock holders, preferred stock holders generally do not participate in the management of issuers through voting or other means unless the issuer is in extreme financial distress (*e.g.*, insolvency). Consequently, preferred stock combines some of the basic attributes of both debt and common stock and is often referred to as a *hybrid security*.

Money versus Capital Markets

The *money market* is the market for shorter-term securities, generally those with one year or less remaining to maturity.

Examples: U.S., Treasury bills; negotiable bank certificates of deposit (CDs); commercial paper, Federal funds; Eurodollars.

Remark: Although the maturity on certificates of deposit (CDs) – *i.e.*, on large time deposits at depository institutions – can run anywhere from 30 days to over 5 years, most CDs have a maturity of less than one year. Those with a maturity of more than one year are referred to as *term* CDs. A CD that can be resold without penalty in a secondary market prior to maturity is known as a *negotiable* CD.

The *capital market* is the market for longer-term securities, generally those with more than one year to maturity.

Examples: Corporate stocks; residential mortgages; U.S., government securities (marketable long-term); state and local government bonds; bank commercial loans; consumer loans; commercial and farm mortgages.

Remark: Corporate stocks are conventionally considered to be long-term securities because they have no maturity date.

Domestic Versus Global Financial Markets:

Eurocurrencies are currencies deposited in banks outside the country of issue. For example, *eurodollars*, a major form of eurocurrency, are U.S., dollars deposited in foreign banks outside the U.S., or in foreign branches of U.S., banks. That is, eurodollars are dollar-denominated bank deposits held in banks outside the U.S.

An *international bond* is a bond available for sale outside the country of its issuer.

Example of an International Bond: a bond issued by a U.S., firm that is available for sale both in the U.S., and abroad.

A *foreign bond* is an international bond issued by a country that is denominated in a foreign currency and that is for sale exclusively in the country of that foreign currency.

Example of a Foreign Bond: a bond issued by a U.S., firm that is denominated in Japanese yen and that is for sale exclusively in Japan.

A *Eurobond* is an international bond denominated in a currency other than that of the country in which it is sold. More precisely, it is issued by a borrower in one country, denominated in the borrower's currency, and sold outside the borrower's country.

Example of a Eurobond: Bonds sold by the U.S., government to Japan that are denominated in U.S., dollars.

ASYMMETRIC INFORMATION IN FINANCIAL MARKETS

Asymmetric information in a market for goods, services, or assets refers to differences ("asymmetries") between the information available to buyers and

the information available to sellers. For example, in markets for financial assets, asymmetric information may arise between lenders (buyers of financial assets) and borrowers (sellers of financial assets).

Problems arising in markets due to asymmetric information are typically divided into two basic types: "adverse selection;" and "moral hazard. " This section explains these two types of problems, using financial markets for concrete illustration.

Adverse Selection

Adverse selection is a problem that arises for a buyer of goods, services, or assets when the buyer has difficulty assessing the quality of these items in advance of purchase.

Consequently, adverse selection is a problem that arises because of different ("asymmetric") information between a buyer and a seller *before* any purchase agreement takes place.

An Illustration of Adverse Selection in Loan Markets: In the context of a loan market, an adverse selection problem arises if the contractual terms that a lender sets in advance in an attempt to protect himself against the consequences of inadvertently lending to high risk borrowers have the perverse effect of encouraging high risk borrowers to self-select into the lender's loan applicant pool while at the same time encouraging low risk borrowers to self-select out of this pool. In this case, the lender's pool of loan applicants is adversely affected in the sense that the average quality of borrowers in the pool decreases.

Moral Hazard

Moral hazard is said to exist in a market if, after the signing of a purchase agreement between the buyer and seller of a good, service, or asset:

- The seller changes his or her behaviour in such a way that the probabilites (risk calculations) used by the buyer to determine the terms of the purchase agreement are no longer accurate;
- The buyer is only imperfectly able to monitor (observe) this change in the seller's behaviour.

For example, a moral hazard problem arises if, after a lender purchases a loan contract from a borrower, the borrower increases the risks originally associated with the loan contract by investing his borrowed funds in more risky projects than he originally reported to the lender.

