RELATIVE EFFICIENCY OF CONVENTIONAL AND ISLAMIC BANKING SYSTEMS IN FINANCING INVESTMENT

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By
S. M. ALI AKKAS

DEPARTMENT OF FINANCE AND BANKING
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Certification

This is to certify that the thesis "Relative Efficiency of Conventional and Islamic Banking Systems in Financing Investment" submitted for the award of the Doctor of Philosophy in Finance and Banking to the University of Dhaka is a record of bonafide research carried out by Mr. S. M. Ali Akkas under my supervision.

Signature: Rahman

(Dr. A. H. M. Habibur Rahman)

Declaration

Except where otherwise indicated this thesis is my own work

Signature.....

(S. M. Ali Akkas)
December, 1996

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ABBREVIATIONS

ACTE	Administrative Cost Per Taka Employed
BRAC	Bangladesh Rural Advancement Committee
FRM	Fixed Return Mechanism
FUR	Fund Utilisation Rate
IBBL	Islami Bank Bangladesh Limited
IBs	Islamic Banks
L/C	Letter of Credit
PEAC	Per Employee Administrative Cost
PEDM	Per Employee Deposit Mobilisation
PEFU	Per Employee Fund Utilisation
PLS	Profit-Loss Sharing
PRSCBs	Private Sector Conventional Banks
PSCBs	Public Sector Conventional Banks
VRM	Variable Return Mechanism

ABSTRACT

The second half of the twentieth century observed a distinctly separate line of thinking on banking. The thought institutionalised at the end of the third quarter of the century and emerged as a new system of banking called Islamic Banking. The architects of this new system consider it to be a superior concept on grounds of several efficiency criteria. A number of writings are found on the subject attempting a theoretical construct of the concept by using modern efficiency criteria. The underlying assumption on which these works were based was that Islamic banks would be operating as a sole banking system in a completely Islamised economy.

However, the reality is that Islamic banks both in Muslim and non-Muslim countries currently operate virtually within the framework of conventional banking system based on interest with the only exception of Iran. This leads to the crucial question whether the said efficiency of these Islamic banks can be sustained if they are to function within the framework of conventional banking. The answer to this question calls for an efficiency analysis under a dynamic conceptual framework.

Evidence shows that Islamic banks face trouble in implementing profit-loss sharing modes, particularly in the deployment of their investible funds. Observers consider this as a serious challenge to the promotion of Islamic banking which might have negative impacts on their efficiency level.

The present study examines superiority of Islamic banking system (as claimed by its proponents) over its conventional counterpart by introducing a new conceptual framework called "Banking Efficiency Model". The model comprises a set of efficiency criteria which can conveniently be applied to measure comparative banking efficiency. The study attempts at providing a sophistication to the earlier version of static analysis and introduces a dynamic approach in analysing relative efficiency of the two banking systems.

The study, in the part of static analysis, tries to measure efficiency of the two systems of banking with the assumption that both the systems operate separately in two different economies. Findings from this analysis lead to the conclusion that Islamic banking system satisfies all the efficiency conditions (viz. productive, allocative, distributive, operational and stabilisational), when its conventional counterpart does not do it at all.

Dynamic analysis, on the other hand, assuming Islamic banks to be operating under conventional banking framework in the same economy, provides a different conclusion. Islamic banks under such situation may not keep their efficiencies sustained.

The basic question is whether the weaknesses of the type as encountered by an Islamic bank are built-in to its system, or whether it is due to the flaws attached to the mechanism of conventional banking system within which Islamic banks operate. The present study deals with this basic question in the theoretical part of the study.

The study includes an empirical investigation of the findings from dynamic analysis with a sample survey from Bangladesh. Empirical findings are found to be in conformity with the findings derived from theoretical analysis conducted under dynamic approach. That means, Islamic banks operating within the conventional banking framework face difficulties in keeping their efficiencies sustained and maintaining them even to the level of their conventional counterparts in the private sector. Difficulties for which this happens include among others -- considering implications for moral hazards and non-repayment of loan culture equally apply to both conventional and Islamic banks -- the switching over tendency of the entrepreneurs from Islamic banks to conventional banks in the event of high borrowing cost resulted in PLS-based financing while that is not the case with conventional banks that charges the same rate of interest for projects with varying rates of return.

The study illustrates the logic and underlying causes for which this happens. It finds that the difficulty faced by Islamic banks is not for their system as such. Rather it is the efficiency-blunt mechanism of the conventional banking system that puts an obstruction to the efficient operation of Islamic banks. This does not mean that the survival of Islamic banks operating within the conventional banking framework is threatened. Evidence from Bangladesh shows that Islamic banks can survive even within the conventional framework with a port-folio management strategy in which funds are diverted from profit-loss-sharing (PLS) to trade related modes of financing. This policy shift has led IBBL rising its productive efficiency compared to the private sector conventional banks in the second half of the period under study.

CHAPTER-1

BACKGROUND, OBJECTIVE AND SCOPE OF THE STUDY

1.1 Emergence of Islamic Banking as an Alternative to Conventional Banking System

Banking plays a vital role in the development process of a country. It helps accelerate the pace of development by ensuring uninterrupted supply of financial resources to people engaged in numerous economic activities. The tremendous development that the present world experienced in the second half of the current century was contributed by several factors among which growing institutional supply of funds must have played the pivotal role. Banking is, thus, considered to be a function akin to what an artery system does in the human body. Banks both commercial and other development financial institutions provide short-, medium-, and long-term funds to business persons and entrepreneurs who usually take the lead in ventures of economic development.

Institutional supply of funds has been made possible by a system of financial inter-mediation organised in a way where conventional banks collect small savings from the public by offering them a fixed rate of interest and advancing the loanable fund out of the deposited money to enterprising clients charging relatively higher rate of interest. The margin between these two rates is bank's income. Bank provides many other services to the people, against service charges, as well.

Despite the outstanding contribution of conventional banking system (interest-based), several ancient and modern economists are critical about its efficiency level. Some economists consider role of interest in the conventional banking mechanism as a major destabilising factor that contributes to cyclical fluctuations in the economy (Minsky, 1982). Specifically, the ineffectiveness of interest rate as a stabilisation tool during the period of Great Depression is a case to note. This eventually called for Keynesian prescription for governmental intervention (Keynes, 1964). Similar concern was expressed in a story published in Newsweek referring Henry Kissinger, the former Secretary of State of USA. To quote him, "The instability has persisted and the uncertainty has continued. After going through the throes of painfully high level of inflation, the world economy has experienced a deep recession and unprecedented rate of unemployment, complicated further by high level of real interest rates and unhealthy

exchange rate fluctuations" (Kissinger, 1983). More recent concern over the potential instability of the world monetary and financial system was expressed by Maurice Allais (1993), a Nobel Laureate, who called for an urgent reform of the World Economic Order. Others vehemently oppose the argument for using rate of interest as a stabilising tool in the economy (Saud, 1980; Siddiqi, 1980; and Kahf, 1982).

On the contrary, a new system of banking known as Profit-Loss-Sharing Banking (henceforth to be called PLS-Banking) has emerged in as many as 45 countries of the world (Nienhaus, 1988; Khan and Mirakhor, 1989; Hussain & others, 1990; and Cowan, 1994). Another study provides a list of 248 Islamic financial institutions that are now in operation in different parts of the world (Ali & Sarkar, 1995).

The main characteristic of these banks is the prohibition of interest in all sorts of banking transactions. The institution of interest is thus replaced by a principle of participation in profits and losses (Siddiqi, 1983; Khan and Mirakhor, 1989; Khan, 1994). That means, a fixed rate of interest is replaced by a variable rate of return based on real economic activities (Mangla & Uppal, 1990). The distinct characteristics which provide Islamic banking with its main points of departure from the traditional interest-based commercial banking system are: (a) the Islamic banking system is essentially a profit and loss sharing system and not merely an interest (*riba*)-free banking system; and (b) investment (loans and advances in conventional sense) under this system of banking must serve simultaneously both the interest of the investor and those of the local community (Khaleefa, 1993).

There are several modes of banking transaction under PLS-system depending on the nature of cases. For examples, there are entrepreneurs who have their money but not sufficient to go in for entrepreneurial venture. The bank may come forward to finance them under a contract that profits to be accrued from the venture will be shared by both parties in proportion to their capital participation. If there is any loss that will be borne by both of them in proportion to their capital contribution. This mode of financing is called Musharaka. There is another type of entrepreneurs who have entrepreneurial skills but lack money capital. The bank, in such a situation, may go for a joint venture with the entrepreneurs financing the entire capital needed under a contract that profit to be generated from it will be shared by both parties on mutually agreed upon ratio determined a priori at the time of contract. If there is any loss, it will be borne by the bank, and the entrepreneurs go unrewarded. This is called 'Mudaraba' mode of

financing. There are other modes of financing practised by a PLS-bank approximately similar to that of its conventional counterpart but having some differences in operational details.

At this stage, it is important to note the factors responsible for the emergence of PLS-system of banking. There are religious as well as economic reasons that have contributed to the emergence of PLS-banking as an alternative to its conventional counterpart. It is the prohibition of '*riba*' in the holy Quran that, according to the proponents of the PLS-system, was the source of inspiration for establishing banks in line with Islamic Shariah (Muslehuddin, 1987; Ahsan, 1990). The basic intention behind establishing Islamic banks was the desire of Muslims to reorganise their financial activities in a way that do not contradict the principles of Shariah and enable them to conduct their financial transactions without indulging in *riba* (Ahmed, 1992). These writers consider rate of interest in the conventional banking mechanism synonymous to *riba*, the term as used in the Holy Quran (Al-Quran 2:275; 30:39). One of the reasons for this is that the outcome of the productive effort is uncertain, and so interest necessarily involves an element of *gharar*, that is, uncertainty (Hasan, 1988). On this religious ground, they urge for avoiding all transactions and institutions based on interest and reorganise them in line with the teaching of Islam (Siddiqi, 1983; Saud, 1986). The economic reason derived from a verse of the holy Quran providing inspiration to devise an interest-free financial system has been documented in the way that interest, instead of increasing wealth, reduces it (Al-Quran 30:4). The primary reason of why the Quran has taken such a hard approach towards interest is that Islam stands for establishing a just economic system free from all kinds of exploitation (Chapra, 1985). Further, Muslim economists consider depression and stagflation very often found in the capitalist world as an outcome of the financial system based on interest (Rahman, 1976).

Some writers observe the emergence of PLS-banking as part of a struggle for Islamic revival (Ashker, 1987; Mangla & Uppal, 1990). The first attempt to establish an Islamic financial institution took place in Pakistan in late 1950s. It was a local Islamic bank in a rural area of erstwhile Pakistan (Wilson, 1983). It was an experiment initiated by some pious landlords. They deposited funds at no interest. Credit facilities were available for small land owners. The borrowers did not pay interest on the credit advanced, but they had to pay a small service charge to cover the bank's operational expenses. The charge was lower than the rate of interest. Although the experience was encouraging, two main factors were responsible for its failure.

First, the deposits made were regarded by depositors (landlords) as once-and-for-all deposits. With the increasing number of borrowers the gap between capital available and credit demanded was huge. Second, the bank staff did not have complete autonomy over the bank's operation and depositors showed considerable interest in the way their money was lent out (Wilson, 1983).

The second attempt began in Egypt in 1963. It was established in a rural area of Nile Delta. The bank was called Mit Ghamr Savings Bank. The bank's operation was based on the same Islamic principles of no-interest to depositors or from the borrowers. Unlike the Pakistani bank the borrower had to have deposit in the bank for credit facilities. The experiment soon became successful. More branches were opened in different parts of the country. Amounts of deposits increased and what started as a one bank operation expanded to form a network of local and savings banks. The experiment suffered a setback owing to changes in the political atmosphere. Nevertheless, the project revived in 1971 under the name of Nasser Social Bank. The bank got supports from the then regime. The principles of operation of the bank were very similar to those of the Mit Ghamr Savings Bank. The new bank offered a full range of normal banking services and a wide range of investment activities through equity participation (Ashker, 1987).

Islamic banking with a very different approach contemporary to that in Egypt emerged in Malaysia. It is a financial institution developed for the pilgrims of Malaysia. The reason for the establishment of this institution was the contention of the Malaysian Muslims that money spent on pilgrimage must be clean and untainted with *riba*. Since this was not possible by putting money with the ordinary banks, this desire led to the establishment of a special financial institution. Consequently, Pilgrims Saving Corporation was established in 1963 which was latter incorporated into the Pilgrims Management Fund Board in the name of Tabung Haji in 1969 (Ahmed, 1992).

A significant development in Islamic banking took place when a license for an Islamic bank was issued by Saudi Arabian government to the fifty-year old "Al-Rajhi Company". It is a firm noted for its currency, exchange and commercial activities. Its assets exceed $5 billion. The firm started operation in 1985 under the name of "Al-Rajhi Banking Investment Corporation" and has since developed active relationships with major manufacturing and trading companies in Europe and several US corporations. The emerging successes of Al-Rajhi

in operating profitably in different regions of the world have increased pressure on the Saudi government to go for full-fledged Islamic banking (Mangla, Uppal and Swamy, 1988).

Islamic Development Bank was founded in 1975 as a multi-national corporation by several Muslim countries. The purpose of the bank is to support social and economic development in Muslim nations within an Islamic Framework. The subscribers of the capital are the founder governments and as such it was established on government treaty.

Furthermore, Islamic Investment Company was established in Bahamas in 1977 as a multi-national holding company. Its purpose was to establish Mudarabah (partnership companies) in various parts of Islamic countries. The company has established two Mudarabah subsidiaries in Sharjah and Pakistan.

The second example of Islamic banking in the West comes from Luxembourg, where the Islamic Banking System International Holding was established in 1978 as a joint-stock company. Its purpose was to establish international Islamic banks in different parts of the western countries where there are communities of Muslims interested in participating investment projects in Islamic and non-Islamic countries. The company's investment operations spread over different parts of the world. As a holding company, it established a new affiliated company in London in June 1983 under the name of Islamic Finance House, and another in Denmark in 1982 under the name of the Islamic Bank International of Denmark. Dar-al-mal-al-Islami (DMI) also emerged in 1981 as a major multi-national company the activities of which consist of Islamic investments, Islamic solidarity (insurance) and Islamic banking operations (Ashker, 1987).

This development, which had been gaining momentum since the second half of the 1970s, took two courses. The first one was the attempt to establish Islamic financial institutions side-by-side with traditional banking. In such attempts, two types of institutions were evolved: Islamic banks were established mostly in Muslim countries; and Islamic investment and holding companies started operating in some Muslim but mostly in non-Muslim countries. These institutions, claimed to be operating without interest in their transactions, compete with conventional banks to attract deposits and invest these funds wherever they find profitable investment opportunities. The majority of these institutions were established through private initiative.

The second course took the shape of restructuring the entire financial system in line with the teachings of Islam. This course had two directions: one in which the entire economy and institutions (including financial ones) were transformed into an Islamic one, as in Islamic Republic of Iran; and the other was islamization of banking sector only, as in Pakistan (Khan & Mirakhor, 1989; Mangla & Uppal, 1990).

1.2 Relative Position of the Two Banking Systems In Terms of Size, Structure and Environment

1.2.1 Size: Despite rapid expansion, the relative position of PLS-banks in terms of number and coverage compared to its conventional counterpart is still insignificant. In countries where Islamic banks are found to operate, the number of banks and their branches are very few compared to interest-based banks. Almost all the Islamic banks are new-entrants and started operation only from the later part of the seventies. Thus the PLS-banks are still in the phase of consolidation. On the other hand, the conventional banks have been growing over centuries in some cases, and over decades in most cases.

1.2.2 Structure: Conventional banks operate throughout the world under a broad-based monetary system of their own, Iran being the exception. They have their own central banks guiding, supervising and controlling their activities under a national monetary policy. On the contrary, with a few exceptions, Islamic banks in the countries concerned are very few and have been growing in spite of difficulties faced by conventional banking environment. In Iran there has been a total conversion of the conventional banking system into an Islamic one. It is too early to comment on its progress since the changeover has taken place there in phases over a longer time and completed only a few years back under stringent political situation.

In Bangladesh, four Islamic banks are now in operation. Among these banks Islami Bank Bangladesh Limited started operation in 1983 and had only 83 branches by December 1994 (Ministry of Finance, 1994-95). The Al-Baraka Bank Limited, another Islamic Bank in private sector, was launched in 1987 (Ministry of Finance, 1993-94). The other two banks (Social Investment Bank and Al-Arafah Bank) went in operation in the later part of 1995.

On the other hand, 25 conventional banks (including public and private sector banks) had as many as 5740 branches by June 1993 (Bangladesh Bank, 1993).

1.2.3 Environment: The size and structure of the two banking systems determine the sphere of their command on the economy. Before launching of the four Islamic banks Bangladesh never experienced a bank based on Islamic Shariah throughout the history of banking in this part of the Indian sub-continent. Conventional banks, after the partition of Indian sub-continent in 1947, rapidly grew and expanded all over the country extending from the capital city to Thana level. It is only after the independence of Bangladesh in 1971 that the conventional banks could reach village level through specialised rural financing institutions like Grameen Bank and non-governmental credit organisations like Bangladesh Rural Advancement Committee (BRAC). All these financial institutions and credit organisations operate on conventional method with interest being the basis of transaction.

In this wider net-work of conventional banking all over the country, Islamic banks with a few branches are likely to have very insignificant influence on the financial market of Bangladesh. Yet the emergence of Islamic banks in Bangladesh seems to be a potential threat to the conventional banks at least to the extent the number of clients originally belonged to the latter and then shifted to the former after their establishment.

In a country with 90% Muslim population, religious sentiments regarding the Quranic prohibition of '*riba*' matter a lot. Those who had kept themselves aloof from interest-based transactions earlier, have started banking transactions with the Islamic banks. This has made expansion of deposits from an amount of Tk 63.59 crores in 1984 to Tk 1022.67 crores in 1994. However, religious consideration has been important and to some extent challenging for the conventional banks that they have started using the term 'profit' instead of 'interest' in their official documents.

Yet, Islamic banking is still a private initiative in Bangladesh. There are some legal constraints for Islamic banks that hinder their smooth operation and effective application of their important modes like Musharaka and Mudaraba.

1.3 Investment Financing under Conventional and Islamic Banking Systems: Similarities and Differences

The term 'investment financing' is used to mean loans and advances of conventional banks and their investment in bonds and securities, and all funds deployed by Islamic banks on short-, medium-, or long-term basis to earn interest or profit (as the case may be). The two systems being different in operational mechanism, they have their separate procedures in mobilising deposits and deployment of funds. Since the present study deals with deployment of loanable funds only, a short description of the modes used for this purpose by the two systems of banking seems to be relevant at this stage.

1.3.1 Modes of Advances by Conventional Banks

Conventional banks use the following modes in advancing finances (Bedi, 1987; Basu, 1965). These are (a) Loans, (b) Overdrafts, (c) Cash credits, (d) Medium term loans, (e) Hire purchase, and (f) Bills purchased/discounted.

Loans: When a bank grants an advance in lump sum, and which is drawn by the borrower at a time and is to be repaid likewise or by prearranged instalments, the advance is called a loan. The money advanced is debited to the loan account of the borrower. There are no cheque facilities for a loan account. Operation with this mode is of short term in nature. Interest is usually calculated and charged quarterly.

Overdrafts: An overdraft presupposes existence of a current account. An overdraft is generally allowed by a prior arrangement with bank, the latter agreeing to allow the customer to overdraw the account (i.e., draw in excess of his credit balance) up to a certain limit. A cheque book is issued to the customer and cheques drawn by him up to an agreed limit are honoured by the bank. Overdraft facilities are extended against securities like share certificates and government promissory notes.

Cash credits: Cash credit is the favourite mode of borrowing by traders, industrialists and agriculturists. It is a separate account by itself and does not require opening of a current

account. It is operated upon like an overdraft account. Depending on the needs of business, the borrower can draw on his cash credit account at different times, and as and when he gets funds in hand, he may deposit them in his account. The debit balance on any day should not exceed the agreed limit. Interest is charged on the daily balance in the account.

Medium term loans: This type of loans is advanced to industries and agriculture for fixed capital requirements. These loans are also granted to traders for purchase of fixed assets, to transport operators for purchase of vehicles, and to self-employed persons for purchase of equipment. These loans are usually allowed for a period of 3 to 7 years and in special cases up to 10 years and are generally repayable by instalments. Since it will take a year or two to derive the full benefits of expansion or renovation, instalments for repayment may start after one or two years of the disbursement of the loan. Interest is charged on annual basis.

Hire-purchase advances: Under this mode, conventional banks grant advances to the clients or parties engaged in hire-purchase business relating to transports, refrigerators and TV, or the like. Repayment of principal is made in instalments along with interest charged. The bank demands immovable properties as security against this type of investment.

Bills purchased/discounted: Export-import businesses are performed through opening of L/Cs with bank. The client, while opening a L/C, comes to an agreement with the bank that the latter will repay the bill received on the former's behalf on a certain date onward in exchange for a specific rate of interest determined at the time of agreement. If the bill happens to reach well ahead of the date mentioned, the bank may purchase the bill, if requested, with a discount. In this case, the bank makes the return twice: first, by charging interest and then by discounting the bill.

Besides the above modes of financing conventional banks provide some other banking services with fees and charges, and invest in bonds and securities. Recent trend in conventional banking shows that it has been financing long-term projects as well.

1.3.2 Modes of Investment Financing under PLS-Bank

A Profit-Loss-Sharing bank (particularly Islami Bank Bangladesh Limited) finances investment under the following modes: (i) Direct investment, (ii) Mudaraba, (iii) Musharaka,

(iv) Bai-muajjal, (vi) Bai-e-salam, and (vii) Ijara. A brief discussion of each of the modes is given below:

Direct investment: An Islamic bank makes direct investment in short-, medium-, and long-term projects in commercial, industrial, agricultural, real estates and housing, transport and other services (Iqbal & Mirakhor, 1987).

Mudaraba: This is a mode by which PLS-Bank provides finance to other party for investment in long-, medium-, or short-term projects in different sectors of the economy. The terms and conditions followed in this scheme are as follows: (a) the administration and management of the financed projects are to be carried out by the Mudarib (entrepreneur); (b) the bank shares in the net profit according to the terms of agreement (c) the bank takes performance guarantee from the other party against breach of contract, and (d) the bank bears any loss that may actually be incurred (Khan & Mirakhor, 1989).

Musharaka (partnership): Under such scheme, an Islamic bank participates in Shariah approved partnership or joint venture projects and undertakings; provides part of the required funds to the entrepreneurs and takes part in decision making; shares in net profit or loss (if any) strictly in proportion to capital contribution (Khan & Mirakhor, 1989). The bank may also purchase shares of joint-stock companies on the basis of equity participation to earn dividend income like ordinary shareholders.

Mudarabah and Musharakah may be applied either to the whole enterprise where each partner takes an equity position, or to a particular line of activity within an enterprise, i.e., they can have either whole firm or project specific orientation. Mudaraba is traditionally applied to commercial activities of short duration whereas Musharaka is applied to production or commercial activities of long duration (Mirakhor and Zaidi, 1988). The practice of financing under these two modes is virtually collateral free and removes the long-practised discrimination by the banking institutions against the non-propertied class in matters of financial accommodation (Abdouli, 1991). Islamic banks are, however, aware of the danger of applying these modes in the early stage of their launching, and hence they limit allocation of loanable funds through these modes (Attia, 1984, 1985).

Murabaha (contract sale): This is an Islamic sale contract in which an Islamic bank purchases a certain Shariah-approved commodity for the client as per his request and specification. The total cost of the commodity is determined in details including purchase price, duties etc. Price is fixed at an agreed rate incorporating certain percentage of profit. Time, place, and mode of delivery of goods and its payment are determined in advance.

Bai-e-muajjal (sales under deferred payment): This scheme is very close to the Murabaha except the mode of payment. Under this sales arrangement, a PLS-bank finances the purchase of specific commodities on mark-up allowing the client to make a deferred payment. For example, under this mode, the bank may supply inputs to the agricultural and industrial sectors. Quality, quantity, time, place, and mode of delivery of goods are determined in advance.

Bai-e-salam (advance purchase): This is an advance purchase contract performed between a PLS-bank and the producer or supplier of agricultural, industrial, fishery, poultry, or dairy products. Bank makes payment to the clients at the time of contract and determines the price, quality, quantity, time, place and mode of delivery of the commodity.

Ijara (leasing/hire purchase): A PLS-bank adopts various forms of leasing and hire purchase arrangements for machinery and equipment, transports, etc., required by its clients with a view to earning rent income. Under this mode, repayment of money is made on instalment basis. Financing of housing units and apartment on rent income sharing is a typical example. Bank provides finance also for fixed capital investment to industrial customers on the basis of leasing. In hire purchase arrangements the purchaser, after completion of the instalments, will be the owner of the assets.

Qard-hassan (interest-free loan): Most of the Islamic banks also provides interest-free loans, e.g., "Qard-hassan" to their customers. However, the practices vary in different banks. Some banks provide interest-free loans to the holders of investment accounts. Some other banks have provisions to provide these loans to needy students and people of the society. There are Islamic banks that provide interest-free loans to small producers, farmers, entrepreneurs who are not qualified to get finance from other sources (Ahmed, 1992).

1.3.3 Modes of Investment Financing: Similarities and Differences

For an effective comparison between the modes used by the two systems of banking, the following categorisations common to both may be adopted: (a) modes related to project financing, (b) modes related to financing trade and commerce, and (c) special modes or system specific modes.

In line with the above categorisation, medium and long term loans under conventional banking, and Mudaraba and Musharaka of PLS-banking come under category (a). Under category (b), the modes like Loans, Cash Credits, Hire-Purchase and Bills Purchased/Discounted of conventional banking and Murabaha, Bai-e-salam and Bai-e-muazzal of PlS-Banking may be listed. Loans and Cash Credits of conventional bank may be categorised under (c) to satisfy, along with other purposes, the working capital needs of the borrower. For Islamic banks, there are no similar modes like its conventional counterpart to meet working capital needs. The "Qard-hassan" is customarily grouped under this category, but it is not widely practised by PLS-banks since the mode precludes taking any return from its operation.

Keeping the above categorisations in view, one may go in for searching the similarities or differences between the modes of conventional and those of PLS-banking. As far as the first category is concerned, unlike PLS-bank, conventional bank advances its money against prefixed rate of return, i.e., rate of interest. That is, under conventional banking mechanism every advance made by a bank turns out to be a contract between the bank and the client with the following essential features: (i) a creditor-borrower relationship is established; (ii) the lending or borrowing is time bound qualifying specific date(s) on which a certain percentage of interest on borrowed capital becomes due for payment along with the principal being fixed; and (iii) the income of the bank is known and prefixed and not in any way related to or variable with the income of the borrower generated from the borrowed money.

On the other hand, in the case of a PLS-Bank, the mechanism of investment financing has the following distinguishing features:

(a) it is a contract between two partners--the bank and the client--providing a partner-partner relationship;

(b) the contract is time bound in the sense that the client has to return the capital on/within specific date(s). In no way the return of the bank is fixed either from the viewpoint of time or that of the rate; and

(c) bank shares a prefixed ratio of profit expressed in percentage term. This is not a prefixed rate of return calculated on capital advanced. This means that the income (profit) of PLS-Bank, unlike that of its conventional counterpart, fluctuates with the profit of the borrower.

Thus regarding the modes of financing, a conventional bank is just a financier which extends credit for a fixed return (interest) on interest. It is not concerned about how the money advanced is utilised. Its income (interest income) does not fluctuate with the profit generated from the money lent. In other words, conventional banks follow such a procedure in advancing money that ensure safe return of income.

On the other hand, a PLS-bank establishes a direct relationship with the projects financed by it and makes its income directly variable to the returns from the projects.

To summarise, as far as the first grouping of the financing modes are concerned, the conventional bank is a risk-averter but the PLS-Bank is a risk-taker.

As for the second grouping of the financing modes i.e., those which are generally used for financing trade and commerce, the only comparison worth mentioning is that the conventional banking mode involves interest payment and its Islamic counterparts make business on profit margin. Modes like Murabaha, Bai-e-salam and Bai-e-muazzal are often accused of being '*riba*' practising. The accusation is countered by the argument that the PLS-Banks, unlike its conventional counterparts, are obliged by mechanism to bear losses, if any.

Concerning the third grouping, the modes are very much system specific and hence no meaningful comparison is possible.

1.4 The Problem

There has been a long debate as to the relative strength of the two systems of banking: conventional and Islamic. The former, as it is claimed, has been developing as a genuine response to the real needs of the time and has expanded all over the world. The latter, on the

other hand, accuses the former to be '*Riba*' practising and hence declares it to be unacceptable from both religious and economic grounds. Moreover, the proponents of Islamic banking claim its superiority even on efficiency considerations. The central issue of debate is thus whether an efficient banking system is with or without interest.

There is a sizeable literature contributing to the development of thoughts on the issue. Regarding the conventional banking, there are three categories of literature. The first category of literature recognises the role of interest in the banking mechanism and hence deals with the explanation of new banking procedures and instruments. The second category of literature has considered the role of interest as economically unimportant and also unhealthy for the economy. On the other hand, a third category of literature provides discussion of a completely new mechanism of banking based on profit-loss-sharing and tries to establish it as a viable and economically more efficient system. Rigorous theoretical analysis with macro economic implications on this issue is a recent phenomenon.

The following discussion aims at delineating the conceptual development of the debate with a view to finding out some common criteria on the basis of which the relative strength of the two systems can be judged.

The role of interest rate as a stabilisation device in the mechanism of conventional banking has been the main thrust of conceptual debate throughout the history of economic thought. The debate originating from the dawn of civilisation when the practice of interest was not institutionalised continues even today passing through the ages of Plato-Aristotle, Adam Smith-Ricardo and Keynes-Cassel. Unfortunately, still we do not have an established theory of interest. The debate centres around a number of theories on interest, the prominent among them are: The Abstinence Theory, the Time Preference Theory, the Productivity Theory, and modern theories such as Loanable Fund Theory and Liquidity Preference Theory.

Before the emergence of these theories, Greek Philosophers viewed that money was nothing but a medium of exchange, and therefore, they denied the productivity (time value) of money loans. "A piece of money cannot beget another piece" was the doctrine of Aristotle (Boehm Bawerk, 1959). The obvious conclusion followed from it was that interest was unjust. Later on, Senior established the Abstinence Theory arguing interest as a reward for abstinence on the part of the capitalist (Bawerk, 1959 p. 39). This theory was vigorously criticised by Lasselle (Cassel, 1903). According to Boehm Bawerk (1959; p. 185), "The existence of

interest and its rate do not exhibit the slightest degree of correlation with abstinence and the degree of sacrifice of abstinence."

The advocates of the productivity theory considered productivity an inherent property of capital and, therefore, they tried to justify interest as a remuneration for this productivity. The theory was criticised by arguing that it was fundamentally defective because it subordinated the role of monetary, psychological, and other related factors.

Rahman (1976) presents an elaborate survey on the theories of interest. He outlines that interest, according to the Time Preference Theory, arises out of a difference from present and future value of goods. This idea was put forth by Petty, Galiani, Turgot, and Jevons but elaborated and explained by Launhardt and Emil Sax. Among American economists J. B. Clark, I. Fisher, F. Fetter, N. Palten and S. M. Mac Vane supported this theory (Bawerk, 1959). The chief exponent of this theory was Boehm Bawerk. The central formula by which Bawerk claimed to give an explanation of the phenomenon of interest was the undervaluation of future goods in relation to the present. He also explained the important factor affecting the rate of interest i.e., the marginal productivity of capital in relation to the element of time in production (Rahman, 1976). Bastiat and Even Manger were against the view (Cassel, 1903).

Among the modern theories, the importance of Liquidity Preference in determining rate of interest was greatly emphasised by Keynes (Keynes, 1964). On the other hand, Loanable Fund Theory states that the rate of interest is merely the price of credit and is determined by the supply and demand for credit. According to Robertson, interest in liquidity preference theory is reduced to nothing more than a risk premium against fluctuations about which we are not certain. It leaves interest suspended, so to speak in a voice, there being interest because there is interest (Robertson, 1961).

There was a separate line of study on the role of interest rate as an allocative device under conventional banking mechanism, particularly while financing investment. Rate of interest in the mechanism of conventional banking system performs some very useful services, i.e., mobilisation of savings and its allocation among different economic agents the majority of whom are the entrepreneurs. It cannot be denied that the tremendous economic development in the current century was contributed by several factors among which the continuous supply of investible funds through banking system played a key role in which interest rate is considered to have been an important allocating device. In spite of that, economists are now worried about

this important tool of banking as its existence is currently being treated as a retarding factor in economic development. It has now been pertinent to reduce interest rate to keep the wheel of development running. Of course, the contention is not recent in origin. The difficulty with the rate of interest was raised by eminent philosophers like Locke and famous economists like Keynes. Keynes (1964) quotes, according to Locke "high interest decays trade, the advantage from interest is greater than the profit from trade, which makes the rich merchant give over, and put out their stock to interest and the lesser merchants break."

According to Sir Josiah Child as referred by Cassel (1903) and quoted in Rahman (1976), "the real wealth of the kingdom can be augmented by reduction of the rate of interest." Sir Thomas Culpepper had also the same view. Quoting him Rahman writes, "it is not only the high interest rate which destroys commerce, trade, and industry but even the very existence of any positive rate of interest can decay wealth and retard the growth of the production process" (Rahman, 1976).

According to Keynes (1964), the rate of interest, by restricting the level of investment, checks the development of industries that could very well increase the national wealth of the country. To quote him, "I mean the doctrine of the rate of interest is not self adjusting at a level best suited to the social advantage but constantly tends to rise too high, so that wise government is concerned to curb it by statutes and custom and even by invoking the sanctions of moral law."

Citing Silvio Gesell, Rahman (1976) quotes "interest sets a limit to the rate of growth of real capital." He further adds that "the growth of real capital is held back by the money interest rate and that, if this brake could have been removed, the growth of real capital would be, in the modern world, so rapid that a zero money rate of interest would be justified ... ."

Economists who support zero rate of interest in the banking mechanism claim that the very existence of interest rate in the conventional banking system has made it inefficient in regard to allocation of investible resources and distribution of income. The chief among the proponents of this view is Nejatullah Siddiqi (1983). To quote him, "The (conventional bank) is naturally most concerned about the safe return of the principal but along with the interest stipulated. The best way to ensure this is to advance money only to creditworthy borrowers who have enough assets to fulfil their commitments. The creditor's (bank) interests are best served when the borrower has the ability to meet his obligations irrespective of the fate of the

actual project in which the loan is to be invested" and "prospects of higher profits the economic criterion which should channel investible funds to a project in preference to other expected to yield a lower rate of profit, fail to exercise a decisive influence on the financiers (bank) as their own returns do not improve due to such prospects." About inequitable distribution of income, he argues that conventional bank (based on interest) shifts risks altogether to the entrepreneurs. Moreover, they are very much insisting of the safe return of both interest and principal without paying any heed to what happens with the return from the project which they have financed. The fact remains that the entrepreneurs may earn a high profit and that should be shared by both bank and the depositors--the mobiliser and the real source of loan respectively.

However, Siddiqi did not present his views on the basis of a well-conceived theoretical model based on static and dynamic analysis. Yet his analysis may best be called a static analysis in which he has shown the superiority of Islamic banking over conventional banking with the implicit assumption that Islamic banking was functioning independently as a complete system in a different economy. Thus, he did not consider what could happen with the efficiency level of Islamic bank if they are allowed to operate under a full-fledged conventional banking framework. Moreover, his conclusion has not yet been tested by an empirical study.

Further reservation has been expressed in respect of the interest rate to be used as an allocating device in the conventional banking mechanism. It has been argued that the existence of the rate of interest in the conventional banking mechanism limits potential projects to be undertaken which would easily be financed if the banking system could be organised without interest (Akkas, 1985). Economy could be less volatile to cyclical fluctuation if rate of interest would not happen to exist (Chisti, 1985). Further, the institution of interest runs counter to the vision of a just economic and social order (Qureshi, 1984).

The above survey of literature provides at least four issues around which debate continues. **First**, which of two the systems is superior in tapping the potential investment opportunity, i.e., which one is comparatively more productive in utilising available investible resources. **Secondly**, which one of the two can best allocate scarce financial resources. **Thirdly**, which of the two systems can ensure more distributive justice, and, **fourth**, which of the two banking mechanisms produces less cyclical fluctuation in the economy and is thus more conducive to economic development.

1.5 Rationale of the Study

Growing interest in Islamic banking is manifested in many academic and research institutions all over the world by their discussions, writings and offering courses on Islamic banking. It is due to the emergence of a number of Islamic banks in Muslim as well as non-Muslim countries including the western world. There are studies in some European countries as to whether their banking laws permit establishment of Islamic banks. The trend naturally calls for an objective analysis of the strengths and weaknesses of the two contemporary banking systems one based on interest and the other on profit and loss sharing.

Review of literature shows that strengths of Islamic banking are perceived within the framework of a complete Islamic economic system. The reality is that most of the Islamic banks, both in Muslim and non-Muslim countries, are operational within the conventional banking framework. A separate study inquiring about what would happen with the efficiency level of an Islamic bank allowing it to operate under a conventional banking framework might be of much interest. Particularly a theoretical analysis followed by an empirical investigation could be a good subject of research in the field. To the best of the knowledge of the present researcher, the subject has not yet been researched.

1.6 Objective and Scope of the Study

The present study is intended to provide answers to the above four issues by introducing a dynamic approach to comparative efficiency analysis which, the present researcher thinks, is still lacking. It has been admitted earlier that only a few works conducted under static frame of reference are available on the comparative efficiency analysis of conventional and Islamic banking systems. The dynamic approach sharply differs from the previous static approach on the ground that the latter approach is fundamentally a "two systems in two different economies" approach while the former deals with the study of relative efficiency of the two systems in the same economy putting Islamic banks within the framework of conventional banking system.

Thus, the present study will approach in three phases. In the first phase, findings of earlier works done under static analytical framework will be presented using improved analytical tools. In the second stage, it will introduce a dynamic analysis with the help of a newly constructed conceptual framework "Banking Efficiency Model". Finally, the findings derived from the dynamic analysis will be subjected to an empirical scrutiny.

In short, the overall objective of this study would be to examine the relative efficiency of the conventional and Islamic banking systems in financing investment adopting both static and dynamic analyses. Under this broad objective, the following specific tasks are attempted in the study:

1. To find out which one of the two systems is more efficient in financing investment up to the full investment opportunity level of an economy;
2. To see which one of the two systems is more efficient in allocating scarce investible funds to the social optimum level;
3. To examine which one ensures more distributive justice in the process of financing investment;
4. To investigate which one is relatively less vulnerable to cyclical fluctuations;
5. To verify which one is superior in terms of operational efficiency; and, finally
6. To recommend policies to be adopted by Islamic banks for increasing their efficiency level while carrying out banking operations within conventional banking framework.

1.7 Plan of the Study

The introductory chapter begins with a background of the emergence of Islamic banking. It then provides a statement of the problem after a thorough review of literature, state the rationale for undertaking such a study, and identifies the study objectives. Chapter-2 exclusively deals with the methodology of the study outlining data sources, sample design, methods of data collection, techniques of data analysis and limitations of the study. Chapter-3 concentrates upon developing an analytical framework of the study. The framework provides an "efficiency model" comprising static and dynamic approaches to efficiency analysis. Chapter-4

compares the efficiency of the conventional and the Islamic banking systems by applying a static analytical framework. Chapter-5 analyses the relative efficiency of the two banking systems under a dynamic approach. Chapter-6 concentrates upon empirical investigation of the findings drawn from comparative efficiency analyses of the two systems under a dynamic analytical framework. Chapter-7 contains the summary and policy recommendations of the study.

CHAPTER-2

METHODOLOGY OF THE STUDY

2.1 Introduction

The methodology of a study in social science requires a well-defined conceptual framework and is designed in a way that it corresponds to the achievement of the study objectives. For the present study a conceptual framework has been developed to measure relative efficiency of the two banking systems using theoretical tools of analysis generally used in macroeconomics. Findings from this theoretical analysis are then put to empirical test. Before delineating the approach and methodology it is relevant to elucidate the terms and terminology to be used throughout the study.

2.2 Terms Elucidated

(i) Investment Financing

Essentially this is an Islamic banking terminology. It is to mean deployment of funds by an Islamic bank to all possible Shariah-approved income earning avenues. Yet for the present study the term has its special connotation. Since the term investment has different meaning in conventional and Islamic banking systems, it is pertinent to assign common meaning to the term. In the present study the term "investment financing" has been used to mean loans and advances made under conventional banking plus investment in securities. The same term has been applied to mean short-, medium- and long-term financing by Islamic banks and deployment of funds in stock market and on Islamic financial instruments.

(ii) Efficiency

In economics, 'efficiency' means highest possible performance level of a production unit, a market or an economic system under the condition that no one can be better off without making someone else worse-off. If applied to banking, it qualifies for best possible performance level of a bank with productive, allocative, distributive, operational and stabilizational efficiency.

(iii) Productive Efficiency

Productive Efficiency means system capacity of a banking system in utilising maximum possible investment opportunity that lies in an economy by generating maximum profit through timely recovery of loan of the financed projects.

(iv) Allocative Efficiency

Allocative Efficiency means the best possible utilisation of community's scarce financial resources satisfying two preconditions: (a) arranging society's ends in order of priority and allocating resources accordingly and (b) allocating resources further among projects under a particular end in terms of profitability.

(v) Distributive Efficiency

Distributive Efficiency of a banking system means its system capacity to maintain equity in distribution of risk and return through its financing mechanism.

(vi) Operational Efficiency

Operational Efficiency of a banking system provides it with the capacity to minimise operational cost with a given level of profit or maximise profit with a given level of operational cost.

(vii) Stabilizational Efficiency

Stabilisational Efficiency talks about built-in system capacity of a banking system to absorb business cycle shocks or the capacity of the system to stabilise investment fluctuations in the economy.

(viii) PLS-Banking

A banking system wherein any transaction with interest, low or high, is prohibited. To fit it to the mechanism of Islamic banking, the rate of interest is replaced by a principle of participation in profits and losses. This means that a fixed rate of interest is replaced by a variable rate of return accrued from real economic activities.

(ix) Variable Return Mechanism (VRM)

Variable Return Mechanism is an alternate name attributed to Islamic banking system based on the argument that earning of this bank does not maintain a fixed rate with the capital invested. Islamic Banks, while making advances, do not charge any fixed annuity, as in the case of conventional bank, rather it shares in the return of the projects financed by it that is always variable.

(x) Fixed Return Mechanism (FRM)

Fixed Return Mechanism, a characteristic name assigned to conventional banking system based on interest that pays and receives fixed interest in all of its transactions.

(xi) Mudaraba

An Islamic mode of financing in which entire capital is supplied by the bank to entrepreneurs under a contract that profit to be generated from the venture will be shared by both on mutually agreed upon ratio determined a priori at the time of contract. If there is any loss, the bank bears it and the entrepreneurs go unrewarded.

(xii) Musharaka

An Islamic mode of financing wherein both bank and entrepreneur participate in the financing of a project under a contract that profit accrued from the project will be shared by both in proportion to capital contribution.

(xiii) Banking Inequality Index

Banking Inequality Indices are ratios (ranging from 0 to 1) derived from dividing cumulative percentage distributions of advances by those of deposits calculated against each category of account size.

(xiv) Composite Productivity Index

Composite productivity index is a quotient of Profit-Loanable Fund Ratio to Administrative Cost Per Taka Employed.

(xv) High Profit Zone

High Profit Zone consists of the projects that have rates of return higher than the market rate of interest. This zone is synonymous to *viable projects' zone* viewed from investment decision model of conventional banking.

(xvi) Low Profit Zone

This is a zone with projects having positive rates of return but less than the market rate of interest. All the projects under this zone are non-viable from conventional banking viewpoint since their rates of return are below market rate of interest.

(xvii) Spread

Spread is defined as the difference between fixed payment commitments made to a bank by a borrower on his loan and the cash flows (income) he receives out of the use of that borrowed money.

2.3 Theoretical Approach to Banking Efficiency Analysis

The theoretical analysis in the present study is aided by an efficiency model, a conceptual framework, to be developed in Chapter-3 that comprises the essential criteria for an ideal banking system. These criteria include:

(a) *productive efficiency*, defined as the capacity of an ideal banking system to finance investment up to the full potential investment opportunity level;

(b) *allocative efficiency*, denoting capacity of the same to allocate scarce financial resources to avenues satisfying optimum social welfare conditions;

(c) *distributive efficiency*, implying capacity of the system to distribute income generated in the banking process among the participating factors with a fair level of distributional equity;

(d) *operational efficiency*, showing maximum profit-deposit and profit-expenditure ratio; and finally,

(e) *stabilisational efficiency*, indicating capacity of the banking system to ensure maximum stability in the economy concerned.

Taking into account these criteria, efficiencies of the conventional and Islamic banks are compared with the ideal one for arriving at a conclusion regarding their relative efficiency level.

As analytical tools, both static and dynamic approaches have been applied to the present study. The static approach illustrates comparative efficiency position of Islamic and conventional banking systems assuming they operate separately in two economies as a

complete system of their own. On the other hand, the dynamic analysis sees comparative efficiency of the two systems assuming their simultaneous operations in the same economy.

Moreover, both the static and dynamic analyses are undertaken under macro-analytical framework. That means, while making a comparative efficiency analysis, only the general features of the two systems of banking have been considered cancelling out specific individual characteristics, if any. So far as the Islamic banking is concerned, there are a wide variety of practices in different parts of the world. Here Islamic banking has been visualised in line with the conceptualisation of the Muslim economists.

2.4 Empirical Testing of the Findings from Theoretical Analysis

The empirical part of the study has been designed to test the findings from dynamic analysis. Among the commonly used methods for empirical study, desk study and interview methods have been followed. Desk study method greatly relies on information and statistics documented in official publications, books, journals, annual reports, bulletins, etc. From these statistics a number of ratios have been developed to provide measurable character to the criteria developed in the efficiency model. These ratios are cautiously devised and are probably capable of measuring relative efficiency of the two banking systems without any bias shown to them. Where official statistics appear insufficient, bank executives and personnel engaged in Investment Division (Loan Operation Division in conventional sense) have been interviewed. Data so collected has been cross-checked by interviewing personnel from the central bank and entrepreneurs of the two systems of banking. All these have been done by following a particular sampling method as detailed in section 2.6 below.

2.5 Types and Sources of Data

The data for the present study have been collected from secondary as well as primary sources. The secondary sources include books, journals, annual reports and documents of sample banks. The primary data, on the other hand, have been obtained through personal interviews with the bank personnel, officers and executives of the central bank and selected entrepreneurs. The different types of data and their sources are presented in the following under respective heads.

2.5.1 Secondary Data

Data that could not be made available from primary sources have been collected from secondary sources. The secondary data include books and journals published from national and international research institutions. Bangladesh Bank publications, reports and bulletins published by of the Ministry of Finance and sample banks and other training and research institutions fall under this category.

Concerning reliability of these data, it can be safely said that these are freely used by all government bodies and very often referred by international agencies.

2.5.2 Primary Data

To have an insight on the relative efficiency of the conventional and Islamic banking systems, opinions of bank personnel of sample banks as well as of Bangladesh Bank have been surveyed. For this purpose five sets of questionnaires has been administered. The researcher has filled up the questionnaires himself. The data thus collected have been subsequently processed, tabulated and analysed in terms of the study objectives. The major features of the five sets of questionnaires are explained in section 2.9 of the present chapter.

Care has been taken from the very outset to maintain authenticity of data. All precautions have been taken to minimise the chances of errors, often by cross-checking the survey data at different stages.

2.6 Sample Design

Sampling techniques applied to the study have been designed with utmost care with a view to making the study free from biases. Similar caution has been taken in the selection of study samples, viz., banks and respondents as well as the study years.

2.6.1 Selection of Banks

A stratified purposive sampling method has been followed in selecting sample banks. While doing so, first, all the banks in Bangladesh have been categorised into conventional and Islamic banks. The former have been further categorised into Public Sector Conventional Banks(PSCBs) and Private Sector Conventional Banks(PRSCBs).

Almost all the banks in Bangladesh, except four, fall under the conventional category. Within this category there are public sector and private sector banks. Before privatisation, all banks were in public the sector. Banks in Bangladesh may further be categorised as commercial banks and development financial institutions or specialised credit institutions. There are 15 commercial banks and 9 specialised credit institutions in Bangladesh. Of the 15 commercial banks, 4 are in public sector and the rest are in the private sector.

As part of data collection from secondary source, three out of the four PSCBs (Sonali, Agrani and Janata) have been selected for data collection. Thus the sample covers 75% of the public sector commercial banks. Of the eleven PRSCBs, 4 have been selected for the study. They are: United Commercial Bank Limited, National Bank Limited, The City Bank Limited and the Arab-Bangladesh Bank Limited. Sample size in this sector is also quite large (36.3%) and very much representative of the population. All the banks

selected for the study, whether in the public or in the private sector, are domestic in character.

Of the four Islamic banks (IBs) operating in Bangladesh, the Islami Bank Bangladesh Limited (IBBL) has been taken as sample considering its bigger size and length of operational experience similar to those of PRSCBs. In this case the sample is 25% of the population size.