THE CONCEPT OF PRESENT VALUE

Suppose someone promises to pay you $100 in some future period T. This amount of money actually has two different values: a *nominal value* of $100, which is simply a measure of the number of dollars that you will receive in period T; and a *present value* (sometimes referred to as a *present discounted value*), roughly defined to be the minimum number of dollars that you would have to give up today in return for receiving $100 in period T.

Stated somewhat differently, the present value of the future $100 payment is the value of this future $100 payment measured in terms of current (or present) dollars.

The concept of present value permits financial assets with different associated payment streams to be compared with each other by calculating the value of these payment streams in terms of a single common unit: namely, current dollars.

A specific procedure for the calculation of present value for future payments will now be developed.

Present Value of Payments One Period into the Future

If you save $1 today for a period of one year at an annual interest rate i, the *nominal value* of your savings after one year will be

$$V(1) = (1+i)*\$1,$$

where the asterisk "*" denotes multiplication.

On the other hand, proceeding in the reverse direction from the future to the present, the *present value* of the future dollar amount V(1) = (1+i)*$1 is equal to $1. That is, the amount you would have to save today in order to receive back V(1)=(1+i)*$1 in one year's time is $1.

Notice that this calculation of $1 as the present value of V(1)=(1+i)*$1 satisfies the following formula:

$$\text{Present Value of } V(1) = \frac{V(1)}{(1+i)}$$

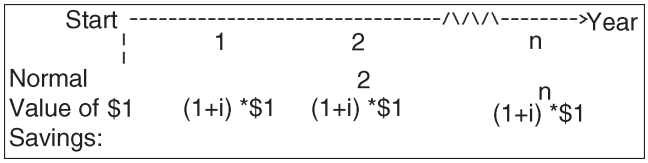
Indeed, given *any* fixed annual interest rate i, and *any* payment V(1) to be received one year from today, the *present value* of V(1) is given by formula in above. In effect, then, the payment V(1) to be received one year from now has been discounted back to the present using the annual interest rate i, so that the value of V(1) is now expressed in current dollars.

Present Value of Payments Multiple Periods into the Future

If you save $1 today at a fixed annual interest rate i, what will be the value of your savings in one year's time? In two year's time? In n year's time? If you save $1 at a fixed annual interest rate i, the nominal value of your savings in one year's time will be V(1)=(1+i)*$1. If you then put aside V(1) as savings for an additional year rather than spend it, the nominal value of your savings at the end of the second year will be

$$V(2) = (1+i)*V(1) = (1+i)*(1+i)*\$1 = (1+i)^2*\$1.$$

And so forth for any number of years n.



Now consider the present value of $V(n) = (1+i)^n * \$1$ for any year n. By construction, V(n) is the nominal value obtained after n years when a single dollar is saved for n successive years at the fixed annual interest rate i. Consequently, the present value of V(n) is simply equal to \$1, regardless of the value of n.

Notice, however, that the present value of V(n) – namely, \$1 – can be obtained from the following formula:

$$\text{Present Value of } V(n) = \frac{V(n)}{(1+i)^n}$$

Indeed, given *any* fixed annual interest rate i, and *any* nominal amount V(n) to be received n years from today, the present value of V(n) can be calculated by using formula above.

Present Value of any Arbitrary Payment Stream

Now suppose you will be receiving a sequence of three payments over the next three years. The nominal value of the first payment is \$100, to be received at the end of the first year; the nominal value of the second payment is \$150, to be received at the end of the second year; and the nominal value of the third payment is \$200, to be received at the end of the third year.

Given a fixed annual interest rate i, what is the present value of the *payment stream* (\$100, \$150, \$200) consisting of the three separate payments \$100, \$150, and \$200 to be received over the next three years?

To calculate the present value of the payment stream (\$100, \$150, \$200), use the following two steps:

- *Step 1:* Use formula above to separately calculate the present value of each of the individual payments in the payment stream, taking care to note how many years into the future each payment is going to be received.
- *Step 2:* Sum the separate present value calculations obtained in Step 1 to obtain the present value of the payment stream as a whole.