On the other hand, sample design for primary data collection has been confined relatively to small size of population. For all the three categories of banks under study, one bank from each category has been selected for interview. Thus the sample sizes for PSCBs, PRSCBs and IBs are 25%, 9.09% and 25% respectively.

2.6.2 Selection of Study Years

The study covers a period of 11 years (from 1984 to 1994). The selected years appear appropriate for the study because the period represents the same range of operation for both PRSCBs and IBs in Bangladesh. The same period for PSCBs does not show any noticeable variation so far as overall banking situation in Bangladesh is concerned. Social, economic and political situation did perhaps equally matter for all categories of banks.

2.6.3 Selection of Respondents

The questionnaires designed for collecting data from primary sources is meant for three categories of respondents, viz., the scheduled bank personnel, the central bank policy analyst/ researchers and the borrowing entrepreneurs.

The first category of respondents numbering 105 represents PSCBs, PRSCBs and IBs each providing 35 respondents. A total number of 10 central bank personnel, 5 each from Research Division and Banking Control Division, have been interviewed. Interview of the personnel from central bank is aimed at cross-checking the findings from scheduled

banks. The third category of respondents, i.e., entrepreneurs from three sample banks representing the three categories of bank under study enumerate 90 (30x3). The categories and the number of respondents thus selected can be summarised as follows:

Table - 2.1
Distribution of Respondents under Each Category of Respondents

Scheduled Bank Personnel				Bangladesh Bank	Borrowing Entrepreneurs			
PSCBs	PRSCBs	IBBL	Total		PSCBs	PRSCBs	IBBL	Total
35	35	35	105	10	30	30	30	90

2.7 Techniques of Data Analysis

Several techniques of data analysis and interpretation have been applied in the study. The simple arithmetical and statistical averages, percentages, ratio analysis, tabular presentations of data are among the techniques used. Graphical presentation of some variables has helped establish relationships among them more visibly.

2.8 Questionnaires Explained

Five sets of questionnaires have been administered for collecting primary data for the study. The first four sets are for the bank personnel and the fifth one is for the entrepreneurs. The main features of the questionnaires are as follows:

2.8.1 Questionnaires for the Bank Personnel

Among the four sets of questionnaires designed for the bank personnel, Questionnaire-1 (Appendix-XXXII) applies to both commercial (conventional and Islamic) and central bank personnel. Questionnaires-2 & 3 (Appendices XXXIII & XXXIV) are virtually the same but these are approached differently to fit to the

commercial bank personnel and the central bank personnel respectively. Questionnaire-4 is exclusively designed for the IBBL personnel.

Questionnaires designed for the bank personnel are meant for collecting (a) data on efficiency/performance status of the banks under study; (b) some specific information on the nature of banking; and (c) data on the state of and reasons for overdue of loans in the banking sector along with the state of affairs relating to the practice of PLS-modes by IBBL.

i) Information on efficiency criteria

The information on efficiency criteria provides a comparative picture of productive, allocative, distributive and stabilisational efficiency or relative performance of the two systems of banking under consideration.

(a) *Information on productive efficiency*: Questionnaire-1 provides 'Fund Utilisation Rate' and 'Profitability' as proxy variables to measure relative productive efficiency of PSCBs, PRSCBs and IBs.

(b) *Information on allocative and distributive efficiency*: Questionnaires 1, 2 & 3 provide sectoral allocation of loanable fund with causes. Questionnaires 2 & 3 take care of income distribution pattern.

(c) *Information on stabilisational efficiency*: Questionnaires 2 & 3 include the information on stabilisational efficiency.

ii) Specific information

The following kinds of specific information have been collected through administering questionnaires 2, 3 & 4.

a) *Identification of the nature of banking systems*: Questions included in the above mentioned questionnaires help identify the nature of the banking systems under consideration. The first parts of the Questionnaires 2& 3 provides answer what types of

banking systems are in practice in Bangladesh, delineating essential differences in their mechanisms.

b) *Overdue loans in Bangladesh*: The second part of questionnaires 2 & 3 provides information on situation of overdue loans and its probable reasons and gives policy options on how the situation might be improved. This part further includes questions which present data on reasons for fund diversion, why industries get sick after taking loans from banks and how the situation could be reverted.

c) *State of PLS-banking in Bangladesh*: Questionnaire 4 (Appendix-XXXV) exclusively presents information on the trend and dimension of the problems related to practice of the PLS-modes by IBs.

2.8.2 Questionnaires for the Entrepreneurs

Questionnaire-5 is for the entrepreneurs. It deals with the status of PLS-banking in Bangladesh. A brief description of the questionnaire is given below:

(1) *Information on the status of PLS-banking practice*: Views of the bank personnel as well as the entrepreneurs regarding practice of PLS-modes by IBs have been collected through questionnaires 4 & 5 respectively.

(2) *Distributional impact of financing*: Questionnaire-6 provides information on the distributional effects that different banking systems under consideration have on the entrepreneurs with income category, asset holdings, and the sectors they belong. The questionnaire provides also the information classifying depositors and borrowers according to (a) income category; (b) the size of deposits they made; and (c) loans they received.

2.9 Limitations of the Study

As has been mentioned above, the study examines comparative efficiency position of the two systems concerning investment financing. The following are the limitations identified in conducting the study.

One of the important limitations of the study is the empirical test of the findings from dynamic analysis based on a single country experience, that is, Bangladesh.

The second limitation arises with the difficulty in applying one of the three criteria in measuring distributional efficiency of the banking systems under study. The efficiency criterion (i.e., classifying deposits and advances with income size or asset holding of the depositors and borrowers) could not be tested at all. Questionnaires-6 & 7 (Appendices XXXVII & XXXVIII) could not be administered even after repeated attempts made by the researcher. This was due to refusal of the sample bank managers as well as the depositors and the borrowing entrepreneurs to disclose information on their deposits holding with and advances received from the banks. Banking laws of Bangladesh are not helpful for this since they do not permit bank managers to disclose account holder position. Moreover, both the depositors and the borrowing entrepreneurs were found to be rarely co-operative in disclosing their proper income and asset positions due to several unknown reasons. Besides, in spite of the criterion being a good measuring indicator for distributional efficiency, its applicability as a tool in micro level study is limited for the following limitations:

(a) depositor of a particular branch of a bank is not necessarily a borrower of that branch;

(b) A depositor may have accounts in other branch or even in different branches of different bank s .

(c) a depositor having large asset holdings does not mean that he will have a deposit with a particular branch of a bank commensurate with his asset holding.

The above facts lead to the conclusion that a micro level study of the above type for measuring distributive efficiency may be less reliable due to lack of correctly representative data at branch level. However, a country level macro data seems to be free from those shortcomings. Unfortunately, country level data on income and asset holding can not be related to deposit holding and borrowing by account size. This has led to limit reliance only on the macro data "classifying deposits and advance in terms of account size".

The third limitation relates to empirical test of the stabilisation efficiency of the two systems of banking under study. Considering the resource and time constraints and the volume and extent of data coverage required, empirical test of 'stabilisational efficiency' has been excluded from the study.

The fourth limitation corresponds to the shortness of the period under study (1984-94). The period is not long enough to draw a final conclusion on the relative efficiency level of the two banking systems under comparison. Because Islami Bank Bangladesh Limited is a newly established bank that launched its operation in 1983. It had many weaknesses and it is very much likely particularly in the early years of operation. Similar problem exists with the private sector conventional banks that were floated in the same year. However, the public sector banks have long experience in banking. Thus, the case findings from the study of the three categories of banks may not be representative of the global situation.

In spite of these limitations we are inclined to say that such limitations are common to almost all data-based work. Yet we have tried our best to minimise the probability of errors. It may be that we have not perhaps been successful in all cases. However, every possible effort has been made to have the data cross-checked by different methods of data collection including personal observation exchange of views with resource personnel in

relevant fields. Therefore, we believe that the limitations of the study would have very little adverse effect on the findings.

CHAPTER-3

BANKING EFFICIENCY MODEL: A CONCEPTUAL FRAMEWORK

In measuring efficiency of the two systems of banking in financing investment a conceptual framework could be of much use. In building such a framework, the foremost task is to define the terms 'investment financing' and 'efficiency'. The first term 'investment financing' is not commonly understood in conventional and Islamic banking. The second term 'efficiency' has different uses in different fields of knowledge. Hence there is a need for giving a common meaning of the terms to banking. Both the terms should be defined in a way that they could be applied suitably to both the systems of banking.

3.1 Meaning of 'Investment Financing' and 'Efficiency' in Economics and Banking

In conventional approach, deployment of loanable funds takes two forms: advances and investment in securities. Whereas in Islamic banking 'investment' means every type of fund use ranging from advances to investment in conventional sense. That means investment from Islamic banking viewpoint equals advances plus investment in securities in conventional sense.

Since the term investment has different meaning in conventional and Islamic banking systems, it is pertinent to assign common meaning to the term. In the present study the term "investment financing" means loans and advances made under conventional banking plus investment in securities. The term also applies in the present study to mean short-, medium- and long-term financing by Islamic banks and deployment of funds in stock market. Investment in preferred stocks and bonds are not allowed in Islam because the returns from them are either fixed, and hence very much like 'riba', or akin to that of gambling (Zaman, 1986).

3.1.1 Efficiency:

The term 'efficiency' is a very widely used term in economics as well as in other branches of knowledge. Figuratively the term implies highest possible performing skill of person, method, system, or a process. In economics, the term closely relates to Pareto optimality concept. Optimum means the best possible way of performing something. Samuelson, using Pareto optimality concept, defines the term efficiency to mean "reorganisation of a production unit or a market or the economic system as a whole in a way that no one can be better of without making someone else worse-off" (Samuelson, 1989).

3.1.2 Application of the Efficiency Concept in Banking

Banking as a process of financial intermediation is supposed to face a number of efficiency tests. Efficiency of a banking system may be judged in terms of the tasks it performs in the process of investment financing. One of the prime tasks of the financing process is utilisation of investment opportunity of the economy as much as possible with the scarce financial resources available to the bank. This capacity of a banking system in better exploitation of investment opportunities available in an economy may be termed as 'productive efficiency' of the system. The term is used here in the sense that different systems of banking may produce different levels of performance in using investment opportunity of an economy having the same amount of investible funds. Thus, it is the mechanism of the particular banking system that determines the level of productivity in tapping up investment opportunity of an economy.

The second task relates to the best possible way of allocating investible funds. The question of allocation relates to only the optimum or best utilisation of investible funds. It depends on the capacity of the system that is further determined by the specific nature of the financing mechanism that a banking system adopts in financing investment. Let us call it allocative efficiency.

The third task is distribution of income generated in the process of investment financing by a banking system. If a banking system ensures more equitable distribution of income, it can be termed as more efficient. Distributive efficiency of a banking system thus depends on how equitably the system can allocate funds and distribute income among the participating factors while financing investment.

The fourth task involves rationalisation of the investment financing mechanism. The system should be cost-effective. It should maximise income with minimum operational costs. That is a system -- to be operationally efficient -- should perform its activities utilising minimum inputs to have maximum outputs. We call this capacity an 'operational efficiency' of an ideal banking system.

Finally, efficiency of a banking system may be attributable as contributing to overall stability of an economy of which it is an integral part. For a steady and uninterrupted growth, an economy should be less prone to cyclical fluctuations. Banking system functions in an economy just like an artery system of human body. The system may sometimes be caught by hypertension either produced internally or created by external shocks. Whatever might be the causes of cyclical fluctuations, the present study aims at delineating whether the banking system can be free from anything repugnant to its own mechanism and have the capacity to face external shocks. Capacity of the type as mentioned above of a banking system may be termed 'stabilizational efficiency.'

3.2 Banking Efficiency Model and its Components: A Conceptual Framework

The basis of the Banking Efficiency Model to be developed here is the conventional Investment Demand curve that explains how investment decision is made by firms or entrepreneurs in an economy. Rate of interest being one of the key factors in the investment decision model, conventional banking appears to be an integral part in the investment decision making process. Akkas (1985, 1996) keeps the structure of the

investment decision model intact and extends it to meet the requirement of being a general one incorporating in it investment decision mechanism of Islamic banking. This is illustrated in the following figures. Fig-la represents investment decision model under conventional banking system and Fig-1b represents the same under Islamic banking. The generalised banking decision making process is modelled in Fig-2 which is derived by superimposing Fig-1b on Fig-la.

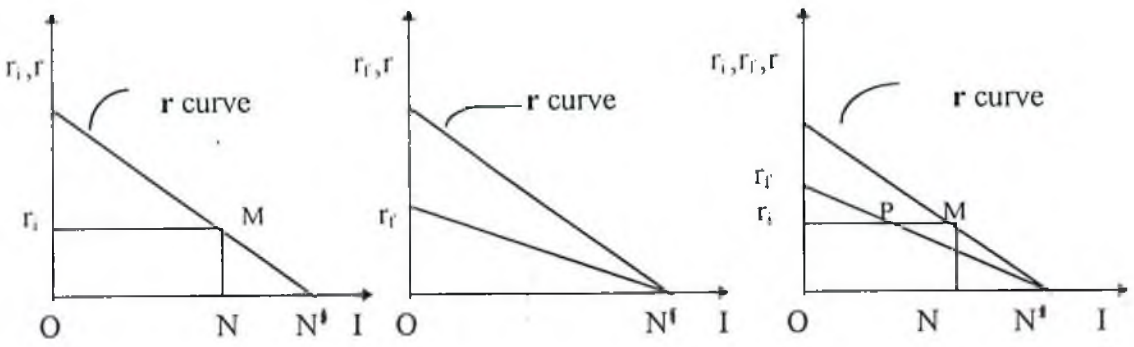


Fig-1a: Investment Decision by Conventional banks

Fig-1b: Investment Decision by Islamic banks

Fig-2: Investment Decisions by Conventional and Islamic banks

The horizontal axis of Fig-2 depicts level of investment, **I**, at different rates of interest ($\mathbf{r}_i$) for a conventional bank and financier's rate of return ($\mathbf{r}_f$) for an Islamic bank both shown vertically. The horizontal shape of the $\mathbf{r}_i$ curve indicates that though the rate of interest seems to affect the level of investment inversely, it is neither related nor influenced by the rates of return of the projects financed by the bank. The downward sloping $\mathbf{r}_f$ (rate of profit that goes to an Islamic bank) curve, on the other hand, is directly variable to changes in rate of return, **r**. This is because both **r** and $\mathbf{r}_f$, maintaining almost a proportional change, are downward sloping and they meet each other at zero rate of return at point **N'**.

A relation between **r** and $\mathbf{r}_r$ can be established if the ratio, λ (the percentage share of **r** going to the borrowing entrepreneur), is known. Thus, the $\mathbf{r}_r$ can be measured in the following way:

$$\mathbf{r}_r = (1 - \lambda)\, \mathbf{r}.$$

Key Assumptions:

The model is based on the following assumptions:

(i) This is an economy where both the conventional and Islamic banks operate side by side;

(ii) Customers are well aware of the functioning of the two systems of banking;

(iii) Religious considerations do not affect rational behaviour of the borrowers and bankers;

(iv) Investment decisions in the money market is not affected by the operation of capital market;

(v) There is no change in price level;

(vi) There is only one market rate of interest prevailing in the economy;

(vii) There is no shortage in supply of credit in the money market;

(viii) Question of moral hazard is absent.

Investment decision under conventional banking: Under conventional banking framework as in Fig-la, bank charges fixed rate of interest to finance only those projects which have rates of return greater than or equal to the rate of interest. If the conventional banking system is termed as *Fixed Return Mechanism (FRM)*, then investment decision under this mechanism may be modelled as:

$$I = f(r_r, r) \quad \ldots\ldots\ldots\ldots\ldots\ldots (1)$$

$$\text{with } \frac{\delta I}{\delta r_i} < O; \quad \frac{\delta I}{\delta r} > O$$

where, **I** represents level of investment, $\mathbf{r_i}$ the rate of interest and **r** the rate of return from the project.

Here $\frac{\delta I}{\delta r_i} < O$ indicates an inverse relation between interest rate and investment demand, **I**,

whereas $\frac{\delta I}{\delta r} > O$ shows a positive relation between investment, **I** and rate of return, **r**.

Investment decision by Islamic banks: Under Profit-loss sharing mechanism of investment financing, bank receives a variable rate of return since it shares a percentage of profits earned by the borrower. Though there is a consensus as to sharing losses in proportion to capital participation, some of the Muslim economists think that the ratio may vary with the application of different types of modes of financing (Hasan, 1985). Moreover, profit earned from bank-financed projects usually being variable, even application of a ratio in proportion to capital participation will provide a variable rate of return for the bank. Thus, the Profit-loss-sharing mechanism of investment financing may be termed as *Variable Return Mechanism or VRM* (Khan, 1985).

Since VRM postulates zero rate of interest at all of its transactions, it neither receives nor pays fixed rate of return while financing investment. The question arises as to what actually is the allocating device that ensures optimum allocation of scarce financial resources and establishes equilibrium in the money market? How financing decision of a bank relates to the investment decision of a firm?

As regards allocating device, rate of interest will be replaced by the rate of return under VRM. By this replacement there is no strong theoretical reason to support the

often-made a priori assertion that investment levels would decline (Haque & Mirakhor, 1986). Though there is no difference of opinion in regard to the rate of return on equity financing as the tool of efficient allocation of resources in a Zero Interest Rate Economy (ZIRE), some sorts of disagreements still persist as to the interpretation of the equilibrium condition. According to Arif, capital will flow into those sectors that offers the highest rate of profits to investors until equilibrium is reached in the sense of profit being equalised for all sectors (Arif, 1982). Kahf, on the other hand, says equilibrium level of investment can be determined at a point where its cost equals its return (Kahf, 1982). While Saqr is on the view that equilibrium will reach at a point where the expected rate of profit is just equal to the normal rate of profit. Each industry has its own normal rate; and rates differ according to the size of investments, time maturity, degree of risk and other related factors (Saqr, 1982). Jarhi's views seem to be more operational and clear. He says, the robust rules for static efficiency in investment are essentially two: The first is that marginal rates of return on investment be equal in all industries. The second rule requires the use of discounting to take proper care of the time dimension of costs and benefits. The process of discounting is entirely acceptable in Islam. This is a rate of return on alternative real investment (Jarhi, 1985). Uzair suggests average rate of profit prevailing in the economy as the measure of opportunity cost that guides project evaluation and resource allocation in the private sector (Uzair, 1982).

The problem still persists as to the definitions of profit and the method of its calculation. The following discussion concentrates upon resolving these issues. The term profit in the capitalist world refers to the reward for enterprise whereas in Islamic context it is a reward that has to be divided between capital and enterprise. In other words, profit in an Islamic system consists of return to capital and enterprise. But the problem arises with the r being gross rate of return accrued from project, which includes cost of borrowing and λ and $1-\lambda$ being the ratios going to the financier and the entrepreneur

leading to impossibility of making a comparison between the first rate and the next two ratios (see Fig-2).

However, the difficulty is not insurmountable. Since we know the rate of return per unit of investment, we may arrive at total profit. The ratios may then be applied to total profit for determining shares of profit going to the financier and the entrepreneur. When we know the ratios and the shares of profits, their respective rate of return against their investment may easily be calculated. When we know financier's rate of return at each level of investment, we can derive the financier's rate of return curve, i.e., $\mathbf{r_f}$ curve.

Under VRM, financial contract specifies the following returns to the financier (bank) and the investor (borrower), respectively:

r = total rate of return

r_f = financier's rate of return i.e., $(1-\lambda)r$ ..... (2)

λr = entrepreneur's rate of return.

Assuming linearity in the movement of 'λ', the financing and investment decisions under VRM are shown in Fig-1b.

In this figure, the $\mathbf{r_f}$ curve meets straight to the point **N'** where r = 0, implying financier's interest to finance all those projects which have rates of return greater than or equal to zero. This may not happen since financing always involves some administrative cost. If so, minimum cost of borrowing under VRM will be somewhere between the market rate of interest (point **M**) and the zero rate of return (point **N'**); say, at point **M'** as shown in Fig-3 below.

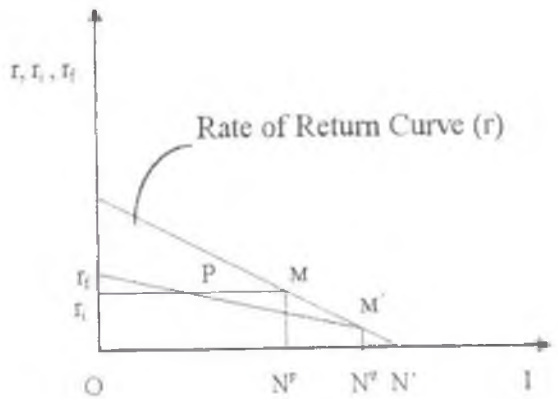


Fig-3: The Banking Efficiency Model

We find some additional features of the Fig-3. These are:

(a) r_i curve is a horizontal line parallel to X-axis.

(b) r_f curve is downward sloping and meets with the r curve at its lower level compared to where r_i curve meets, and

(c) the equilibrium under VRM takes place at a higher level of investment (ON^V) than that of the FRM (ON^F).

Based on the above three features, Fig-3 tells something more than it is simply a decision-making model for conventional and Islamic banking. r_i and r_f being the allocating device for the respective banking systems provide an opportunity to compare their relative efficiency in regard to allocation of scarce financial resources of the economy concerned. In the process of allocating resources, the respective banking systems also shows their relative productivity in terms of promoting investment in the economy. Moreover, besides playing the role as allocating devices, r_i and r_f influence distribution of income among participating factors in the process of financial intermediation. Further, these two tools, as stabilising devices, influence tremendously the investment situation of a country.

Thus Fig-3 provides an opportunity to compare relative efficiency of the two banking systems in terms of at least the following five efficiency criteria. These are: a) Productive Efficiency, b) Allocative Efficiency, c) Distributive Efficiency, d) Operational Efficiency, and (e) Stabilizational Efficiency. While the first three criteria are very explicit to the efficiency model, the fifth is implicit. Prior to applying these criteria to measure comparative efficiency of the two systems, it is important to define them here as follows:

3.2.1 Productive Efficiency

Productive efficiency of a bank in financing investment implies a system capacity of the financing mechanism to produce maximum possible result from an investment. A bank, while financing investment, confronts five types of productivity questions so far as its financing mechanism is concerned. *First*, how much its financing mechanism is capable of utilising investment opportunities that exist in an economy. *Second*, how far its financing mechanism can help ensure effective performance of the projects financed by it. *Third*, how much the mechanism is capable of ensuring maximum possible timely recovery of the loan financed. *Fourth*, how much it is capable of tapping up maximum return from an investment. *Finally*, how much the system is elastic in providing the financial services to the entrepreneur seeking funds as per their necessity. Thus a financing mechanism, to be productive, faces five efficiency tests:

(1) Investment opportunity utilisation test

(2) Project efficacy test

(3) Loan recovery test

(4) Profit maximisation test

(5) Test of elasticity in financing .

Investment opportunity utilisation test: In testing the investment opportunity utilisation capacity of an investment financing mechanism of a bank it is essential to know

what is actually meant by the term investment opportunity and how it can be quantified so as to help measuring the bank's capacity to utilise it.

Investment opportunity means total number of projects, calculated in money terms, in an economy which are waiting to be financed having their internal rates of return greater than or equal to zero, i.e., IRR $\geq$ O, assuming no cost of borrowing and non-existence of other alternative opportunities for investment. For a clear understanding of the concept we may again refer to Fig-3. The vertical axis shows different rates of return of bank-financed projects while the horizontal axis indicates amount of investment that could be made at different rates of return. The downward sloping rate of return curve, **r**, indicates that projects available in an economy can be arranged in descending order in terms of their rate of return and can be financed as long as the rate of return is greater than zero. If so, according to Fig-3 **ON'** is the investment opportunity level.

Under the assumptions of zero borrowing cost and fund availability, investment opportunity utilisation test among different types of banking shows comparative strength of a particular system over the other to finance investment projects with **r** as much as possible closer to zero. In applied sense, Fund Utilisation Rate (Employed Fund as a percentage to Loanable Fund) may be used as a proxy to Investment Opportunity Utilisation Test.

Project efficacy test: A financing mechanism, to be productive enough, should be capable by mechanism to ensure better performance of the project where it has financed. This is because of the fact that it has got opportunity to utilise scarce financial resources which usually have alternative uses. How much a financial mechanism is productive, in this sense, is determined by the effective linkage that it can establish with the financed project through its financing procedure thereby helping the project money to be utilised in an appropriate and cost effective manner in order to achieve best possible result.

Loan recovery test: This test measures another dimension of productivity of a financing mechanism to show how much it is sound to recover loans financed earlier. Factors which help easy and timely recovery of loans are linked up with the whole process of financing ranging from (i) selection of projects, (ii) disbursement procedure, and (iii) monitoring of the performance of the project. The nature, importance, and extent of these activities are very much system specific and thus produce varying results in recovery. While measuring comparative productivity of the two financing mechanisms in loan recovery, the question of cost effectiveness should duly be considered.

Profit maximisation test: Productivity of a system also conforms to its inherent mechanical capacity to tap up maximum profit by employing its scarce and limited financial resources in a productive way. This can be done if a bank starts financing projects with the highest rate of return and takes over the second, the third highest and so on and continues in this way till the last unit of investible fund is exhausted. Referring to Fig-1, a most productive financing mechanism could be one which finances project starting from point O and proceeds along the line ON'. Some measurable criteria for profit maximisation test would be: (i) Profit-Employed Fund Ratio and (ii) Profit-Loanable Fund Ratio.

Test of elasticity in financing: Investment financing is surely an act of service production. This is a service provided primarily to the entrepreneurs and finally to the society. Entrepreneurs' borrowing needs are various in nature: short, medium, and long term as well as temporary credit need including consumption and working capital requirements. Thus a financing mechanism, to be productive, should have enough capability to response and fulfil instant and short term credit needs of the entrepreneurs. The elasticity of investment financing may be defined as a ratio of change in short term financing to change in total investment. Thus,

$$E_f = \frac{\delta S_f}{\delta I} \cdot \frac{I}{S_f} \quad \text{.....(3)}$$

where, E_f means elasticity of financing, δS_f means change in short-term financing, and δI means change in total investment.

Comparative strength of a particular banking system in this regard is determined by the higher value of its E_f.

3.2.2 Allocative Efficiency

Allocating efficiency deals with the best possible utilisation of the community's scarce financial resources so as to attain maximum benefit to the society. There are two broad ways to promote economic welfare in a world of scarcity: (a) to arrange ends in order of priority and allocate resources accordingly until the resources are exhausted, and (b) whatever ends are chosen for priority, they should be met with the least expenditure of scarce resources (Sametz, 1982).

While the first way of promoting economic welfare is called allocative efficiency the second one means operational efficiency.

Allocating efficiency is not only limited to prioritising of ends in order of decreasing desirability and employing resources according to that order but also putting them to their best use since all alternative uses can not be satisfied simultaneously. Question arises as to how one can be sure of the best uses of funds without having a criterion of fund allocation among projects even if he is provided with the ordering (priorities) of ends.

An optimum allocation of investible funds may be achieved if (a) each end in the priority list is given particular percentage weight and funds are separated accordingly; and (b) funds meant for particular end should be allocated as per profitability of the projects awaiting to be financed, assuming that all other conditions have been satisfied.

Thus an investment financing mechanism to be an efficient one, must follow two criteria as far as its allocating efficiency is concerned: (a) ordering of ends in terms of decreasing desirability, and (b) ordering of projects in terms of their profitability (in descending order). Now in measuring efficiency of the two banking systems--conventional and Islamic--their financing mechanisms should be put to test with the above two criteria.

3.2.3 Operational Efficiency

Allocative efficiency conditions presuppose utilisation of scarce investible funds at the least possible administrative cost. It is desirable for the interest of the bank as well as for that of the society. There is an inverse relationship between bank's profit and administrative cost. The former shrinks by enhancement of the latter and vice versa.

Thus profit maximisation criterion of the productive efficiency is linked to operational efficiency of a bank. It should be noted that operational efficiency is not the only factor contributing to maximisation of profit. While analysing productive efficiency, we allowed changes in the value of profit maximisation criterion keeping operational or administrative cost constant. But in the case of operational efficiency, the concern is to minimise investment financing cost with a given level of profit.

For giving operational shape to the concept of operational efficiency in measuring relative efficiency of the two banking systems, the following criterion may be evolved:

(a) Administrative Cost Per Taka Employed.

The higher the value the ratio possesses, the greater the possibility that a financing mechanism is operationally efficient.

3.2.4 Distributive Efficiency

The rationale behind allowing operation of a bank with public money is obviously the contribution it makes to economic development of a country. Economic development, now a days, is not merely meant for increased production or growth in the production of

goods and services. Rather it means, according to the latest evolution of the concept, growth plus equitable distribution.

A banking system may influence distribution in two stages. First, it influences distribution through deployment of its financial resources among different sectors, regions and different income groups. Secondly, it affects the distribution while distributing incomes generated in the financing process among the participating factors (the depositors, the bank, and the entrepreneurs). Hence a banking system, to be an efficient one, should ensure equitable distribution of investible funds among different sectors, regions and different income groups as well as distribution of risks and returns among the participating factors.

The criteria that might be used here for identifying relative distributive efficiency of the two systems of banking are as follows:

(a) classifying deposits and advances in terms of account size or, if possible, in terms of income size;

(b) interest-income or profit income ratios between the entrepreneurs and the bank, and that of the bank and the depositors; and

(c) rural-urban classification of deposits and advances;

3.2.5 Stabilizational Efficiency

Stabilizational efficiency means built-in capacity of a banking system to minimise cyclical fluctuations in an economy. Market economy, by nature, is subject to cyclical fluctuations. The intensity of the fluctuations may differ from system to system. In other words, differences in the operational mechanism of different banking systems may produce cyclical fluctuations of different scales. Here the hypothesis is that an investment financing mechanism that produces minimum fluctuations in an economy may be considered more efficient.

In measuring stabilizational efficiency of the two systems of banking under study, the model developed in line with Chisti (1985) may be used. Chisti has examined through previous investment theories with a view to tracing out the process of cyclical fluctuations in a market economy. He reviewed Miller-Modigliani theorem and Kalecki's theory of investment and also went deeply into Minsky's interpretation of cyclical fluctuations. Finally he firmed up Minsky's approach to analysing the process of cyclical fluctuations.

According to Minsky, the fragility of the financial system depends on the relation between contractual commitments (which are essentially interest and the principal on debts), and the cash flows from regular operations (which are essentially profits). With respect to this relationship he classifies business firms into three groups, namely *hedge, speculative, and ponzi.*

For *hedge* units, cash flows are expected to exceed payment commitments on outstanding debts in every period. For *speculative* units, cash commitment on debts exceeds cash flows from regular operations only for some periods. For *ponzi* units, cash payment exceeds cash flows for almost all near term periods.

During a prolonged period of tranquillity, prices of capital assets tend to rise, and portfolio preference shifts towards more *speculative* and *ponzi* financing. This makes the economy very sensitive to interest rate variations. The cost of short term debt in financial structure increases and the weight of cash in portfolios declines. Falling profits and rising interest turn some *hedge* units into *speculative* units, and *speculative* units into *ponzi* ones.

When many *speculative* and *ponzi* units find it difficult to meet payment commitments with cash flows they issue more debts. Where it becomes increasingly difficult to meet payment commitments by emitting more debts, *ponzi/speculative* units start selling out their assets. However, when many units resort to generate cash by selling out their assets, it causes a fall in asset prices. If the asset prices fall to the level of the cost

of production or even below, new investment virtually stops. This very low level of investment exerts pressure on profits to rise and this merry-go-round starts all over.

The above interpretation of the creation of cyclical fluctuations consolidated in Minsky's own work (Minsky, 1982) is retained in Chisti model. What Chisti has added is the interpretation of the fixed financing condition, vis-à-vis the uncertainty of profits to be mainly responsible for the gap between cash flows and payment commitments. While interpreting the fixed financing condition, Chisti agrees with the opinion that oscillations in the system are not generated by exogenous shocks, rather they are inherently produced by the system itself (Andronov, Vih and Khaikin, 1966; Minorsky, 1962). The interaction between the stimulating effect of investment and the retarding effect of the worsening financing conditions is the main force that generates the cycles. He has explained the situation by using a Phase Diagram (as in Fig-4).

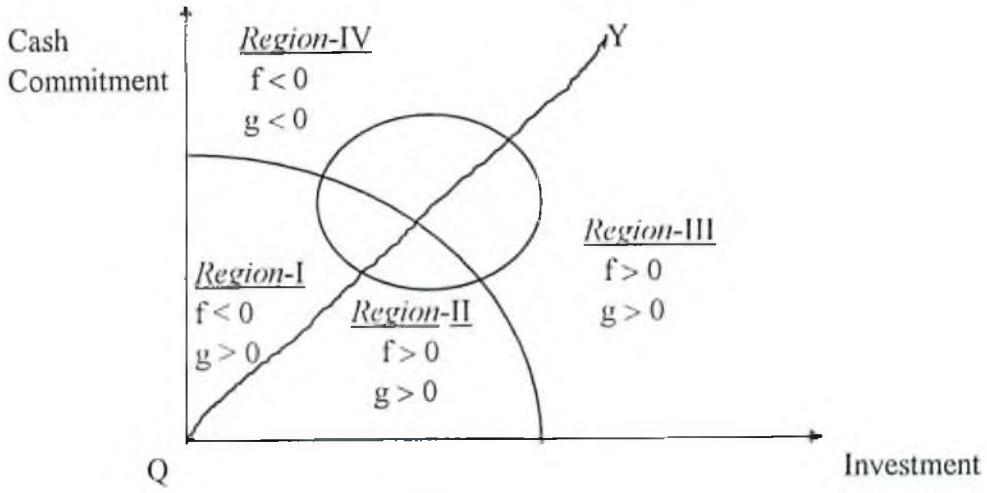


Fig-4: Phase Diagram -- Cyclical Fluctuations in Investment

In region-I, both the levels of investment and payment commitments are low. Internal funds, at this low level of investment, may be sufficient to its financing and the excess of cash flows over investment expenditure may be used to retire some existing debts. At this low level of investment prospective returns are high which accelerate investment. This indicates the upswing of the business cycle.

In the Region-II, general optimism regarding investment continues. People forecast, at this situation, high returns and high capitalisation rates. As a result, prices of existing and new capital goods tend to rise with the rise in investment. Under these optimistic conditions, banks will be willing to provide more finances to meet the investment plans. The situation is such that general long term assets are acquired by emitting relatively short term liabilities. That means a faster rise in debt payment commitments than cash flows.

Region-III is characterised by boom in the economy. At this stage, investment level is so high that it dampens optimism on yields. High level of cash commitments tends to lower the capitalisation factor. As a result, the prices of existing capital as well as new investment starts falling leading to a fall in profits, i.e., cash flows. The payment commitments, at this stage, remain at the same level as before. For many operating units it becomes difficult to meet their cash commitment with their cash flows. The gap between the two widens and is tried to be met up by emitting more debt. At this stage, banks find lending to be very risky that makes refinancing more stringent. Gradually, the system reaches a limit when it becomes difficult to borrow from one to repay the other. So, the entrepreneurs are compelled to sell their assets to generate cash to meet their payment commitments. When the same procedure is adopted by many, asset prices fall and the sellers have to accept capital losses. Foreclosure, bankruptcies and selling of subsidiaries occur frequently. With the significant fall in asset prices, new investment virtually stops. This corresponds to Region-IV. Once the economy reaches this region the process starts again from the bottom.

Integrating Phase-Diagram to Banking Efficiency Model: The basic hypothesis on which the Phase-Diagram is based is the fixed payment commitment of the entrepreneurs to bank against uncertain cash flows out of borrowed money. This is exactly the same as reflected in the Banking Efficiency Model (Fig-3) by the horizontal $\mathbf{r}_i$ curve and the downward sloping **r** curves.

To sum up, it is the spread between uncertain cash flows and fixed payment commitments that is a major source of instability in investment. The magnitude of this spread is system specific, i.e., particular type of investment financing mechanism may produce spread of specific magnitude between cash flows and payment commitments. More specifically, dissimilarity in the investment financing mechanism might result in spread of different magnitude between cash flows and payment commitments.

Since the concepts of cash flows and payment commitments have their different connotations in conventional and Islamic banking due to differences in their operational mechanisms, acceleration of cyclical fluctuations in the two systems certainly differs in magnitude.

The aforementioned model can conveniently be applied to measure roles of the two banking systems in aggravating/reducing cyclical fluctuations in the economy and thereby tracing their relative stabilizational efficiency.

CHAPTER-4

RELATIVE EFFICIENCY OF CONVENTIONAL AND ISLAMIC BANKING SYSTEMS IN FINANCING INVESTMENT- A STATIC MODEL

This chapter aims at examining theoretically the efficiency level of FRM and VRM in financing investment. This is a static analysis carried out under the assumption that the conventional and Islamic banking systems are in operation at the same time but in different economies. Efficiency criteria developed in the Efficiency Model is applied to both FRM and VRM to measure their efficiency levels.

4.1 Productive Efficiency of Conventional and Islamic Banking Systems

The strengths and weaknesses of the conventional banking system may be examined in respect of its investment opportunity utilisation capacity, contribution to project efficacy, loan recovery performance, profit maximisation, and elasticity in financing investment. These are the components of efficiency test developed in the previous chapter for measuring productive efficiency of the banking systems under study.

4.1.1 Investment Opportunity Utilisation Test

Utilisation of investment opportunity by FRM: In analysing the investment opportunity utilisation capacity of FRM, we may refer to Fig-3 in Chapter-3.

It may be mentioned that there exists **ON'** level of investment opportunity. Assuming availability in supply of investible funds, optimum level of investment under conventional banking framework will be determined at $\mathbf{ON}^{F}$ level where the rate of return, **r**, and rate of interest, $\mathbf{r}_i$, intersects at point **M**.

With Or_i rate of interest the level of investment that a conventional bank is interested to finance is ON^F. Thus projects beyond ON^F, though having positive rate of returns, are rejected for financing under FRM since rate of interest exceeds the rate of return from those projects making them non-profitable for the entrepreneurs and non-viable for bank financing. That means, under FRM a portion of investment opportunity always remains unutilised.

At this stage, it may be convenient to divide the investment opportunity level, ON', into two zones: (i) the viable projects zone, ON^F, and (ii) the non-viable projects zone, N^FN'. The latter zone N^FN' may be narrowed and more projects may be viable for financing if the rate of interest declines. In other words, utilisation of investment opportunity level may be increased (or decreased) with the decrease (or increase) in the rate of interest.

Theoretically, the *viable projects zone* widens when the bank reduces the rate of interest in order to utilise excess liquidity. The success of the policy depends on the stage of cyclical fluctuations the economy confronts. It has been shown that the FRM have excess liquidity in the downswing phase of cyclical fluctuations just after boom (Chisti, 1985). At this stage the spread between the payment commitment and cash flows reaches its highest level creating a situation in which FRM finds lending to be very risky. As a result, it becomes difficult for FRM to expand viable profit zone by reducing the rate of interest.

There might be another plausible reason why the investment opportunity utilisation range of the conventional bank reduces even further. This happens in the cases of projects that have net rate of return $(r - r_i)$ very close to zero on the left of point **M**. This is because of the fact that the marginal projects are severely vulnerable to cyclical fluctuations and prone to losses. That is why the rational entrepreneurs themselves avoid applying for bank financing for those projects. That means, under conventional banking framework where entire risk is borne by the borrowers, entrepreneurs submit only those projects for

financing which have probability of generating a high minimum net rate of return not subject to be offset by uncertainties. If this is true, the investment opportunity utilisation range of FRM further squeezes.

Utilisation of investment opportunity by VRM: VRM can finance ON^V level of investment thereby utilising extra potential investment opportunity of N^FN^V. This is possible for VRM since it can remain at least at the level of the average rate of return earned by the FRM by counterbalancing the losses incurred in the *low profit zone* (right of point P) by the excess profit earned in the *high profit zone* (left of point P). Thus keeping the average rate of financier's profit in FRM's level, VRM can utilise more potential investment opportunity remaining untapped in the economy. With a microeconomic analysis in dynamic sense Mukherji (1984) finds that compared to a capitalist firm, the firm in Zero Interest Rate Economy (VRM in our present context) will have a high rate of growth at low profit margin.

4.1.2 Loan Recovery Test

FRM and loan recovery: Loan recovery rate might be another criterion for measuring productivity of a banking system. The higher the recovery rate, the greater is the possibility of recycling scarce financial resources leading to increase in the productive efficiency.

FRM, for several reasons, is less sound in satisfactory recovery of loans. Using collateral as a safeguard, it becomes too much optimistic about recovery of principal with interest. Selection of projects providing high weight on collateral may ultimately affect safe return of loans since projects so financed may turn sick and hence run into losses. This may, further, open the room for taking another loan for repayment of the former. This is possible because the FRM prefers collateral than to the prosperity of the project. Delay

in the recovery of loan thus cuts the productivity of FRM in two ways: (a) by squeezing the flow of resources to investment activities, and (b) by reducing income for the bank.

VRM and loan recovery: VRM performs better in recovery of loans due to its built-in profit-loss-sharing mechanism. Failure of a project not only reduces profit but also it may lead to capital losses. Delay in the receipt of profit and capital reduces investible funds for further financing thereby slowing down the recycling process of funds. This keeps the VRM always alert to potential failure of any project financed by it.

4.1.3 Project Efficacy Test

FRM and project efficacy: While testing FRM's role in making a financed project effective, it is important to identify the level of linkages that it can establish with a project. There might be as many as four stages of linkages for a financial institution with its financed projects in order to make them effective: (a) while selecting projects, it has to be done appropriately after careful appraisal; (b) while signing financing contract, proper identification of the location of the project is required by spot-enquiry; (c) while disbursing the finance, it is essential to ensure its utilisation as per project design; and (d) monitoring of the project performance until recovery of the loan is completed.

FRM, in principle, follows all the four stages. In spite of that there exists doubt as to their actual practice. This is because the income of bank is not directly linked to the performance of the projects. It is argued that FRM relies too much upon collateral for safe return of principal and interest. Thus, it is neither committed to nor is serious in the effective operation of the projects financed by it.

VRM and the project efficacy: VRM by mechanism is a partner of the projects which it finances. It shares in losses as well as returns from the projects financed by it. Bank's income under VRM, has a direct functional relationship with the profit generated

from those projects. In other words, bank's profit increases or decreases with the rise or fall in returns from the projects financed by it. Thus the VRM is very much concerned about the performance of projects financed by it. The concern is expressed in the following ways: (a) while considering applications for loans, banks become very careful in assessing the profitability of the proposed projects; (b) banks keep a constant eye on the installation phase of the projects; and (c) the supervision continues as long as there is bank's involvement. These, obviously, ensure effective implementation of the projects and their better performance. Thus, VRM, being a ratio-sharer in profit, acts as a promoter of entrepreneurship which in turn helps in maximising bank profit. In short, coincidence of bank's interest with that of the entrepreneur ensures best possible outcome of the projects right from their selection, operation, and termination of contract between the two parties.

4.1.4 Profit Maximisation Test

FRM and profit maximisation: FRM's efficiency with profit maximisation may be tested in terms of the Fig-3. Assuming availability of investible funds and no alternative opportunities for investment, FRM can maximise its profit if it finances **ON'** level of investment, i.e., where r = 0. This is impossible for FRM since it charges the same rate of interest irrespective of differences in profitability of projects. Any attempt at financing projects beyond $\mathbf{ON^F}$ will lead to pulling down the level of interest rate thus reducing total profits. The lending rate of interest being $\mathbf{Or_i}$, the profit maximising investment level for FRM is thus $\mathbf{ON^F}$. The total profit(return) it earns is $\mathbf{Or_i\ MN^F}$.

FRM may increase the volume of its return if the lending rate rises. This takes place at a lower level of investment. That means, FRM misses some projects (considered as non-viable due to high lending rate), but higher rate of interest charged on the remaining projects may pull up its profit.

The above analysis clearly shows that FRM's productive efficiency in terms of investment opportunity utilisation works opposite to its profit maximisation efficiency criterion.

We have also illustrated that investment opportunity utilisation level as well as profit maximisation is affected by the low rate of recovery of loans advanced.

VRM and profit maximisation: Profit maximising equilibrium of VRM takes place at a higher level of investment than its conventional counterpart. The economy in which VRM operates is in equilibrium, according to the Fig-3, at $\mathbf{ON^v}$ level of investment at point **M'** where marginal rate of return on investment is equal to its marginal cost for all banks. The equilibrium point **M'** is preferable to **M** since average profit at the former point is greater than at the latter point.

4.1.5 Efficiency in Short-term Financing

Short-term credit need arises out of the demands for working capital, business transactions and consumer goods. The very nature of this credit needs is that it is mostly of contingent type and credit requirements have to be met within a very short span of time (less than three months). Second, such categories of credit requirements are not placed in the form of separate projects. As a result, profitability of projects in such types of financing is difficult to estimate in advance. Even where it is possible, it may not be economical to do so in view of cost effectiveness.

It is from the above perspective that the efficiency of both the FRM and VRM in short-term financing may be studied. FRM in this case enjoys advantages over VRM in calculating interest for periods of any length.

For VRM, short-term loan financing is still a problem. It lacks specific modes for meeting working capital needs of the entrepreneurs. What it does normally, by using modes like *Musharaka* and *Mudaraba,* is that while financing a project it encourages the

entrepreneurs to add the working capital requirement to the original project proposal. Thus working capital financing under VRM may relatively be inflexible. It may fail to meet suddenly raised working capital needs. Uzair does not share this view. Rather he is optimistic about the possibility of applying profit-loss sharing modes to meet financial needs of even contingent type. Introduction of proper accounting method that may help calculating profits generated from the use of working capital on quarterly, monthly, or on weekly basis derivable from past annual or quarterly averages (Uzair, 1980). That means according to him, if properly executed, modes as Mudaraba and Musharaka may also conveniently be used for financing even the fresh working capital needs of the entrepreneurs. However, several evidences show that financing through the above two modes represents a very small percentage of total financing made under VRM operating in the present world. Of course, it is argued that most of the PLS-banks are operating under a situation not supported by adequate legal back up helpful for their expansion and smooth running.

As far as the business transaction (particularly trade financing) is concerned the *Murabaha* mode is applied as an alternative to its conventional counterpart using the mode *bills purchased and discounted*. However, the proponent of VRM prefers limiting the extensive use of Murabaha since the mode does not at all conform to the profit-loss sharing characteristic of the VRM.

VRM has not yet been able to devise any alternative to consumption loan financing of its conventional counterpart. The latest development of literature on the issue suggests that banks under VRM may separate a portion of its investible funds for providing interest-free loans to consumers. In exchange, it may charge service charge from borrowers (Uzair, 1980).

4.2 Allocative Efficiency of Conventional and Islamic Banking

FRM and allocative efficiency: As has been mentioned in Chapter-2, an optimum allocation of scarce financial resources is possible, as par the efficiency model, when two conditions are satisfied, i.e., (a) setting country's development objectives in order of priorities and allocating funds accordingly, and (b) funds meant for each purpose are then disbursed to projects as par profitability.

While financing investment, FRM, no doubt, takes into account the profitability of the project, its collateral position and entrepreneurial experiences, and skills and personal integrity of the borrowers. All these considerations are important for a bank for the safe return of its capital and interest.

However, since FRM's income is not directly related to profits accrued from the projects financed by it, profitability does not work ultimately as principal criterion for fund allocation. Chapra refers to the contention of Ralph Turvey that, under FRM, rate of interest is irrelevant to investment decisions and hence should be replaced by price of existing equipment or share prices (Chapra, 1984). In Fig-3 we do not find any strong correlation between the downward slopping **r** and the horizontal $\mathbf{r}_i$ curves.

Allocative efficiency and PLS-system of banking: The first welfare condition is satisfied by the VRM. It is also in conformity with the Islamic welfare conditions developed by Mannan (1982).

When the first criterion is satisfied by Islamic welfare conditions, the second criterion concerning optimum allocation of resources automatically fits to the VRM model. It is because the very basis of VRM is profit loss-sharing where profitability stands first in order among the deciding factors in selecting a project for financing. While the first

criterion narrates distributional aspect of resource allocation, the second allocates resources for their most productive utilisation.

Thus, VRM, satisfying both the Pareto optimality and the Islamic welfare conditions, emerges as an efficient allocator of financial resources in an economy.

4.3 Distributive Efficiency of Conventional and Islamic Banking

In the previous chapter the Banking Efficiency Model introduced three criteria for measuring distributional efficiency of a banking system. These are: (a) classification of deposits and advances in terms of account size or in terms of income size; (b) classification of deposits and advances in terms of economic sectors, regions etc.; and (c) correlation among the incomes (profits) of the entrepreneurs, bank and the depositors. As the first two criteria are self explanatory and have little to do with theoretical analysis, these are left for empirical testing in Chapter-6. The following discussion corresponds to only the third criterion.

4.3.1 **FRM and distributive efficiency:** The institution of interest gives rise to two types of distributional problems. The first one relates to the distribution of income between the bankers and the depositors. The second problem relates to income distribution among various groups of people. The first category of inequality arises under conventional banking system because the benefits derived from the created money are, largely, appropriated by the bankers. The second type of distributional problems created by the institution of 'riba' is resulted from its dampening effects on investment and employment (Rushdi, 1988).