Carrying out Step 1, it follows from formula above that the present value of the \$100 payment to be received at the end of the first year is \$100/(1+i). Similarly, it follows from formula above that the present value of the \$150 payment to be received at the end of the second year is

$$\frac{\$150}{(1+i)^2}$$

Finally, it follows from formula previous that the present value of the \$200 payment to be received at the end of the third year is

$$\frac{\$200}{(1+i)^3}$$

Consequently, adding together these three separate present value calculations in accordance with Step 2, the present value PV(i) of the payment stream (\$100, \$150, \$200) is given by

$$PV(i) = \frac{\$100}{(1+i)^1} + \frac{\$150}{(1+i)^2} + \frac{\$200}{(1+i)^3}$$

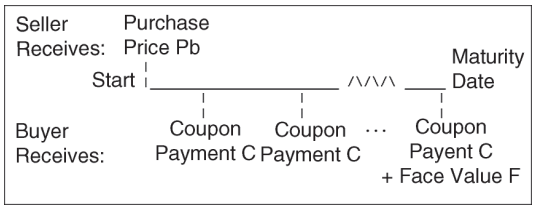
More generally, given *any* fixed annual interest rate i, and given *any* payment stream (V1, V2, V3. . ., VN) consisting of individual payments to be received over the next N years, the present value of this payment stream.

MEASURING INTEREST RATES BY YIELD TO MATURITY

By definition, the current annual *yield to maturity* for a financial asset is the particular fixed annual interest rate i which, when used to calculate the present value of the financial asset's future stream of payments to the financial asset's owner, yields a present value equal to the current market value of the financial asset.

Yield to Maturity for Coupon Bonds

The basic contractual terms of a coupon bond are as follows:



Consider a coupon bond whose purchase price is Pb=$94, whose face value is F = $100, whose annual coupon payment is C = $10, and whose maturity is 10 years.

The payment stream to the buyer (new owner) generated by this coupon bond is given by

($10, $10, $10, $10, $10, $10, $10, $10, $10, [$10 + $100]).

For any given fixed annual interest rate i, the present value PV(i) of the payment stream above is given by the sum of the separate present value calculations for each of the annual payments in this payment stream as determined by formula previous. That is,

$$PV(i) = \$10/(1+i) + \$10/(1+i)^2 + \ldots + \$10/(1+i)^{10} + \$100/(1+i)^{10}.$$

The current value of the coupon bond is its current purchase price Pb = $94. It then follows by definition that the yield to maturity for this coupon bond is found by solving the following equation for i:

$$Pb = PV(i).$$

The calculation of the yield to maturity i from formula previous can be difficult, but tables have been published that permit one to read off the yield to maturity i for a coupon bond once the purchase price, the face value, the coupon rate, and the maturity are known. More generally, given any coupon bond with purchase price Pb, face value F, coupon payment C, and maturity N, the yield to maturity i is found by means of the following formula:

$$Pb = PV(i),$$

where the present value PV(i) of the coupon bond is given by

$$PV(i) = C/(1+i) + C/(1+i)^2 + \ldots + C/(1+i)^N + F/(1+i)^N.$$

INTEREST RATES VS. RETURN RATES

Given any asset A held over any given time period T, the return to A over the holding period T is, by definition:

- The sum of all *payments* (rents, coupon payments, dividends, *etc.*) generated by A during period T, assumed paid out at the end of the period,
- Plus the *capital gain (+) or loss (-)* in the market value of A over period T, measured as the market value of A at the end of period T minus the market value of A at the beginning of period T.

The *return rate* on asset A over the holding period T is then defined to be the return on A over period T divided by the market value of A at the beginning of period T.

More precisely, suppose that an asset A is held over a time period that starts at some time t and ends at time t+1. Let the market value of A at time t be denoted by P(t) and the market value of A at time t+1 be denoted by P(t+1). Finally, let V(t, t+1) denote the sum of all payments accruing to the holder of asset A from t to t+1, assumed to be paid out at time t+1.