It is found from Fig-1 that FRM maintains a flat rate of interest whatever might be the profitability of the projects financed by it. In other words, banks' income under FRM is, by no means, related to profit accrued from projects financed by it.

The real source of income is projects where entrepreneurs deploy their borrowed funds. To charge the same rate of interest for projects earning different rates of return is unjustified from both economic and social considerations.

Concerning the distribution of risks, FRM shares nothing and shifts them altogether to the entrepreneurs. This is consistent with the nature of FRM that puts greater emphasis on maintaining sound collateral against each advance for safe return of its capital and interest. Entrepreneurs while facing loss or bankruptcy, FRM is entitled to recover its claims even by selling the collateral.

FRM gives fixed rate of interest to the depositors. That is why it prefers to receive a fixed rate of return (interest) from the borrowers so as to make payment to the depositors, meet its own operational costs and earn some profits. This is an arrangement that secures income for both the bank and the depositors. This is done at the cost of the borrowers who have to face cent percent risk. Thus conventional banking establishes a relationship that is widely biased to the depositors and bank and against the entrepreneurs.

It is important to specify the impacts of the above distribution on other efficiency considerations pertaining to FRM. We have illustrated earlier that marginal projects (with net rate of return closer to zero) will never be placed for financing since the entrepreneurs prefer minimising risks. This limits investment opportunity utilisation capacity of the conventional bank thereby reducing productive efficiency of FRM.

The income distribution scheme under FRM works against optimum allocation of scarce financial resources. This is because of the fact that FRM, instead of financing in terms of profitability of projects, diverts funds to projects with sound collateral. This helps concentration of wealth in favour of those who are already well-off and creates highly skewed income distribution in the society.

4.3.2 **Distributive efficiency under PLS-banking:** Since VRM shares a proportion of profit generated from projects financed by it and the profit received therefrom is further

shared by the banks and the depositors according to proportional weight given to each unit of share and deposit capital, we find a strong correlation between the income of these three parties. This is true whether the issue is seen from micro or from macro viewpoint.

From micro point of view, VRM shares a proportion of profit accrued from a project implying an equitable distribution. It is because of the fact that the distribution remains unaffected by the volume of profit generated from the project and the share proportion being determined by market forces, i.e., by the demand for and supply of investible funds (Siddiqi, 1983).

Seen from macro viewpoint, the distribution remains unaltered since VRM receives a share of total profits that are simply the addition of individual profits accrued from different projects financed by the bank.

As to the distribution of income between the bank and depositors, a standard proportion (in percentage term) is always maintained. Thus under VRM a strong correlation between the incomes of the three participating factors is found.

4.4 Operational Efficiency of Conventional and Islamic Banking Systems

Theoretically and under the assumption of static analysis, VRM is supposed to be operationally more efficient than FRM. It is because (1) it has the built-in mechanical superiority in utilising more investment opportunity of an economy, and (2) it allocates financial resources according to profitability criterion. What happens in practice when it is put to dynamic analysis and tested empirically, are the issues left over for discussion in the next two chapters.

One point has to be noted that financial viability of VRM as well as its growth depend on undertaking more and more profitable ventures and timely realisation of profits and recovery of principal. This is extremely important for a PLS-bank since it shares in

profits as well as in losses of the projects financed by it. A better performance from such type of financing arrangement presupposes effective supervision. That means higher administrative cost per unit of investment. The latter may be offset by more than proportionate increase in profit in response to proportionate increase in administrative cost. Thus the condition for operational efficiency of VRM is satisfied when

$$\frac{\delta r_f}{\delta I_e} > 0$$

where δr_f means change in financier's profit and δI_e means change in expenditure on investment.

4.5 Stabilizational Efficiency of Conventional and Islamic Banking Systems

It is to be noted that the context of Minsky's interpretation of cyclical fluctuations was basically the conventional banking, i.e., banking scheme based on interest.

4.5.1 **FRM and stabilizational efficiency:** The cyclical fluctuation process as depicted in the Efficiency Model clearly identifies the widening gap between the payment commitments and the cash flows as the main internal source of instability in investment. The magnitude of the instability, however, depends on the degree of responsiveness of cash flows to payment commitments. Since the payment mechanism of conventional bank (FRM) emphasises maintaining of fixed rate and time of payments, the instability in investment will be higher. The FRM, charging fixed rate of interest on advances, establishes an inflexible payment mechanism. Thus the real source that intensifies cyclical fluctuations in an economy is the fixed payment commitments (under FRM) against

uncertain cash flows. The view is also supported by Henry Simmons and Joan Robinson as referred to by Chapra (Chapra, 1984).

Thus FRM has a built-in destabilising element (i.e., rate of interest) which aggravates cyclical fluctuations once created in an economy.

4.5.2 **Stabilizational efficiency and VRM:** VRM has a different cash-flow and payment commitments arrangement with the entrepreneurs. Cash-flows under VRM are defined as yields generated from regular operation of projects (which essentially mean profits for entrepreneurs). Payment commitments, on the other hand, are promises made to the bank by the entrepreneurs with the condition that the latter will pay a certain percentage (decided a priori as par agreement) of profits generated in the project along with principal. The very nature of this commitment is that the entrepreneurs commit to pay a certain percentage of profits, not a fixed percentage of the loaned amount. Thus, entrepreneurs pay less when profit is lower, and they pay more when it is higher. Moreover, if profit is zero, they pay nothing to the bank and if there is loss entrepreneurs are not obliged to pay any profit, rather the bank shares loss in proportion to capital participation. This specific nature of payment commitments bridges up the 'spread' or at least reduces it to the minimum. Now let us show how the payment commitment arrangement under VRM helps reduce cyclical fluctuations.

Let us recall the phase-diagram of Chapter-3 (Fig-4). Suppose we are in the Region I. At this stage, both the cash commitments (C) and investment (I) are low. Thus, $f > o$; $g < o$. The low level of investment can be financed by internal funds. Prospective yield being high it stimulates further investment.

Region II is characterised by continuous rise in investment. Entrepreneurs go on expecting still higher prospective yield. This leads them to increase investment and resort to external financing. They feel further encouraged by the financing condition that part of the risk will be borne by the financier. On the other hand, financiers will be cautious in

financing since they are aware that if there is any loss they will have to bear it in proportion to their capital contribution. Thus increase in investment as well as cash commitment remains within manageable limit even if the economy runs towards boom. In other words, both investment and cash commitments will increase, but not as rapidly in the case when lenders do not share any of the borrower's risk and willingly accept the entrepreneur's optimism.

In region III, the economy enters into the late stage of the boom. High level of investment, at this stage, dampens forecasts of prospective yields as well as actual yields. However, unlike the fixed interest case, where cash payments remain the same, payment commitments under VRM are adjusted to the decline in cash-flows. Therefore, there may not arise the need for refinancing the matured 'debts' to the scale that could be apprehended to make under Fixed Return Mechanism (FRM), maintaining inflexibility in payment commitments. Moreover, the term of refinancing may not be so much stringent as could be under a situation when borrowers could not pay their maturing debts. Therefore, one can expect that investment will not fall as fast as it does under conventional mode of financing.

In Region IV, the final phase of the cycle, there happens a drastic reshuffling of portfolios to generate additional cash to meet the payment commitments. This results in a sharp drop in the price of capital assets and a chaos in investment. The main reason for chaos is the 'spread' between cash-flows and payment commitment. Under VRM, however, the spread is not so wide to force the operating units to sell out their assets for meeting their payment commitments which creates panic in the capital asset market and leads to an abrupt fall in asset prices thereby affecting new investment. The flexibility and the built-in stabilising capacity of the VRM automatically manage the spread and keep under control the capital market and hence the investment.

Thus, PLS-banking having been a built-in stabiliser to cyclical fluctuations may be considered as more efficient than its conventional counterpart.

4.6 Summary of Efficiency Analysis under Static Model

Throughout this chapter five efficiency criteria have been applied to measure comparative efficiency of FRM and VRM. The following conclusions are drawn with each of the criteria.

As for the ***productive efficiency***, VRM has been found to be more efficient in terms of investment opportunity utilisation, project efficacy, recovery of loan, and profit maximisation. So far as the efficiency in temporary and short term financing is concerned, FRM seems to be superior to VRM. This is because the latter has not yet been able to devise suitable modes in such types of financing. However, VRM can finance beyond the investment financing limit of the FRM at a lower marginal rate of return. It is possible for the VRM since it shares in profits generated from projects financed by it. By that way it can offset the apparent losses (compared to interest earning by FRM) in the *low profit zone* by the higher rate of return earned in the *high profit zone*.

Projects under VRM may be more effective than FRM. It is because VRM pays intensive attention to better functioning of the projects as the income of the bank is directly affected by profits generated from the projects. For similar reason, rate of recovery of loan is expected to be higher under VRM.

Equilibrium under VRM takes place at a point beyond that of the FRM implying VRM to be in a better position in maximising profit than the FRM.

Regarding the ***allocative efficiency***, the VRM satisfies all the welfare conditions particularly those of the Pareto optimality, while the FRM does not do it at all. This is because of the fact that VRM, while selecting projects, follows their descending ordering in profitability assuming all other necessary conditions have been duly considered.

As to the ***distributive efficiency***, VRM ensures equitable distribution of income among the participating factors involved in the financing process: the entrepreneurs, the bank, and the depositors. This is done by ratio sharing of incomes among the participating factors. It means that there exists a direct relationship between the income of the entrepreneurs, the bank, and the depositors.

Concerning *stabilizational efficiency*, VRM operates as built-in stabiliser of the cyclical fluctuations of an economy, while the FRM contains in it the basic source of instability in investment that accelerates cyclical fluctuations in an economy. The *spread* between the cash flows and payment commitment is the source element of instability that is considered to be the main internal factor causing cyclical fluctuations.

Since the FRM has a built-in inflexibility in the payment commitments (interest and principal) against uncertain cash flows, *spread* widens at different phases and aggravates the cyclical fluctuations. In the case of VRM, payment commitments are by mechanism related to cash flows of the financed projects. Here nothing is found to be destabilising or exasperating the cyclical process. In other words, volume of payment commitments fluctuates with the fluctuations in the cash flows. Moreover, if cash flow is greatly affected by losses in the financed projects, *spread*, instead of being widened, gets narrowed due to the proportionate sharing of loss by the financier in proportion to its capital contribution.

CHAPTER-5

RELATIVE EFFICIENCY OF CONVENTIONAL AND ISLAMIC BANKING SYSTEM IN FINANCING INVESTMENT -A DYNAMIC MODEL

The discussion onward aims at measuring comparative efficiency of conventional and Profit-Loss-Sharing banking systems in financing investment while they operate side by side in the same economy. This is a dynamic analysis because it studies simultaneous operation of the systems in the same economy. Since the interest-based banking is in operation as a complete system in most of the countries of the world, perhaps the best nature of dynamic comparative analysis might be a study of the efficiency of Islamic bank(s) operating under conventional banking framework.

If the FRM and VRM are taken to be operating simultaneously in the same economy, the shape of the static model is modified and their comparative efficiency positions are changed in terms of all the efficiency criteria under consideration.

5.1 Impact on Productive Efficiency of FRM and VRM

The possibility of greater investment opportunity utilisation under VRM, as found in static analysis, is reduced significantly soon after it starts operation under conventional banking framework. Entrepreneurs guided by profit maximisation motive switch over to the banking system in which borrowing cost is low or they have to sacrifice a low percentage of their profits. The owners of the projects at *high profit zone* switch over from VRM to FRM since throughout this zone $r_f > r_l$. In other words, cost of borrowing in this zone for the entrepreneurs is always higher under VRM than under FRM (Fig-5).

There might be other reasons responsible for this entrepreneurial behaviour. The very nature of the financing contract under VRM provides some authority to the bank to look after functioning of the project and particularly to put constant eye on whether proper accounting is maintained. Entrepreneurs may treat it as an interference in his business particularly when this is not the case at all while dealing with FRM. The negative effects of the said behaviour of the entrepreneurs are counter-balanced by the favourable side of the contract that VRM not only shares in profits but also bears risks, if any, in proportion to capital contribution. This may induce the entrepreneurs to borrow at higher cost from VRM. However, the logic may not work when entrepreneurs are not willing to make their real accounting position public in order to avoid income tax -- a phenomenon that characterises underdeveloped countries in general. The last social phenomenon may greatly influence the entrepreneurs to switch over from VRM to FRM.

Another very plausible reason that may encourage the entrepreneurs to prefer making transaction with FRM is the advantage of flexible utilisation of borrowed fund.

As a result of the said behaviour of the entrepreneurs, the high profit zone segment of the r_f curve in Fig-5a moves downward and may eventually coincide with r_i line as in Fig-5b.

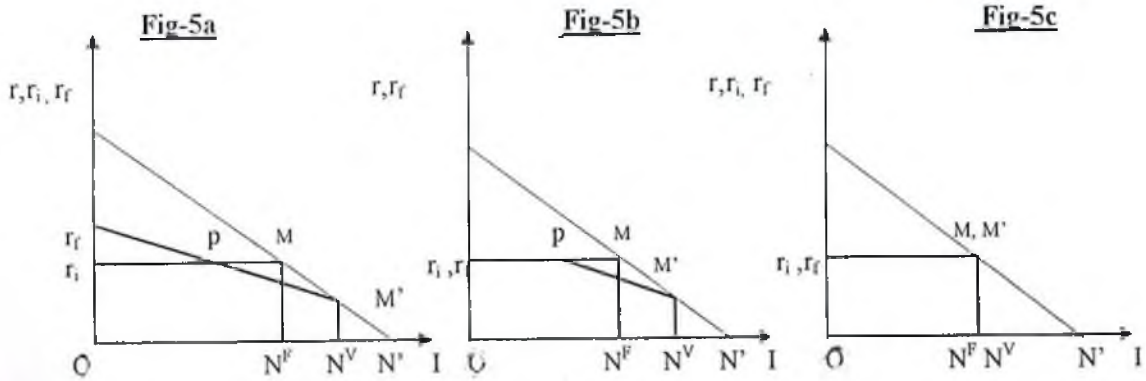


Fig-5: Dynamic Model: Simultaneous Operation of Conventional and Islamic Banks

That means, switching over of projects under high profit zone to FRM pushes VRM and FRM on the same level so far as profit maximisation is concerned. The story does not end there. Failing to tap up higher profit in the high profit zone, the VRM may follow either of the two courses of action. It may insist for higher profit ratio for him for the projects at low profit zone. If the VRM follows this course, the segment of r_f curve in the low profit zone will move upward and may coincide with the r_f line as shown in Fig-5c. If so, investment opportunity utilisation level of the VRM falls to the level of FRM. If the VRM fails to move upward, its average profit will come down beyond that of FRM. In that situation, survival of VRM as a bank can be at stake.

The situation may compel the VRM to switch over from profit-loss sharing modes (such as Musharaka, Mudaraba) to other modes of financing (such as Murabaha, Bai-e-muazzal and Bai-e-salam) to catch up average profit to the level of FRM.

The shape of the FRM model does not change because of the fact that its role in the economy is almost all-encompassing. It is an age-old system and thus favoured by status quo.

5.2 Impact on Allocative Efficiency of FRM and VRM

We have illustrated in Chapter-3 that FRM by mechanism can not allocate financial resources to economically and socially desirable directions. It can neither satisfy the Pareto Welfare criterion nor the social priority welfare conditions as developed in the Efficiency Model. This situation does not change in favour of FRM when the two systems of banking under study operate side by side as shown in Fig-5. On the other hand, the allocative efficiency level, found to be maintained by the VRM under static analytical framework, does not sustain when it starts operation under FRM. Eventually the efficiency of VRM is reduced to the level of FRM when the model takes the shape as shown in the Fig-5c.

Thus the built-in allocative efficiency of FRM (found under static analysis) is lost when entrepreneurs switch over from VRM to FRM in the high profit zone. In this situation, projects can no longer be financed by VRM according to profitability.

5.3 Impact on Distributive Efficiency of FRM and VRM

Nothing happens anything different with the FRM's distributional efficiency measured under static analysis. We do not find any strong correlation among the income of the entrepreneurs, bank, and the depositors in the new situation. This is because of the fact that the FRM remains unaffected by the introduction of VRM in the economy and its distributional inefficiency continues to be at the same level as was found under static analytical framework.

On the contrary, VRM's distributional efficiency level as identified under static analytical framework in Chapter-3 sustains no longer when it starts operation under conventional banking framework. The assumed higher correlation among the incomes of the entrepreneurs, the bank, and the depositors breaks down when the borrowers switch over from VRM to FRM for better terms.

5.4 Impact on Stabilizational Efficiency of FRM and VRM

FRM helps widening the gap between the cash flows and payment commitments leading to investment instability while functioning as a sole system in the economy. The situation does not change when VRM enters the economy. This is because the FRM instead of being affected by it, rather influences the VRM. As a result, the VRM is compelled to switch over from profit-loss-sharing modes to other modes of financing more or less similar to those as practised by its conventional counterpart.

This leads to the disappearance of the claimed superiority of the VRM in reducing cyclical fluctuations in the economy. As a result, the built-in harmonising link between cash flows and payment commitment is lost. Thus, VRM can no longer play a role of built-in stabiliser in the economy as is claimed under static analytical framework.

CHAPTER-6
EMPIRICAL ANALYSIS: THE BANGLADESH CASE

This chapter deals with empirical testing of the findings from dynamic analysis to see what happens with the efficiency level of Islamic banks operating within conventional banking framework in Bangladesh. In other words, the study examines validity of the dynamic model to Bangladesh situation.

6.1 Analytical Framework and Methodology

The empirical study puts into application the Banking Efficiency Model criteria to measure relative efficiency of the two banking systems under study. These criteria are measured and expressed in terms of ratios. Where quantitative analysis fails to be a measuring rod, qualitative approaches have been followed as alternatives. Quantitative analysis is based on data collected from sample banks of three categories namely: Public Sector Conventional Banks (PSCBs), Private Sector Conventional Banks (PRSCBs), and Islamic Banks (IBs).

Quantitative analysis rests on primary sample survey conducted using 5 structured questionnaires (see the Appendices XXXII-XXXVI). Bank officers presumed to be well-versed in problems and policies of loan operations in their banks and in the banking system of Bangladesh, were selected for interview. Four categories of respondents were identified for interview. They are: (a) bank officers serving in the loan operation and research departments of each category of banks; (b) officers serving in the Banking Control Division and Research Department of Bangladesh Bank (the central bank of the country); (c) depositors; and (d) the borrowing entrepreneurs. Moreover, officers heading the Central Accounts Department of all categories of commercial banks under study have also been interviewed. Keeping in view the sample type, bankers in the rank of General Manager and Deputy General Managers and Principal Officers of Janata Bank representing PSCBs have

been interviewed. To represent PRSCBs and Islami Bank Bangladesh Limited (IBBL) officers in the rank of Executive Vice-presidents and Assistant Executive Vice-presidents, Senior Principal Officers were interviewed. One hundred and five officers in total of the three categories of sample banks and 10 officers from Bangladesh Bank along with 90 entrepreneurs (30 from each category of banks) were interviewed.

For the quantitative part of the analysis, all the PSCBs (Sonali, Agrani and Janata bank) and major PRSCBs (National bank Limited, City Bank Limited, United Commercial Bank Limited and Arab Bangladesh Bank Limited) have been brought under the purview of data collection. Of the four IBs operating in Bangladesh, only the Islami Bank Bangladesh Limited has been selected for data collection.

6.2 Productive Efficiency of Public and Private Sector Conventional Banks and Islami Bank Bangladesh Ltd.

Of the five efficiency test criteria enlisted under Productive Efficiency, *Investment Opportunity Test* comes first. The following three ratios may conveniently be applied to test 'investment opportunity utilisation capacity' of the banking systems under consideration. They are:

1) Fund utilisation rate
2) Per employee deposit mobilisation
3) Per employee fund utilisation

The Fund Utilisation Rate (FUR) is defined as a ratio of Fund Employed to Loanable Fund, i.e.,

$$\text{Fund Utilisation Rate} = \frac{\text{Fund Employed}}{\text{Loanable Fund}} \times 100$$

where Fund Employed means loans and advances in conventional sense and all types of fund utilisation by an Islamic bank coining 'investments'. The term Loanable Fund, on the other hand, varies with the nature of banking system. In the case of conventional banks

(both in public and private sectors), loanable funds are the amounts that are made available after meeting statutory reserve requirements on deposits. Borrowing from other banking companies and agents may also be considered as a part of loanable fund.

Statutory reserve requirement rates have changed over time in Bangladesh. Until 1987, the commercial banks of conventional categories were required to maintain a reserve requirement of 20% with the Bangladesh Bank. From 1988 to 1991 the ratio was 25%. However, the ratio was again re-fixed at 22% for 1992. Islamic banks, on the other hand, were required to maintain all through a statutory reserve requirement ratio of 15%. Thus, loanable fund for IBBL has been calculated by taking 85% of its deposits and adding to it borrowings from other banks and agents, if any, for the whole period under study.

Fund Utilisation Rate shows the percentage utilisation of funds available at a bank's disposal to income earning ventures undertaken by entrepreneurs. A rate approaching 100% is considered to be a good sign of efficiency in fund utilisation.

Per Employee Deposit Mobilisation (PEDM) and Per Employee Fund Utilisation (PEFU) are the two complementary indicators of productive efficiency of a bank. FUR shows percentage of loanable fund employed by the bank whereas PEDM indicates productivity of bank employees per head in mobilising deposits. PEFU, on the other hand, measures per employee productivity in utilising loanable fund.

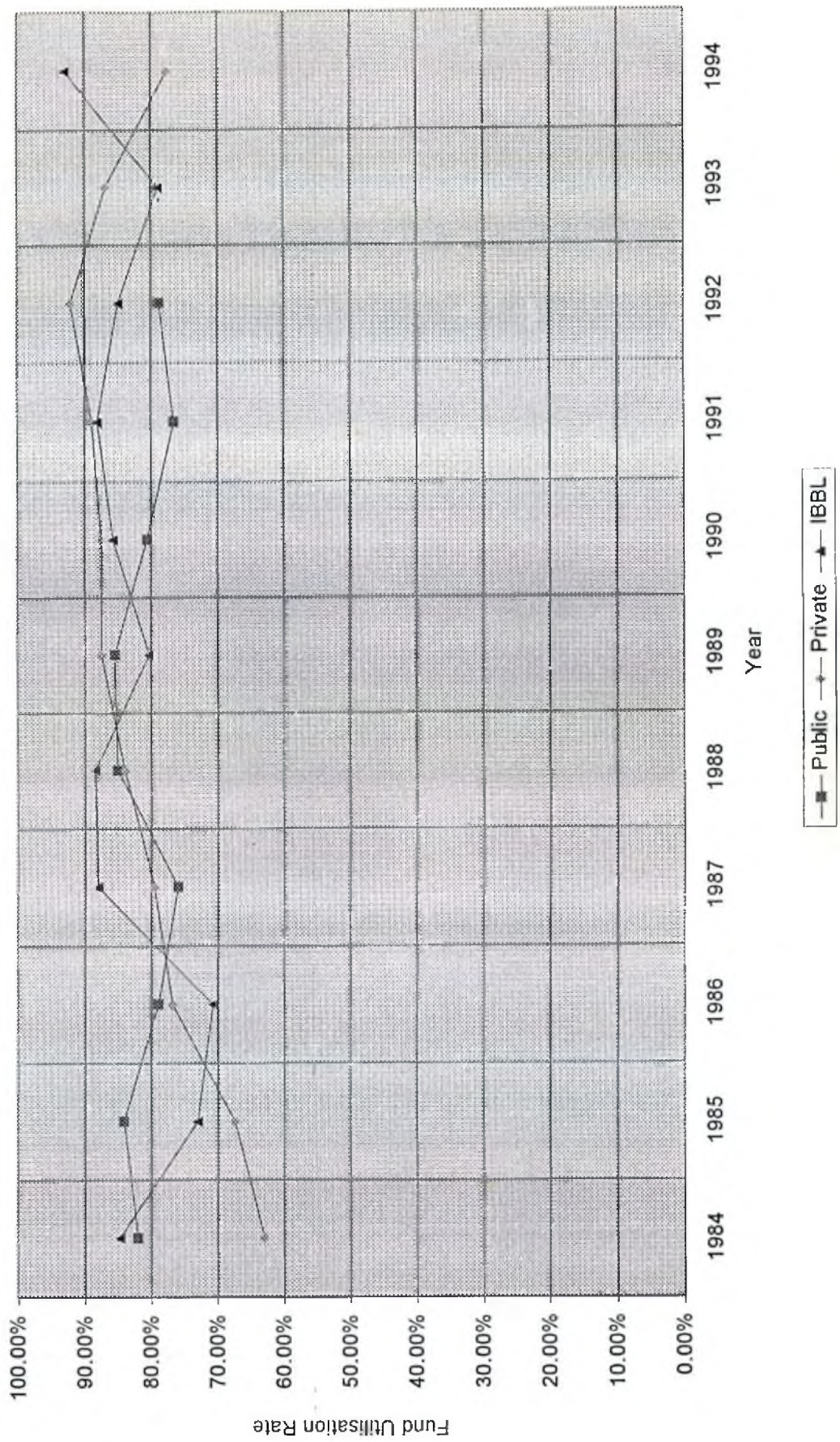
6.2.1 Investment Opportunity Utilisation Test

Table-1 and Figures 6, 7 & 8 demonstrate comparative productive efficiency positions of PSCBs, PRSCBs and IBBL for the period 1984-94 using investment opportunity utilisation test criteria (i.e., FUR, PEDM and PEFU).

Average FUR of IBBL is found to be the highest in comparison to both PSCBs and PRSCBs during the period under study. However, the figure is influenced by high FUR of IBBL in the initial two years and the terminal year of period under study. The rate fell down in 1986 and continued to be lower in comparison to PRSCBs for consecutively five

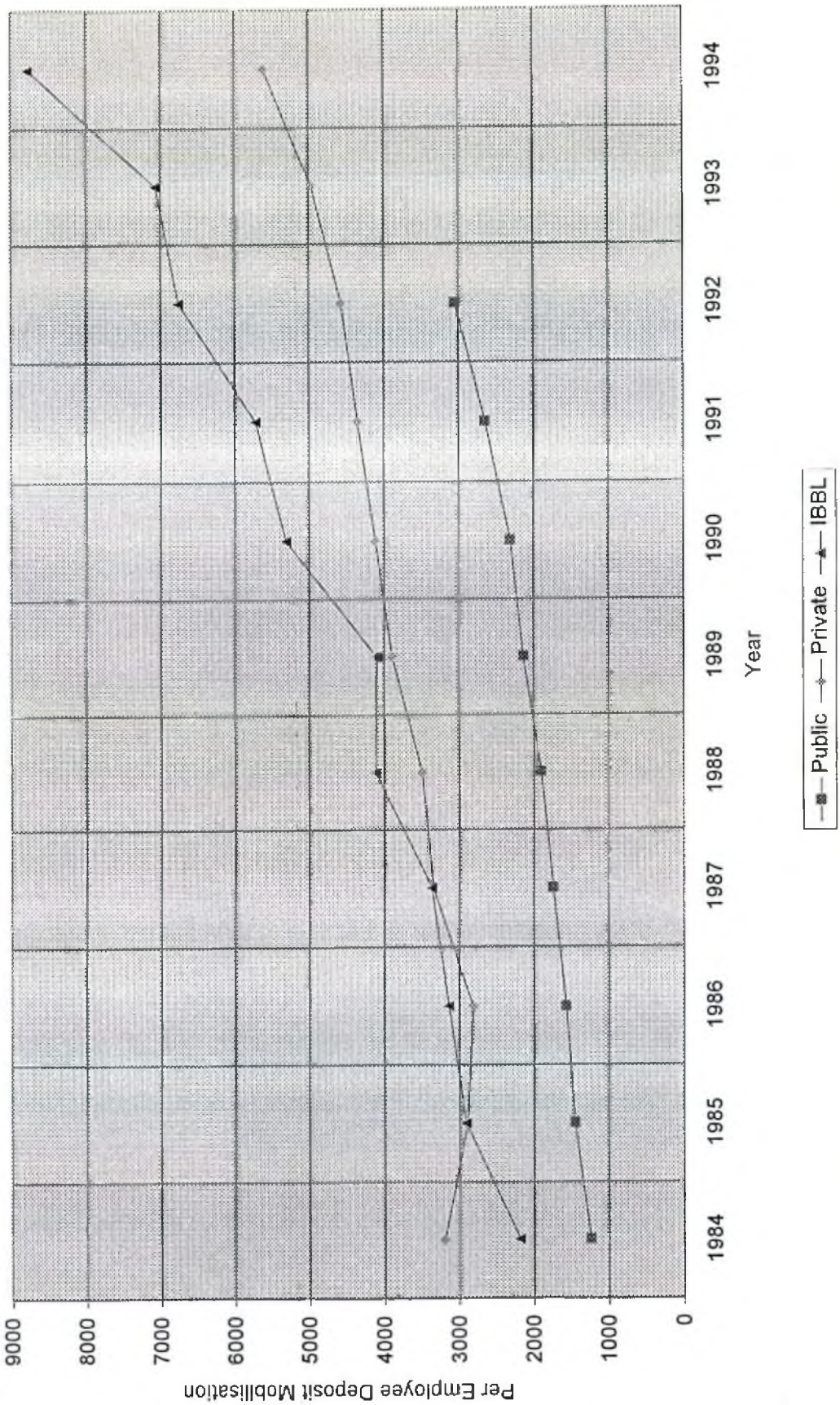
FUR

Fig-6: Fund Utilisation Rate of Public, Private
Sector Conventional Banks and Islami Bank Bangladesh Limited.



DEMOB

Fig-7: Per Employee Deposit Mobilisation of Public,
Private Sector Conventional Banks And Islami Bank Bangladesh Limited.



PEFU

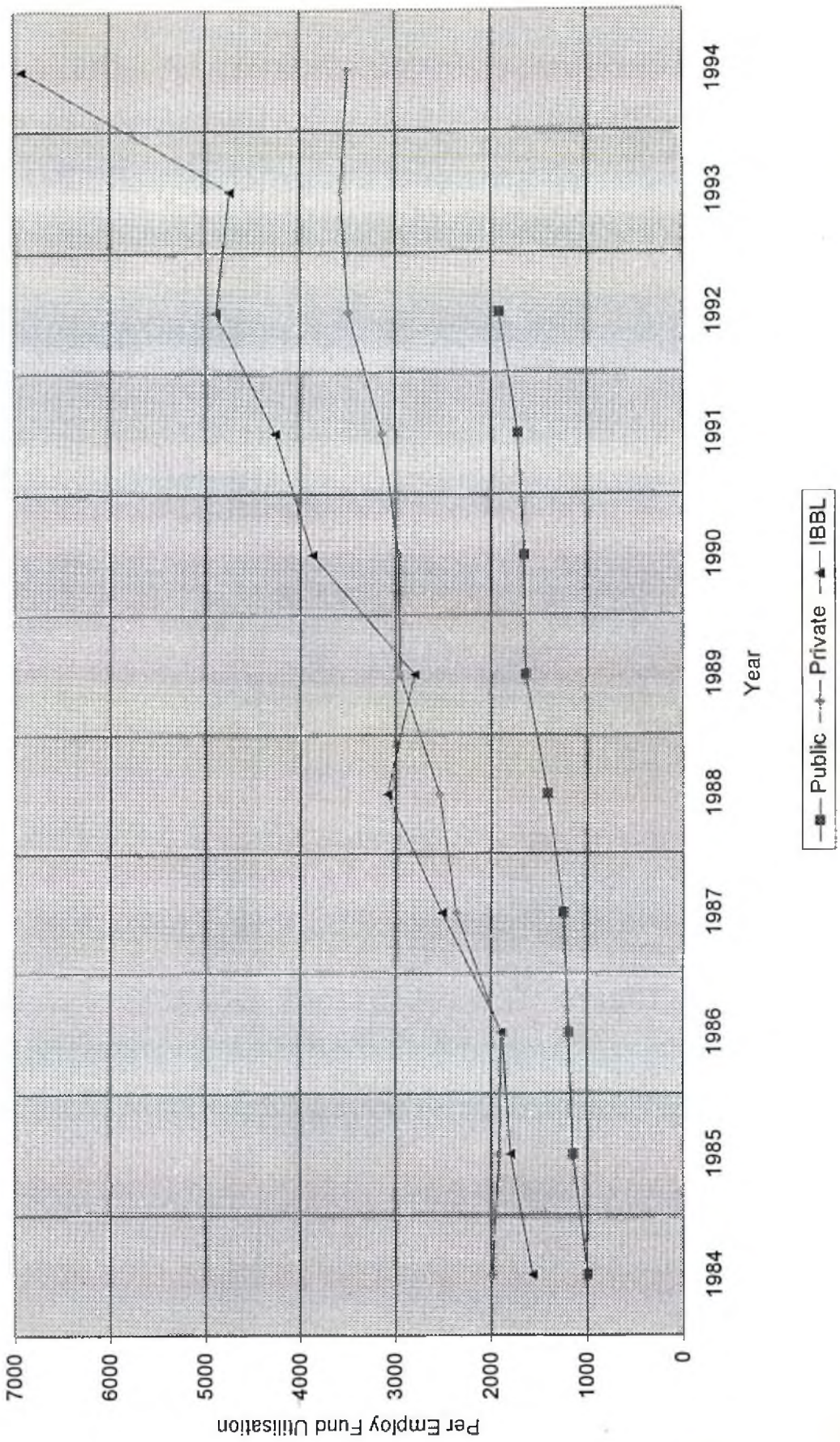


Fig-8: Per Employee Fund Utilisation of Public, Private Sector Conventional Banks and IBBL

years (1989-93). It could surpass PRSCBs again in 1994. The FUR of PSCBs was the lowest in comparison to both PRSCBs and IBBL (Fig-6).

FUR of IBBL fell sharply in the second and third year of its launching to their ever lowest level of 73.02% and 70.69% respectively from an initial level of 84.70%. This was due to slow increase of PEFU with a high PEDM -- a trend observable even up to the last year of the period under study. The FUR got momentum and reached its peak to 88.07% in 1991 as a result of high PEFU.

PEDM was highest in IBBL followed by PRSCBs and PSCBs. In 1985, PEDM in IBBL, PRSCBs and PSCBs was Taka 29,01,000/-, 28,84,000/- and 14,51,000/- respectively which increased to Taka 67,65,000/-, 45,69,000/- and 30,43,000/- respectively in 1992. PEDM of IBBL further rose to Taka 87,71,000/- in 1994 compared to Taka 56,02,000/- of PRSCBs (Table-1).

As to the PEFU, IBBL could manage itself to be in the highest position from 1987. In 1984, the PEFU of IBBL, PRSCBs and PSCBs was Taka 15,73,000/-, 19,93,000/- and Taka 9,93,000/- respectively. In 1992, the figures reached the levels of Taka 48,86,000/-, 34,91,000/- and Taka 19,16,000/- respectively.

PSCBs, on the other hand, experienced a secular decline in FUR in the first half of the period under study and then again from 1989. This was a phenomenon against constant increase of both the PEDM and PEFU but the former being more rapid in the later part of the period under study (Table-1).

FUR of the sampled PSCBs declined from 84.09% in 1985 to its lowest at 75.94% in 1987. The situation improved substantially in 1988 and 1989 reaching a peak level to the tune of 85.49%. However, the rate escalated again and came down to 78.80% in 1992. It happened against a rapid increase in PEDM from Taka 12,42,000/- to Taka 30,43,000/- and PEFU from Taka 9,93,000/- to Taka 19,16,000/- during 1984-92.

The FUR of the PRSCBs was on a progressive increase during the period under study. It rose from the lowest of 62.96% in 1984 to 92.09% in 1992. The next two years witnessed a gross setback in FUR of PRSCBs, the rate dwindling to a level of 77.68%. Similar to the case of PSCBs both the PEDM and PEFU of PRSCBs were on steady

increase, the former showing almost a fifty percent increase and the latter getting nearly doubled during 1984-92 (Table-1).

Though relatively better but still below the optimum level of fund utilisation by IBBL was due to hard situation faced by it in introducing completely new modes of financing that were unknown to both the bank personnel and the entrepreneurs seeking funds from it. The second important reason as considered to be most important is the borrowers' behaviour in making choice between the conventional and Islamic banks. Conventional bank, in both public and private sectors, charging a flat rate of interest irrespective of the profitability of projects, induces borrowers to switch over from IBBL since the latter shares in profits implying higher borrowing cost for the borrowers. In other words, high return project owners prefer borrowing from banks other than IBBL. The argument may be justified by IBBL portfolio analysis. The portfolio distribution of loanable funds by IBBL shown in Table-2 depicts gradually lower and lower percentage allocation of funds through profit-loss sharing modes (particularly musharaka).

Other reasons for which a sizeable amount of IBBL fund could not be utilised, as found in the opinion survey under Questionnaire-1 (see Appendix-XXXII), are presented in order of importance as below:

a) absence of Islamic financial instruments in the money market;

b) careful selection of clients in order to avoid further deterioration in loan recovery;

c) absence of investment opportunity in the money market due to presence of interest elements;

d) stagnant economic situation.

For details see Table-3.

The causes of very low and declining FUR in the public sector banks as found in the opinion survey administered through Questionnaire-1 are: (a) lack of sound management; (b) stagnant economic situation; (c) careful selection of clients in order to avoid further deterioration in loan recovery; (d) absence of efforts to promote clients and (e) unforeseen

interference in the operation of regular banking activities. The causes listed above show their order of importance (See Table-5).

Findings from the above tests appear to be contradictory to what were found in dynamic analysis. For example, productive efficiency of Islami Bank Bangladesh Limited (IBBL) -- measured by FUR, PEDM and PEFU -- is higher in comparison to its conventional counterparts operating in the private sector. On the other hand, the conclusion from dynamic analysis in the theoretical section was opposite. One should not finally draw any conclusion till rest of the criteria of productive efficiency, particularly the profit maximisation tests, are applied.

6.2.2 Profit Maximisation Test

The FUR and its co-indicators like PEDM and PEFU may not be truly representative indicators of productive efficiency analysis until they are complemented by other indicators relating to profitability of banks. All the four indicators of profitability (viz., Income-Expenditure Ratio, Profit-Expenditure Ratio, Profit-Loanable Fund Ratio and Profit-Employed Fund Ratio) indicate that banks of all categories (i.e., PSCBs, PRSCBs and IBBL) experienced secular decline in their profitability (Table-6). That means rapid growth of PEDM and PEFU was not reflected on FURs of all categories of banks under study.

Profitability -- measured by Income-Expenditure Ratio, Profit-Expenditure Ratio, Profit-Loanable Fund Ratio and Profit-Employed Fund Ratio -- was found to be lowest in PSCBs. Between PRSCBs and IBBL, the latter maintained clearly a lower profitability than the former until 1990.

Average Profit-Expenditure Ratio for PSCBs during 1984-92 was 0.07. The same for the PRSCBs and IBBL were 0.21 and 0.20 respectively. The 1984-92 averages of the Profit-Employed Fund Ratios, on the other hand, were 0.008, 0.029 and 0.020 respectively. Similarly, average Profit-Loanable Fund Ratios for the same period, as

evident from Table-6, were 0.007, 0.023 and 0.017 respectively. With the first two indicators of profitability, the averages of 1984-94 compared to that of 1984-92 for IBBL demonstrated an improvement over PRSCBs. However, with the third and fourth criterion of profitability (Profit-Loanable Fund Ratio and Profit-Employed Fund Ratio) IBBL clearly lagged behind PRSCBs.

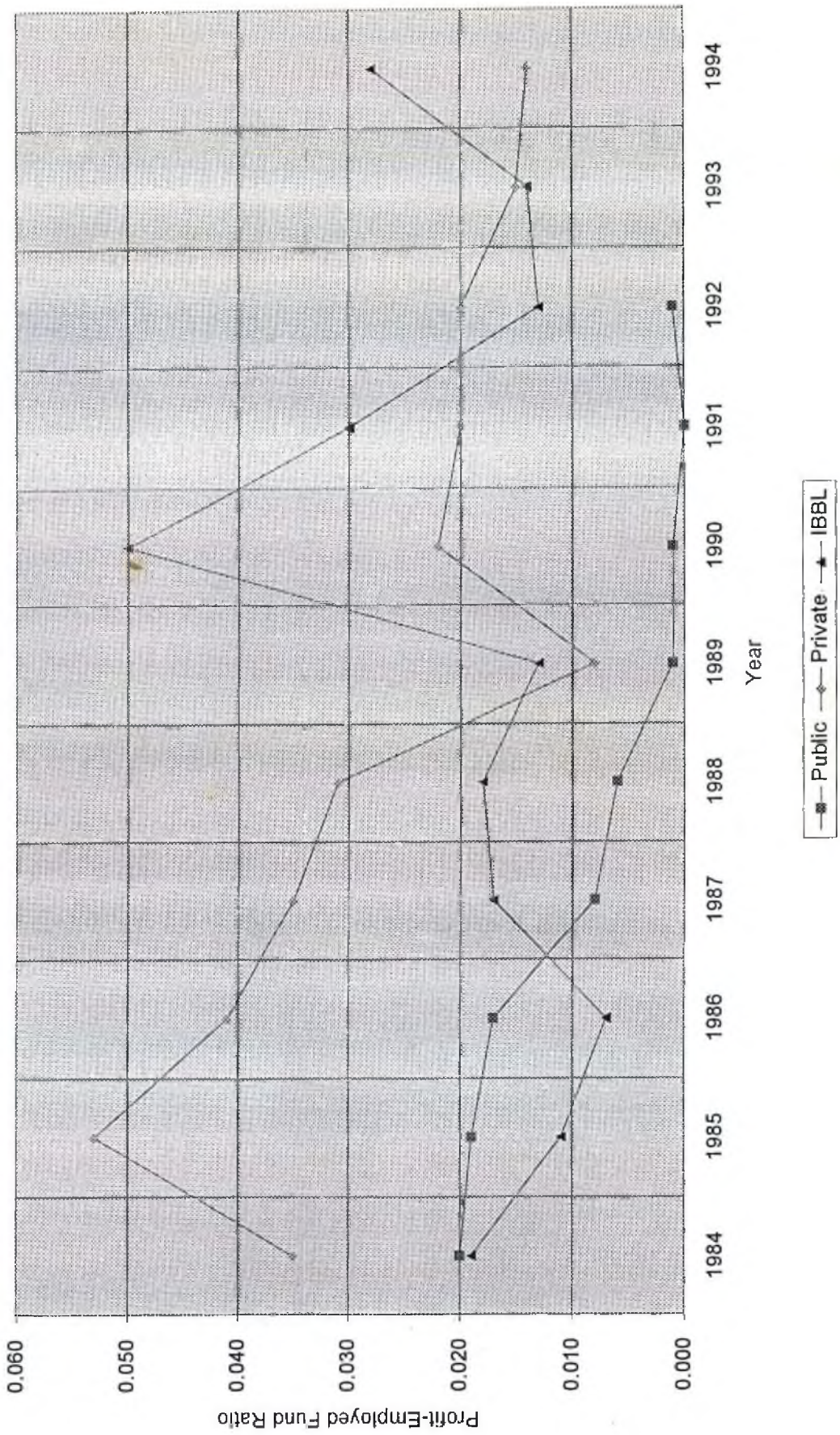
Table-6 also depicts the trends in the profitability of different categories of banks. It is evident from the table that the profitability of both the PSCBs and PRSCBs were gradually on the decline. The Profit-Employed Fund Ratio of the PSCBs declined from 0.020 in 1984 to 0.001 in 1992. The same ratio for the PRSCBs decreased from 0.053 in 1985 to 0.014 in 1994. IBBL had the same trend for the first three years coming down from 0.019 in 1984 to 0.007 in 1986. It was on the increase from 1987 (0.017 in 1987 and 0.018 in 1988). From 1990 it again went on falling down from 0.050 to 0.014 in 1993. The 1984-94 averages of Profit-Employed Fund Ratio demonstrate that PRSCBs rank higher (0.021) than IBBL (0.019).

The declining profitability of the PSCBs was greatly influenced by sharply declining profitability of all the three sampled banks in public sector, namely: Sonali Bank and Agrani Bank and Janata Bank. The Profit-Loanable Fund Ratio of Sonali Bank came down from 0.0202 in 1984 to 0.0007 in 1992 while that of the Agrani Bank decreased from 0.020 in 1985 to 0.002 in 1992. The profitability of Janata Bank generally being lower than other public sector banks experienced a gross set-back in Profit-Loanable Fund Ratio in the terminal two years, i.e., in 1991 and 1992 (See the Appendix-XV).

The sliding profitability of the PRSCBs was accentuated by their decreasing Profit-Loanable Fund Ratio (PLFR). Among them, the Arab-Bangladesh Bank Limited maintained a high PLFR. PEFR this bank increased from 0.0252 in 1984 to 0.0442 in 1994. United Commercial Bank Limited had the lowest PLFR declining from 0.0352 in 1985 to 0.0102 in 1994 (see the Appendix-XVI). Similar conclusion may also be drawn from the study of the Profit-Employed Fund Ratio (PEFR).

PEFR

Fig-9: Profit-Employed Fund Ratio of Public Private Sector Banks and IBBL.



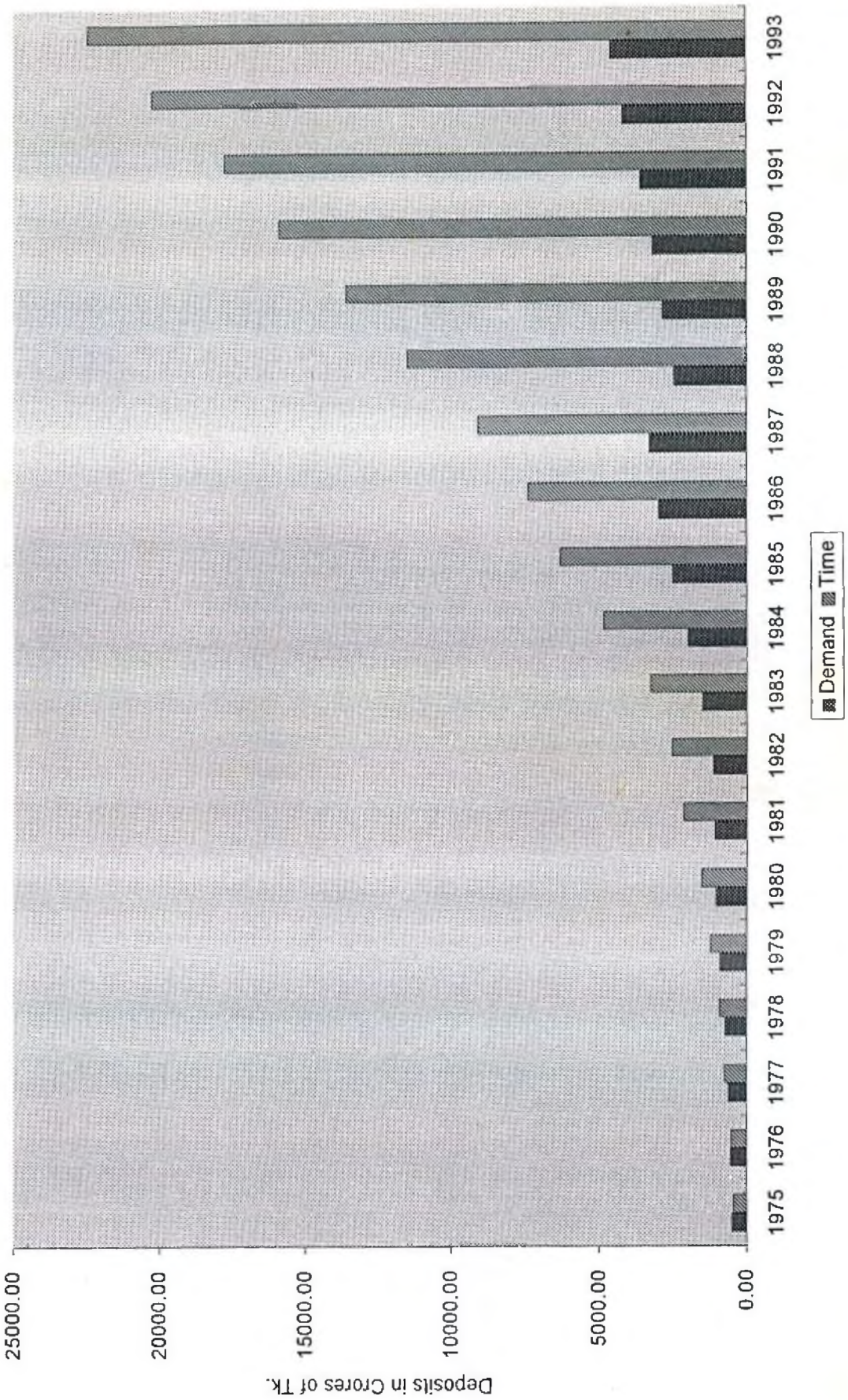


Fig-10: Deposit Structure in Bangladesh

It is observed in Table-6 that all categories of banks had a sudden fall in profitability in 1989. The PLFR and PEFR for the PSCBs were lowest, i.e., 0.001 in each case, while they were 0.007 and 0.008 in the case of PRSCBs. The corresponding figures for IBBL were 0.010 and 0.013. Though the private sector banks including Islami Bank Bangladesh Limited could make a reversal of the trend, obviously not being sustainable, their public sector counterpart could not do it at all. Fig-9 shows the declining trends of profitability for the PSCBs and PRSCBs. For IBBL the trend is highly volatile.