Then, by definition, the return rate on asset A from t to t+1 is given by the following formula:

Return Rate on

$$\text{Asset A From} = \frac{V(t,t+1)+P(t+1) - P(t)}{P(t)}$$

$$\text{time t to t+1} = \frac{V(t,t+1)}{P(t)} + \frac{P(t+1) - P(t)}{P(t)}$$

= payments + Capital Gain (if +)
received as or Loss (if -) as
percentage percentage of P(t)
of P(t)

Formula above holds for any asset A, whether physical or financial. The question then arises: For financial assets, what is the connection between the return rate defined by formula above and the interest rate on the financial asset defined by the yield to maturity?

The return rate on a financial asset is not necessarily equal to the yield to maturity on the financial asset. Starting at any current time t, the return rate is calculated for *some specified holding period from t to t'*, whether or not this holding period coincides with the maturity of the financial asset.

Moreover, the return rate takes into account any capital gains or losses that occur during this holding period, in addition to any payments received from the financial asset during this holding period.

In contrast, starting at any current time t, the yield to maturity takes into account the payment stream generated by the financial asset *over its entire remaining maturity*, plus the overall anticipated capital gain or loss that will be incurred *when the financial asset is held to maturity.*

REAL VS. NOMINAL INTEREST RATES

The yield to maturity measure of an interest rate, as examined to date, has been "nominal" in the sense that it has not been adjusted for expected changes in prices.

What actually concerns a "rational" saver considering the purchase of a financial asset is not the nominal payment stream he or she expects to earn in future periods but rather the command over purchasing power that this nominal payment stream is expected to entail. This purchasing power depends on the behaviour of prices.

Let $inf^e(t)$ denote the expected inflation rate at time t, and let i(t) denote the (nominal) yield to maturity for some financial asset at time t. Then the *real interest rate* associated with i(t) is defined by the following "Fisher equation:"

$$i_r(t) = i(t) - inf^e(t).$$

That is, the real interest rate is the nominal interest rate minus the expected inflation rate.

Note: The real interest rate defined by above is more precisely called the *ex ante* real interest rate because it adjusts for *expected* changes in the price level. If the *expected* inflation rate in above is replaced by the *actual* inflation rate, one obtains the *ex post* real interest rate.

Real interest rates provide a more accurate measure of the true costs of borrowing and the true gains from lending than nominal interest rates, and hence provide a better indicator of the incentives to borrow and lend. In particular, for any given nominal interest rate i on a debt instrument D, the incentive to borrow (issue D) will be higher if the real interest rate associated with i is lower (*i. e.,* the expected inflation rate is higher).

This is so since a higher expected inflation rate means the borrower (issuer of D) can expect to pay off his future nominal debt obligations using cheaper dollars than he borrowed. For this same reason, the incentive to lend (purchase D) will be lower if the real interest rate associated with i is lower.

A similar distinction is made between the (nominal) return rate defined by above, which has not been adjusted for expected changes in prices, and the "real return rate" which is subject to such adjustment. More precisely, the *real return rate* on any asset A over any holding period from t to t+1 is defined to be the (nominal) return rate above minus the expected inflation rate $inf^e(t)$.

BANKING PERFORMANCE AND SOCIO ECONOMIC DEVELOPMENT

"Banking Performance and Socio-Economic Development" is a comprehensive exploration of the crucial role played by banking institutions in fostering socio-economic development worldwide. This insightful book examines the intricate relationship between banking performance and broader indicators of socio-economic progress, offering valuable insights for policymakers, economists, bankers, and scholars alike. Through a combination of theoretical analysis and empirical research, the book investigates various aspects of banking performance, including efficiency, stability, innovation, and access to financial services. It explores how these factors impact key socio-economic indicators such as poverty reduction, income inequality, employment generation, and economic growth. Drawing on case studies from diverse geographical regions and banking systems, the book highlights best practices and identifies challenges faced by banks in promoting socio-economic development. It examines the role of regulatory frameworks, technological advancements, and financial inclusion initiatives in shaping banking performance and its impact on society. With its interdisciplinary approach, "Banking Performance and Socio-Economic Development" contributes to the ongoing dialogue on the role of banking in promoting inclusive and sustainable development. Whether used as a textbook in academic settings or as a reference guide for policymakers and practitioners, this book offers valuable insights into the complex dynamics of banking and its implications for socio-economic progress.

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