Two major causes of the downward trend in the profitability of the banking sector have been identified. First, a growing percentage of bank loans was converted into bad debts that reduced the income of banks. Moreover, banks were required to make bad debt provisions for classified loans. Second, there had been a compositional change in the deposit structure. Time deposits being only 47.5% of total deposits in 1974-75 approached to 71.53% in 1984-85 and finally reached 83.06% in 1992-93 (see Table-7 and Fig-10). That means percentage share of cost bearing funds (time deposits) had increased compared to the cost-free fund (demand deposits).In other words, banks had to pay more and more interest on deposits in the later years than before. Both the causes were supported by the opinion survey conducted on the senior officials of different PSCBs, PRSCBs and IBBL.

Table-8 provides the reasons why profitability of PRSCBs declined in spite of relative improvements in FUR. The empirical findings from opinion survey tell about the reasons that are listed as below:

(a) fall in liquidity trap due to non-recovery of loans;

(b) heavy unauthorised borrowing by the directors of some Private Sector Conventional Banks;

(c) high relative cost of deposit or borrowing by the bank;

(d) risk in lending as well as less fair opportunity for investment;

(e) increase in percentage of bad loans to total loans.

Table-9 depicts the causes behind the decline of profitability of the overall banking sector. The reason ranked top among the list is the increase in the amount of provisioning made for classified loans and advances. The other two most important reasons are: low recovery rate and decline in fund utilisation rate, particularly in the case of PSCBs.

A closer look on the two test results of productive efficiency -- investment opportunity utilisation test and profit maximisation test -- provides the insight that higher fund utilisation rate does not necessarily ensure higher profitability. If this happens and happened exactly in the case of IBBL, the implication is nothing but that the financial institution is less productive. This is because of the fact that higher fund utilisation rate without ensuring higher profitability leads to operational inefficiency of the financial institution concerned. For illustration refer to measures of operational efficiency and their application results in Section-6.3.

6.2.3 Project Efficacy Test

How far a bank can contribute effectively in running a project financed by it, is primarily determined by the level of linkage it can establish through its financing mechanism. They are:

a) project selection criteria;
b) pre-financing appraisal of projects;
c) post-financing supervision;
c) built-in mechanical linkage of the bank to its financed projects.

Responses were received from all the three categories of banks on five questions (serials 6, 7, 8 & 10) included in the Questionnaire-2 (Appendix-XXXIII). Tables 10, 11, 12, 13 & 14 together present the findings.

In response to the question 'How decisions for project financing by PSCBs and PRSCBs are taken,' majority of the respondents expressed the view that decisions generally

go in favour of a project with relatively low profitability but backed by strong collateral (Table-10). This is because of the fact that conventional bank does not feel much concerned about the performance of the projects as its income is not related directly to the yield of the financed projects. That is why loans received in the name of a project can be diverted elsewhere due to shortcomings in post-financing supervision.

Tables 11 & 12 provide the reasons for fund diversion and the causes for which a project financed by a bank could be sick and affect recovery of loans. Table-11 enlists reasons for fund diversion in the following order:

a) bank's post-finance supervision is inadequate and not so much effective;

b) bank's return is in no way linked to the yield generated from the project;

c) lack of proper procedures in selection of experienced borrowers;

d) weak terms and conditions of sanction and weak documentation.

Table-12 serialises in order of importance the reasons for which a project financed by a bank could be sick:

a) bank's post-financing supervision was not adequate and effective;

b) wrong selection of projects;

c) pre-financing appraisal of submitted projects was not correct

d) non-economic factors matter widely in the selection of projects for financing;

e) sudden changes in government policy;

f) lack of proper management in the banking sector; and

g) deterioration in the overall management of the economy.

Table-13 highlights the underlying causes for why bank's post-finance supervision is not adequate and effective. The reasons are:

(a) the mentality of the banker that their concern is merely the recovery of interest and principal which needs to be taken care of only when the borrowers are in default;

(b) bankers think it not to be important so far as its financing mechanism is concerned;

(c) bankers think it to be expensive and not adding anything to its income;

(d) lack of adequate laws which can discourage borrowers' defaulting mentality.

Table-14, on the other hand, lists below the preconditions to be fulfilled in playing an effective role by a bank to ensure effectiveness of the projects that it has financed. The preconditions are as follows:

a) resumption of discipline and improvement of management in the banking sector to ensure efficacy of the financed projects even without bringing about any changes in the present financing mechanism of all categories of banking system;

b) bank can introduce a financing mechanism by participating in some form in the management of the projects financed by it and bearing profit/losses in proportion to capital contribution;

c) bank can continue with interest-based financing mechanism and creates some legal provisions that permit effective supervision of the financed projects; and

d) providing of corporate counselling.

Analysis of Tables 10-14 provides the conclusion that the financing mechanism currently pursued by PSCBs and PRSCBs has built-in deficiency as it takes little interest in promoting efficacy of financed projects. The financing mechanism presently followed by IBBL is essentially not much different from conventional banks in ensuring effectiveness of projects financed by it. It is because of the fact that IBBL practices mostly the trade related modes that have little or no relevance to project financing.

6.2.4 Loan Recovery Test

Data relating loan recovery is highly confidential and thus the researcher could not have the access to it anywhere in the banking sector. As an alternative to it, he devised some qualitative questions of ordering type by using some scales that demonstrate some degrees of loan recovery position in different categories of banks under study. Tables 15 & 16 depict the overdue loan situation of the sample PSCBs, PRSCBs and IBBL.

From Table-15 it appears that overdue loan situation in PSCBs and IBBL is a matter of concern whereas in PRSCBs it is within the manageable limit. On the other hand, Table-16 shows that overdue loan situation is improving in all categories of banks under study.

So far as comparative overdue position is concerned PSCBs face the most acute problem of loan recovery though it is not reflected so much in the opinion survey. The argument may be justified by the most depressed profitability of the PSCBs as a whole. It is difficult from opinion survey to trace out the comparative position of PRSCBs and IBBL. If average profitability is considered to be an indirect indicator of loan recovery position, the PRSCBs undoubtedly stand in a superior position than its Islamic counterpart.

6.2.5 Test of Elasticity in Loan Financing

Loan financing mechanism of Islamic banks all over the world is still less elastic. IBBL is facing similar problems as it lacks suitable modes in meeting call loan demands as well as working capital needs of the entrepreneurs. It faces problems in inter-bank borrowing due to lack of suitable financing modes. Table-17 provides a more detailed and clear picture on the issue. It is evident from the table that short-term financing (TDR) by the IBBL accounts for less than 4% of its total employed fund throughout the period under study, while in the case of both the PSCBs and PRSCBs the ratio is high. Moreover, loans being essentially a short term financing mode, if included in the category and added to money at call and short notice, the ratio will be even higher for both PSCBs and PRSCBs than their Islamic counterpart.

If we consider all efficiency criteria of productive efficiency, IBBL is found to be lagging behind PRSCBs but performs better than the PSCBs. Of course, it has to be noted that productive efficiency as an efficiency criterion needs to be complemented by the analysis of operational efficiency criteria. Because, we have seen that IBBL did inferior with two important profitability criteria even though it had higher fund utilisation and

deposit mobilisation rates. Clearly, fund utilisation rate without corresponding increase in profitability has little implication. This calls for further analyses with operational efficiency criteria as presented below.

6.3 Operational Efficiency of Public and Private Sector Conventional Banks and Islami Bank Bangladesh Limited

Two criteria have been used to measure operational efficiency of the three categories of banks. These are: Per Employee Administrative Cost (PEAC), and Administrative Cost-Loanable Fund Ratio (ACLFR). Table-20 presents, in this regard, the relative positions of the PSCBs, PRSCBs and IBBL. It is evident from the table that PEAC is lowest for the PSCBs and highest for the PRSCBs throughout the period under study. Similarly, ACLFR was also lowest for the PSCBs.

PEAC for the PSCBs, PRSCBs and IBBL in 1984 were Taka 28,181/-, Taka 86,859/- and Taka 64,261/- respectively. It was steadily increasing in the subsequent years for all categories of bank. The amount reached the level of Tk. 72,237/-, Tk. 132,433/- and Tk. 166,698/- respectively in 1992.

On the other hand, ACLFR for the PSCBs increased from Tk. 0.024 in 1984 to Tk. 0.030 in 1992. The rate for the PRSCBs during 1985-94 was relatively stable and fluctuated between Tk. 0.034 to Tk. 0.037. In the case of the IBBL, the figure had a declining trend from Tk. 0.035 in 1984 to Tk. 0.024 in 1994.

If the averages of both 1984-92 and 1984-94 are considered, IBBL stands better than PRSCBs on counts of both operational efficiency criteria (i.e., PEAC and ACLFR). IBBL has proved to be operationally efficient with a low average ACLFR of 0.027 compared to 0.035 of PRSCBs for the period 1984-94. Regarding PEAC during the same period the respective figures for IBBL and PRSCBs were 113,763 and 117,574.

For the PSCBs we observe an upward trend in both the PEAC and ACLFR. That means increase in operational cost with both PEAC and ACLFR was one of the factors that led to decline profitability of public sector banks.

From the above analysis we find that both the PEAC and ACLFR of IBBL were well below those of the PRSCBs. If so, why the profitability of IBBL was below that of the PRSCBs? The answer to this question lies in the following analysis.

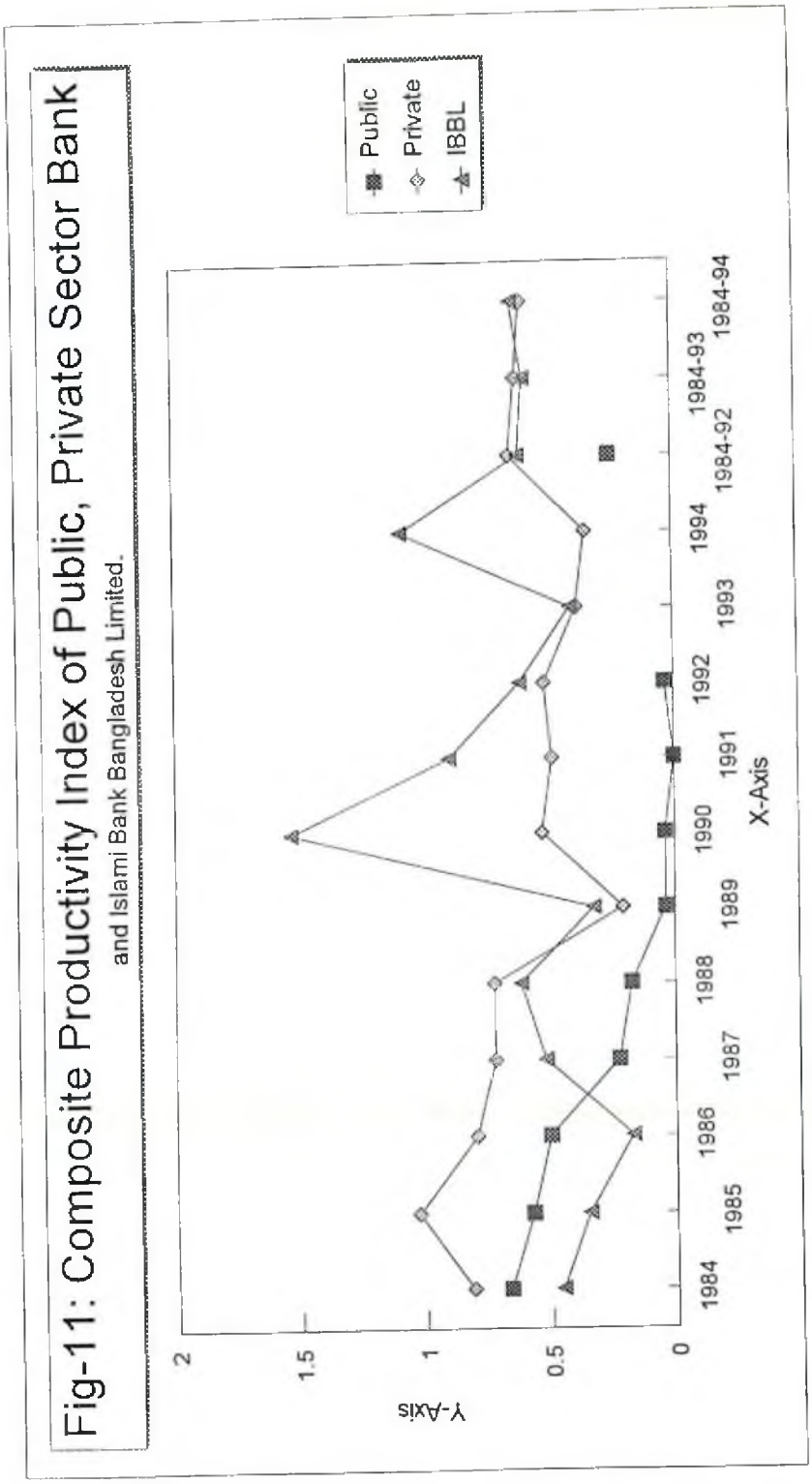
Composite Productivity Index: There arises a difficulty in making an effective comparison between PRSCBs and IBBL, because the former had comparatively higher profitability while the latter had lower operational cost during the period under study. To overcome the difficulty, a *composite productivity index* has been constructed to measure their relative efficiency. The index is defined as below:

$$\text{Composite Productivity Index} = \frac{\text{Profit-Loanable Fund Ratio}}{\text{Administrative Cost- Loanable Fund Ratio}}$$

As a rule, the higher the value of the index a banking system possesses, the higher is the possibility that it is operationally efficient.

In Table-21 and Fig-11 are presented the composite productivity index of the PSCBs, PRSCBs and IBBL. It is clear from the table that the value of the index for the PRSCBs is higher than that of both PSCBs and IBBL. The average value of the composite productivity index of PRSCBs for the period 1984-92 was 0.65, whereas it was 0.25 for the PSCBs and 0.61 for the IBBL. Extending the analysis one year to cover the period 1984-93, the composite productivity index of PRSCBs stands still on the top. However, the position of IBBL goes up if the comparison is made taking into consideration the exceptional performance (in terms of profit) it made in 1994.

Another distinguishing feature is that the value of the composite productivity index of both PSCBs and PRSCBs declined over the years. For the PSCBs the value came down



from 0.67 in 1984 to 0.03 in 1992. In the case of the PRSCBs the value decreased from 0.81 in 1984 to 0.34 in 1994. The value of composite productivity index of IBBL, on the other hand, is seen to be widely fluctuated over time with extremely two high figures in 1990 and 1994. These two figures would have certainly influenced in enhancing the average values of the composite productivity index of IBBL.

Thus, if productive and operational efficiencies are simultaneously considered for the entire period of analysis, PRSCBs are seen doing marginally better than IBBL. However, performance of IBBL is relatively better if only the second half of the period under study is considered.

6.4 Allocative Efficiency of Public and Private Sector Conventional Banks and Islami Bank Bangladesh Ltd

Exactly the same thing happens in the case of IBBL -- a PLS-bank by nomenclature -- but profitability rarely matters in its modes of operation while deciding upon projects. Musharaka and Mudaraba, the two distinguishing modes where profitability acts exclusively as allocating device, have their declining share in portfolio distribution of IBBL. Table-2 shows that IBBL could never introduce Mudarabah financing during the period under study. Regarding Musharaka financing, its share declined constantly over the years, from 28.94% in 1984 to 3.51% in 1994.

The probable causes identified by a cross-section opinion survey of both bank personnel and entrepreneurs through structured questionnaires (Questionnaires 4 & 5 in the Appendices XXXV & XXXVI) are presented in Table-18. The table clearly shows that under-reporting of profits by the entrepreneurs to evade taxes widely matters to the application of PLS-modes. Since both Mudarabah and Musharaka are profit-sharing contracts between the bank and the entrepreneurs, maintenance of proper accounting and declaration of actual profit by the entrepreneurs are extremely essential for the bank. Under-reporting of profits is one of the severe moral hazards in Bangladesh. This has been a rule rather than an exception. As a result, entrepreneur, interested in 'riba-free banking,'

prefers making their transactions through modes other than Musharaka and Mudaraba. Islamic banks, for the same reason, consider financing under PLS-modes risky. Thus, economic rationalism, without moral hazards, appears to be comparatively less important in Bangladesh.

There hardly exist any common criteria for making an effective comparison of the allocative efficiency of the two systems of banking when financing in the social priority sectors is mandatory for one of them and optional for others. It is understood that banks in the public sector have to make advances in priority sectors or projects where investment decisions do not follow the profitability criterion. In this situation, it is likely that PSCBs have lower profitability than PRSCBs. Thus the two welfare criteria, as devised in the Banking Efficiency Model, can not be applied to make any comparison between PSCBs and PRSCBs because circulars issued from the central bank of Bangladesh regarding financing of the priority sectors/projects do not equally apply to both of them.

Table-19 depicts financing, classified by economic purpose, of PSCBs, PRSCBs and IBBL. It is evident from the table that 9.53% of the employed funds of the PSCBs went to agricultural sector in 1984. Financing by the PRSCBs and IBBL in the same sector were 0.22% and 1.07% respectively. The allocation pattern further turned unfavourable to agriculture by the 1992 portfolio distribution of the PSCBs and IBBL with lower percentage allocations to this sector, such as 5.65% and 0.26% respectively.

Manufacturing sector got, approximately, equal importance in both the PSCBs and PRSCBs. For the PSCBs, this varied from 31.88% in 1984 to 40.56% in 1992. A similar trend was observed in PRSCBs whose allocation to manufacturing increased from 30.68% in 1984 to 31.96% in 1992. At the same time, IBBL's financing to manufacturing sector was reduced considerably, its allocation to this sector declining from 23.85% in 1984 to 11.07% in 1992. On the other hand, IBBL's financing in the trade sector increased from 57.58% in 1984 to 59.91% in 1992. Financing in trade sector by its conventional counterpart in the private sector increased slightly during the period under study. The share

of PRSCBs financing to this sector increased from 30.36% in 1984 to 37.54% in 1992. Financing by PSCBs in this sector had a declining trend from 23.77% in 1984 to 20.32% in 1992.

Table-19 provides a notable picture on IBBL that has made a major portfolio reshuffling between manufacturing and trade financing. The bank has withdrawn a sizeable portion of its funds from manufacturing and directed it towards wholesale and retail trade.

The change in the pattern of financing by IBBL reflects a disappointing result in the application of Musharaka mode -- a distinguishing feature of an Islamic bank. Mudaraba, another important mode of financing, could not yet have been attempted by IBBL due to wide apprehension of risks in regard to safe return of capital and profit. Musharaka financing came down from 28.94% in 1984 to only 3.51% in 1994 (Table-2).

A review of the operation of Islamic banks all over the world shows a declining trend in the utilisation of profit-loss sharing modes like Mudarabah and Musharaka. This undermines the role of profit to be an effective allocating device when Islamic banks operate under conventional banking frame-work (Ghuddah. 1987). The policy stance has been to encourage short-term and low-risk financing that has resulted in concentration of bank portfolios in trade type financing mostly through Murabaha rather than long-term investment projects. The primary consideration of this policy stance has been the perception that the removal of interest increases moral hazard, thus making profit-sharing projects risky (Mirakhor, 1987). Interviews with senior executives and bank personnel directly involved with investment operations (loan operations in conventional sense) of IBBL confirm that modes which truly comply with the profit-loss sharing character of an Islamic bank face trouble in their application due to (a) economic reason such as higher cost of borrowing in relation to other banks and (b) social reasons such as disinterest to maintain actual accounting on the part of entrepreneurs with a view to evading income tax, and wilful default and delay in payment thereby depressing the average profit. To have a way out IBBL has been gradually switching over from profit-loss sharing

modes to risk-free modes like hire-purchase, Murabaha, etc. The obvious reason for this switching over is to prevent the bank's rate of return or profitability from falling.

During the period under study there was a government policy to withdraw gradually from agriculture. A natural outcome of the policy was that less fund would be channelled to that sector. At the same time there was a policy of deregulation and privatisation of public sector industries to creating an environment so that private sector could play a major role in the economy. The analysis of Table-19 shows that both PSCBs and PRSCBs responded to this policy positively, whereas IBBL preferred financing of trade rather than manufacturing.

6.5 Distributive Efficiency of Public and Private Sector Conventional Banks and Islami Bank Bangladesh Limited.

Three criteria have been applied to measure distributive efficiency. The first criterion deals with percentage shares of bank's gross income going to the bank and the depositors. Interest-Income or alternatively Profit-Income Ratio (for IBBL) serves as an indicator of the first criterion. The second criterion analyses distribution of deposits and advances classified by account size. The third criterion we are going to apply is rural-urban classification of deposits and advances to trace out regional biases. For the first criterion, data have been collected from Central Accounts Departments of respective sample banks. For the latter two criteria, data for the PSCBs and PRSCBs have been taken from Bangladesh Bank Bulletin and Scheduled Bank Statistics. The same data for the IBBL have been collected from its Central Accounts Department as per Questionnaire-4 annexed in Appendix-XXXV.

6.5.1 Interest-Income or Profit-Income Ratio

Interest-Income Ratio means percentage share of bank's income going to depositors as interest whereas Profit-Income Ratio denotes percentage share of Islamic bank's income

paid to depositors as profit. It is assumed that a high value of the ratio indicates a tendency towards better distribution of incomes generated through the financing process.

The exercise applies to each category of banks. Table-22 indicates that the average value of the ratio for the period 1984-92 is high in the case of PSCBs (0.66), lower in the case of PRSCBs (0.58) and lowest in the case of IBBL (0.16).

Considered in this way, the distributive efficiency of IBBL is found to be lowest compared to both the Public and Private Sector Conventional Banks.

6.5.2 Classification of Deposits and Advances in Terms of Account Size

Table-23 shows that in PSCBs nearly 70% of deposit accounts belong to account category of Tk. 5,000/- and below. Advance accounts belonging to this category of account size are only 38.59%. That means borrowers of PSCBs belonging to the above category of account size are nearly half in number compared to that of the depositors. This account category held 8.90% of total deposits, but made total advances of only 1.47% thereby transferring more than 7% of total deposits to the upper income groups. If the account size is raised up to Tk. 25,000/-, only 7.34% is advanced against receipt of 26.51% as deposits under this category. Account size up to Taka two lacs, consisting more than 99% of total number of accounts, holds a bit more than 50% of total deposits but receives advances of only 16.29% of total advance.

The concentration is more prominent in the case of PRSCBs. Table-24 shows that 63.7% deposit account holders belonging to the account-size category up to Tk. 5,000/- deposit 3.94% of total deposits. But the number of advance accounts belonging to this category is 14.69%, which is less than one-fifth of deposit accounts. The category, making 3.94% of total deposits, receives advances of only 0.03% of total loan advanced. Against a bottom 20% receipt of deposits, the PRSCBs made advances less than 1% of total advances. Similarly, against the bottom 50% deposit money received belonging to account

size up to Taka four lacs, only 7.11% of total advances is seen to be allocated to this category of account holders. This is more iniquitous than in the case of PSCBs.

Islamic banking practice in Bangladesh is not exceptional to the current trend of transferring investible resources from the low income depositors to high income borrowers. However the intensity of this transfer is marginally lower in comparison to its conventional private sector counterpart. If compared to its conventional public sector counterpart, IBBL contributes to creation of more income inequality. Table-25 shows that Islami Bank Bangladesh Limited is less open to low-income clients compared to its conventional counterparts in PSCBs and PRSCBs. Against 71.55% and 63.70% deposit accounts respectively of the PSCBs and PRSCBs belonging to accounts-size up to Tk. 5,000/-, IBBL has within this category only 52.55% deposit holders. Percentage of total deposits belonging to this category is also the lowest (i.e., 1.1%) in the case of IBBL.

If the bottom 20% of total deposits received by IBBL belonging to account-size up to Tk. 50,000/- is considered, it has disbursed relatively a higher percentage of total advances (i.e., 1.59%) to the borrowers belonging to the same category compared to its conventional private sector counterpart. Yet the role of IBBL in transferring resources from low income depositors towards high-income borrowers is prominent.

The above findings are more clearly reflected in the ***banking inequality indices*** of PSCBs, PRSCBs and IBBL as depicted in Table-26. Banking Inequality Index is a ratio between cumulative percentage of total amount deposited to that of total amount advanced in the same category of account size. The value of the indices ranges from zero to 1. The implication of the index is that the higher the value of the lower limit of the range, the higher the possibility that the banking system is equitable, i.e., more efficient so far as distributive efficiency is concerned. We observed that PSCBs had the highest value (i.e. 0.17) in the lower limit of the Banking Inequality Indices shown in column 4, followed by relatively lower values i.e., 0.07 and 0.01 belonging to IBBL and PRSCBs respectively as depicted in columns 10 and 7 of Table-26.

6.5.3 Rural-Urban Distribution of Deposits and Advances

Rural-urban classification of deposits and advances of a bank shows its allocation pattern of financial resources having distributional implications. Tables 27 and 28 depict the relative position of the conventional and Islamic banking systems regarding allocation of financial resources between rural and urban areas. Data on the subject was not available for IBBL before 1990. As such, trend analysis comprising the whole period under study was not possible. As a result, two points of time for conventional and Islamic banking were considered: 1988 and 1992 for conventional banks and 1990 and 1992 for IBBL. Since rural-urban classification of nationally consolidated figures on deposits and advances may conceal regional bias, divisional disintegration of the same has also been provided. Further, regional disintegration of national figures simply on Division basis may not provide true pictures of rural-urban bias in resource allocation. To avoid the problem, each divisional data has been compared with corresponding divisional data excluding the district figures in which the divisional headquarters is situated. For an example, rural-urban classification of deposits received from and advances made to Dhaka Division has been compared to data of the same excluding from it the figures of Dhaka district.

Rural-urban distribution pattern of conventional banks: Table-27 illustrates rural-urban distribution pattern of deposits and outstanding advances of the conventional banking system consolidating PSCBs and PRSCBs figures. The consolidated country figure clearly shows a percentage increase of rural deposits from 20.42% in 1988 to 21.85% in 1992. The corresponding figures for urban are 79.58% and 78.15% respectively. Concerning advances, the rural share has rather declined from 23.06% in 1988 to 19.84% in 1992. That means, there has been a net transfer of financial resources from rural to urban.

Percentage share of rural deposit mobilisation in 1992 was highest for Rajshahi Division (45.37%) followed by Khulna and Chittagong Divisions with share of 38.95% and

31.86% respectively. The share for Dhaka Division was only 10.25%. This is because Dhaka Division holding the capital city of the country and being the centre of major economic activities attracts more resources and thereby depresses the rural percentage share of deposits.

Concerning allocation of advances, there are evidences of transfer both to and from rural areas. While Rajshahi Division has succeeded in pulling a bigger percentage of rural advances than its percentage contribution to rural deposit mobilisation, other three Divisions are net suppliers thereby transferring financial resources from rural to urban areas. Rajshahi Division received 66.90% as rural advance against rural deposit mobilisation of 44.93% in 1988. The trend maintained its course almost in the similar direction but with a declining pace in 1992. As against a rural deposit mobilisation of 45.37%, the share of rural advances came down to 64.30%.

Urban bias of advances is prominent in both Khulna and Chittagong Divisions. The trend intensified during the last four years. As against a modest gap between the rural percentage share of deposit mobilisation and receipt of advances (36.29% and 34.08% respectively) in 1988, Khulna Division experienced a wider gap between them (38.94% and 29.39%) in 1992. In other words, in Khulna Division there has been an increased transfer in favour of urban against a higher rural deposit mobilisation. The Chittagong Division, where rural deposit increased from 29.78% in 1988 to 31.86% in 1992, received a lower advance rate of 20.91% in 1992 compared to 25.21% in 1988.

The bias is completely reversed if Divisional headquarters are excluded from the Divisional consolidated data except Rajshahi Division. Among the four Divisions under study, three (excluding Rajshahi) have received more as rural advances than they have contributed in terms of rural deposits. That means Districts other than the Divisional headquarters of the Division concerned have received more financial resources as advance than their contribution as deposits. This has been made possible by transferring a portion of rural deposit of the Divisional headquarters District to other Districts of the Division

concerned. That means the Divisional headquarters Districts except Rajshahi are net losers, i.e., receiving a lower percentage as advance against a larger percentage contribution as rural deposits.

In final analysis, under conventional banking system, Districts other than Divisional headquarters have experienced inflow of financial resources from either Divisional headquarters District and /or from elsewhere. The only exception is the Rajshahi Division where all the Districts have received more rural advances than they have contributed as rural deposits. The rural bias of the country figure of advances in 1988 reversed in 1992 because of the decline in rural advances mostly in Chittagong and Khulna Districts in spite of percentage increase of rural deposits.

Rural-urban distribution pattern of IBBL: Statistics show that IBBL is still an urban-based bank. Its percentage share of both rural deposits and advances is still less than 4%. Moreover, percentage receipt of rural advances against percentage contribution to rural deposits in both the years under study was lower, thus favouring transfer of resources from rural to urban area. Consolidated country figures in Table-28 show that the percentage share of rural advances though increased from 0.83% in 1990 to 2.10% in 1992, the percentage share of rural advances was distinctly lower in comparison to a high rural deposit mobilisation of 3.59% in 1992.

Rural banking of IBBL, whatever it has, is mainly concentrated in Khulna and Chittagong Divisions. Rural banking had been expanding in Khulna Division. As against a rural deposit share of 1.88%, IBBL made a rural advance of 5.05% in 1990. The figure increased to 7.13% against a deposit share of 7.74% in 1992. In other words, 1992 figures show an urban bias so far as advances are concerned. Similar trend is also evident in Chittagong. A distinctly high share of rural advances amounting 27.61% against a meagre percentage share of rural deposit of 5.27% in 1990 drastically came down to 6.76% in 1992.

The feature is different neither in Dhaka nor in Rajshahi Divisions either including or excluding the Divisional headquarters Districts.

In short, a comparative study of the two systems of banking about their rural net-working and allocation of funds to rural areas shows that IBBL is far behind the conventional banks. In other words, geographical distributive efficiency of IBBL with distribution of deposits and outstanding advances is lower than its conventional counterparts.

6.6 Stabilizational Efficiency of Conventional and Islamic Banking Systems

The opinion survey provides a clear testimony to the statement that the "spread or gap between uncertain cash flows (entrepreneurial profit) and fixed payment commitment (interest and principal) is the major cause of investment fluctuations" (Table-29). 70% percent of the respondents agreed to the statement in principle. Those who did not agree to the proposition opined that it was the lack of moral integrity of the entrepreneurs of Bangladesh that have caused investment to stagnate in Bangladesh (Table-30a). Along with this, the investment situation in Bangladesh was caught up by other factors such as political intervention in credit operation of banks, shock of the financial sector reforms, inability of the government to restore law and order in the country and establishing congenial labour-employer relations. Donor conditionality in procurement and disbursement of funds was also mentioned to be important factors leading to poor implementation of investment projects.

Those who agreed to the proposition opined that gradual conversion of conventional banking into Islamic banking would pave the way to lessen the impact of cyclical fluctuation in Bangladesh. They also believe that present-day Islamic banks rely less on PLS modes of financing and thus these banks should explore possibilities and avenues to increase financing on PLS modes (Table-30b).

Collateral-based financing (as practised by conventional banks) appears to be one of the most important causes for poor recovery of loan thereby depressing the recycling process of credit in the economy. Thus a participatory banking is proposed to be potential alternative to collateral-based banking. However, if all the causes responsible for investment depression in the present-day Bangladesh are considered together, one may immediately come to the conclusion that mechanical weaknesses inherent in the conventional banking system are the factors which have brought about the present-day investment stagnation in Bangladesh.

CHAPTER-7

SUMMARY AND POLICY RECOMMENDATIONS

7.1 An Overview on the Findings

In the previous chapters essentially two approaches were followed in analysing the relative efficiency of the conventional and the Islamic banking systems in financing investment. The first approach dealt with theoretical handling of the problem by resorting to static analytical framework which means a study of comparative efficiency of the two systems of banking under the assumption that they operate separately in two different economies. The second approach, on the other hand, analysed the relative efficiency of the two systems of banking under study from a dynamic perspective denoting that Islamic banks were operating under completely a conventional banking environment. This approach demonstrated the process of deteriorating efficiency of Islamic banks operating under conventional banking system and analysed the underlying reasons. The empirical survey conducted in this connection was aimed at proving or disproving the findings derived from the second approach.

7.1.1 Findings: Static Approach

As to the first approach, Islamic banking was found to be more efficient than its conventional counterpart in terms of all the efficiency criteria. On the other hand, conventional banking was not only found to be less efficient than its Islamic counterpart but also could not satisfy most of the efficiency criteria. The following are the findings from static analysis:

(1) Islamic banking was found to be more efficient so far as productivity was concerned in terms of both fund utilisation and profitability. If banking is organised on Islamic principle, where profit-loss-sharing plays a pivotal role in investment financing, an economy can benefit from utilising more of its potential investment opportunities. This is

because a PLS-bank, being ratio-sharer in profit (not in the principal amount), can finance projects even with lower rates of return below the rate of interest (in ex ante sense). This is made possible by counterbalancing the bank's apparent losses incurred with the projects having rates of return less than market rate of interest with high profit earned from the projects yielding high rates of return. This is not possible by a conventional bank that charges the same rate of interest on projects with varied rates of return thereby cancelling out a number of potential projects having positive rates of return but being below the market rate of interest.

(2) Scarce investible funds can be more efficiently allocated under Islamic banking system since it satisfies social welfare conditions by allocating funds primarily according to priority sectors and then financing projects under each sector as per profitability. Conventional bank by mechanism rejects financing in terms of profitability of projects. Its funds are rather directed to projects whose owners possess high prospective repayment capability with having a strong collateral base.

(3) Islamic banking ensures comparatively more equitable distribution of income generated in the banking process. Profit-loss sharing being the most distinguishing feature of the system, Islamic banking owns a built-in mechanism for equitable distribution of income among the entrepreneurs, the bank and the depositors. The system also distributes risks among the above three parties equitably. This is done by maintaining a mutually agreed upon ratio of sharing risks and returns primarily between the entrepreneur and the bank and then between the bank and the depositors. In the case of conventional bank, nothing exists built-in in the system that can ensure equitable distribution of income among the participating factors.

(4) Islamic banking has been found to be free from factors contributing to cyclical fluctuations. This is because an Islamic bank establishes a built-in flexible and direct relationship between the entrepreneurs' profit and their payment commitment with the bank. That means, payment commitment, having been varied with the profits earned from

the financed projects, provides a built-in flexibility between the two. On the other hand, conventional banking by mechanism contributes to cyclical fluctuations. The inflexibility in the relation between cash flow (profits) and payment commitment (interest and principal) is generally considered to be the internal cause of cyclical fluctuations in an economy.

In short, under static analytical framework when the two systems of banking are assumed to be operating as complete and separate systems in two different economies, Islamic banking emerges as the more efficient system than its conventional counterpart in terms of the efficiency criteria, viz., productive, allocative, distributional and stabilizational efficiency.

7.1.2 Findings: Dynamic Approach

Comparative efficiency analysis under dynamic approach provides the conclusion that the superiority of Islamic banking system as claimed by its proponents does not stand when it starts operation within a conventional banking framework. The following are the findings in this connection:

(a) Islamic bank fails to appropriate high profit from high-return projects since the owners of these projects prefer borrowing from conventional banks where cost of borrowing turns out to be lower. That means, only the projects with rates of return equal to or below the market rate of interest are left with the Islamic banks. In this situation, Islamic banks are not able to invest on the projects having rates of return below the prevailing rate of interest thereby limiting their capacity to utilise investment opportunity to the level of their conventional counterpart. This leads to limiting the application of profit-loss-sharing modes such as Mudaraba and Musharaka. In other words, Islamic banks, in that situation, switch over to other modes of financing such as Murabaha, hire-purchase, leasing, etc. As a result, fund utilisation rate by Islamic banks operating under conventional banking framework is likely to be lower.

(b) Allocative efficiency of an Islamic bank is not likely to be in the level as is found under static analytical framework. This is so because of the fact that Islamic banks operating under conventional banking system are compelled to switch over to modes other than profit-loss-sharing and turns to be a bank of almost similar character as of its conventional counterpart so far as efficiency implications are concerned. Profitability of projects being the ideal device of efficient resource allocation applies, in this situation, neither to Islamic banking system nor to the conventional banking system. Allocative efficiency of the latter, thus, remains at the same level as was found in the case of static analysis.

(c) It has also been found that distributive efficiency of Islamic banking is lost when an Islamic bank starts operation under conventional banking framework. Any shift from profit-loss sharing modes leads the system break the direct relationship between the incomes of the entrepreneurs, the bank and the depositors. The inefficiency of conventional banking system lies in the fact that it is neither influenced nor modified by the introduction of Islamic banking in the economy.

(d) The capacity of Islamic banking to reduce cyclical fluctuation is also lost when profit-loss sharing modes are replaced by other modes of financing. The role of conventional banking as contributor to cyclical fluctuations continues to be at the same level even after entry of Islamic banking in the economy.

7.1.3 Empirical Findings

Results from empirical study are found to be highly consistent with the findings from dynamic analysis. Though in some stages initial results with few criteria appeared to be contradictory to theoretical findings, the ultimate conclusion was very much consistent with the theoretical findings.

Findings from some of the productive efficiency tests are seen not to be in line with what were found in dynamic analysis. For example, productive efficiency of Islami Bank Bangladesh Limited -- measured by *Fund Utilisation Rate*, *Per Employee Deposit Mobilisation* and *Per Employee Fund Utilisation* -- was reported to be higher in comparison to its conventional counterparts operating in the private sector. The finding has not been considered to be conclusive until and unless the test results of rest of the productive efficiency criteria, particularly those related to profitability, were considered.

Profitability -- measured by *Income-Expenditure Ratio*, *Profit-Expenditure Ratio*, *Profit-Loanable Fund Ratio* and *Profit-Employed Fund Ratio* -- was found to be lowest in public sector conventional banks. Between public sector conventional banks and Islami Bank Bangladesh Limited, the latter maintained a lower average profitability than the former until 1993.

A closer look on the first two test results of productive efficiency (that is, investment opportunity utilisation test, and profit maximisation test) provides the insight that higher fund utilisation rate does not necessarily mean a higher profitability. This happened exactly in the case of IBBL and the implication is that it is relatively less productive. In other words, higher fund utilisation rate without ensuring higher profitability means a bank operationally less efficient.

Operational efficiency of Islami Bank Bangladesh Limited measured by *Per Employee Administrative Cost* and *Administrative Cost per Taka Employed* criteria was well above those of the private sector conventional banks. Measured by the same indicators, the public sector conventional banks stand at the lowest while the private sector conventional banks rank second. This creates confusion why profitability of Islami Bank Bangladesh Limited was lower when it had lower operational cost and higher fund utilisation rate than the private sector conventional banks. The answer is simple. Relatively higher percentage of invested funds of Islami Bank Bangladesh Limited was classified and subject to bad debt provision that put severe impact on its profitability that could not be recovered by lower operational cost. This leads to the conclusion that private sector conventional banks are seen to do better than both Islami Bank Bangladesh Limited and public sector conventional banks if both productive and operational efficiencies are

considered simultaneously. However, IBBL's position on this count is found to be better if only the second half of the period under study is considered.

As to the allocation of investible (loanable) funds to priority sectors, Islami Bank Bangladesh Limited similar to private sector conventional bank was found to be far away from the role expected to be played. Investment (advances in conventional sense) in agriculture by these two categories of banks was less than 1.5% during 1984-92. Thus, the first welfare condition (i.e., allocation of fund in terms of sectoral priority) was not satisfied by either of the two private sector counterparts: Islami Bank Bangladesh Limited and private sector conventional banks. The second welfare condition (i.e., financing projects within each sector in terms of profitability), too, has remained unfulfilled by all categories of banks.

Distributional efficiency of Islami Bank Bangladesh Limited has been found to be the lowest concerning functional distribution of income. It should be noted that the above conclusion follows a narrow data base limiting distribution analysis only to the income of depositors and that of the bank. Again, distribution analysis with resource transfer from low to high income group and from rural to urban puts Islami Bank Bangladesh Limited in lower in the former case and the lowest in the latter.

7.2 Assessment

Empirical findings of the present study mostly conform to those derived from theoretical analysis conducted under dynamic approach. That means Islamic banks operating within the conventional banking framework become less efficient with efficiency criteria such as productive, allocative, distributive and operational efficiency.

Though fund utilisation rate is the lowest for Islami Bank Bangladesh Limited it lags behind the Private Sector Conventional Banks but fares relatively better than the Public Sector Conventional Banks with profitability. Moreover, though the Islami Bank Bangladesh Limited has been operating in a comparatively cost effective way having the lowest Administrative Cost-Loanable Fund Ratio, its operational efficiency is ranked

second if profitability and cost effectiveness are considered simultaneously. The position of Islami Bank Bangladesh Limited is the lowest if judged by allocative efficiency. Percentage share of advances to trading has been increasing in the face of falling share of agriculture and manufacturing. Distributive efficiency measured by deposit distribution and outstanding advance among different income groups classified by account size and between rural and urban population is worse if not the worst. Distribution of income between the bank and depositors is more skewed in the case of Islami Bank Bangladesh Limited. The Islami Bank Bangladesh Limited, like its conventional counterparts, helps transfer of financial resources from low income to high income groups. It also helps transferring of finance from rural to urban areas.

These are the characteristics that make little difference between an Islamic bank and a conventional interest-based bank except that the former practises Shariah-approved financing modes. Thus the Islami Bank Bangladesh Limited, though an interest-free bank, stands far away from being a purely Islamic bank. A bank can be considered truly an Islamic bank when two basic preconditions are fulfilled. The first one is that the bank has to be essentially a profit-loss-sharing bank and a major part of its investible fund has to be deployed through PLS-modes like *musharaka* and *mudaraba*. Second, its investment must serve simultaneously the interest of the investors (borrowers) and those of the local community. The Islami Bank Bangladesh Limited has problems in satisfying both the preconditions.

The reasons for which Islami Bank Bangladesh Limited could not maintain the essential characteristics of an Islamic bank are often produced with the following arguments. The Islami Bank Bangladesh Limited came into operation with completely new modes of operation that were exclusively unknown to the people of Bangladesh. Bank personnel were also mostly less familiar with the *modus operendi* of this new system of banking. Moreover, from the very beginning, Islami Bank Bangladesh Limited had to face unfavourable situations primarily caused by the omnipresence of the conventional banks,

existing banking laws, absence of interest-free financial instruments, and capital market. Moral hazards and lack of interest of the entrepreneurs in keeping proper accounting of actual profit to avoid paying income tax led the IBBL abandon the PLS-modes and introduce those ones that, otherwise, would not have been preferred by it under a complete Islamic economic system.

It seems that the primary concern of the Islami Bank Bangladesh Limited authority has been its survival as a viable bank. Considered in this way, the strategy adopted by the bank was very much likely. However, it appears that they were less aware of the deteriorating efficiency level measured by common efficiency criteria as have been applied in this study. If really they were aware, they would perhaps be more careful in their endeavour to manage their portfolio towards realising those efficiency targets that could ensure simultaneously the basic characteristics of an Islamic bank and its survival.

The underlying cause for which Islami Bank Bangladesh Limited faced setbacks with almost all the efficiency criteria is its inability to promote application of PLS-modes in financing investment. A stern retreat from a PLS-practice of as high as 28% of total lending to a rate below 2% tell the history of the failure all about. Considering all other factors that apply equally to all categories of banks, the important factor that has brought down the efficiency level of Islami Bank Bangladesh Limited is its increasingly lower and lower practice of its PLS-modes in lending.

This has prevented the Islami Bank Bangladesh Limited from benefiting from financing high return projects and hence from earning high profits. For the same reason, the Islami Bank Bangladesh Limited has failed to play the role of good allocator of financial resources. By the same reasoning it could not have contributed to a fair distribution of income among the depositors, bank and the entrepreneurs, and to the promotion of stability in the investment situation.

The question arises what led Islami Bank Bangladesh Limited to abandon the practice of PLS-modes. There are moral hazards as well as economic reasons behind it.

Concerning moral hazard, the unholy practice of fictitious record keeping by the entrepreneurs to show profit abruptly low for evading taxes invokes entrepreneurs not to go for transactions that involve profit-loss-sharing.

The economic reason is as follows. In a situation where conventional banks advance loans on a flat rate of interest irrespective of the profitability of the projects, financing under PLS-system is considered costlier for high return projects. The logic is simple. Conventional banks charge the same rate of interest for all projects irrespective of the rates of return (low, moderate or high). This means that the cost of borrowing from a conventional bank is the same for all projects whose rates of return are higher than the market rate of interest. On the other hand, an Islamic bank share in the profit of the project financed by it. This means higher borrowing cost (amount of profit surrendered to an Islamic bank by the entrepreneur) for the entrepreneurs whose projects generate high rates of return. As a result, entrepreneurs of high return projects prefer borrowing from conventional banks. This has a negative impact on Islamic banks compelling them to abandon profit-loss sharing modes and undertakes trade related modes of financing. This brings down the efficiency level of Islamic banks to the level of their conventional counterparts.

Thus, an overwhelming practice of conventional banking creates an unfavourable situation that makes PLS-modes difficult to apply. As a result, the economy loses an opportunity to benefit from an improved banking system based on profit-loss- sharing principle.

Nevertheless, the emergence and expansion of Islami Bank Bangladesh Limited under a totally unfavourable situation demonstrate its inner strength and capability to survive as an alternative system of banking. Particularly, relatively good performance of IBBL in the second half of the period under study on both productive and operational efficiency grounds is a case to note. This has been made possible, largely, by motivation of bank personnel, their dedication to the cause, and, the last but not the least, their honesty and sincerity.

7.3 Future Policy Directions

It is evident from the research findings that Islamic banking could be the most efficient system if it were allowed to operate as a sole system in an economy. However, when it starts operation within the conventional banking framework, most of its efficiencies are lost. The study demonstrates that it is not the inherent shortcomings of Islamic banking system that is responsible for its relative inefficiency. Rather it is the continuation of legacies of the conventional banking system that jeopardises an efficient operation and functioning of Islamic banks in the economy. The policy implication is not that Islamic banks should never be floated within the conventional banking framework. Rather it is the conventional banking system whose operational mechanism needs to be reviewed in terms of PLS-system considering beneficial impact of the latter on the economy. However, as long as Islamic banks are to operate within the conventional banking framework, the recommendations under the following heads may be taken note of.

7.3.1 Banking Philosophy

There seems to be a gap between the ideals and actual practice of Islamic banks in Bangladesh. In their reports, booklets, bulletins and posters these banks express their commitment to striving for establishing a just society free from exploitation. The present study shows that little or no progress has been achieved so far in that regard. Though this failure is attributed mainly to the pervasive influence of conventional banking system itself, lack of vigilance of the promoters of Islamic banking in realising the objective is no less to blame. These shortcomings need to be identified. Particularly, it has to be seen whether there is any scope to open up alternative avenues to arrest the causes of efficiency erosion. There should be a thorough review of policies that have been pursued by these banks for about a decade, and points of departure have to be identified to redesign their course of

action. This is a very crucial issue because of the fact that people at the mass level find very little difference between the banking operations of Islamic banks and those of their conventional counterparts. Until and unless a quick change in policy followed by clear actions takes place, the credibility that Islamic banks have achieved so far may be tarnished away very soon.

The first action that deserves immediate attention is the promotion of the image of Islamic banks as PLS-banks. Strategies have to be carefully devised so that the image of Islamic character and solvency as a bank is simultaneously promoted. The following strategies are suggested for immediate application:

(a) Pilot schemes in some very selective areas should be started to testing innovative ideas with profit-loss-sharing modes of financing as major component. This type of scheme may be experimented both in rural and urban areas. The strategy will serve as a ready reference that Islamic banks are in the process of transforming themselves as PLS-banks. Side by side, they will gain experiences from real situation as to the problems that might come up while implementing profit-loss-sharing modes on trial and error basis.

(b) Islamic banks should clearly demonstrate by their actions that their banking practices are guided by profitability criterion thereby establishing that only Islamic banking practices ensure efficient allocation of resources and provide true market signals through PLS-modes.

(c) Islamic banks should continuously monitor and disseminate through various media the impact of their operations on the distribution of income primarily between the bank and the other two parties: the depositors and the entrepreneurs and then on different income groups of the society. These presuppose establishment of a fully equipped research academy in each Islamic bank.

7.3.2 Promoting Fund Utilisation Rate

Islamic banks in Bangladesh should abandon their traditional outlook of limiting their lending operations only to the so-called reputed entrepreneurs. They should broaden their clientele base among the poorer sections of the population. This will require a change in the approach of banking both in rural and urban areas. It can help promotion of self-employment through financing income generating activities undertaken by poorer sections of the population. The Hilful Fazul approach in selecting clients, formation of groups and the lending mechanism pursued by them may be experimented in some selected areas (Akkas, Naqi and Karim, 1996). People with Islamic commitments may be the first target group of Islamic banks. To have a meaningful social transformation towards Islam, the financial base of Islam-loving people needs to be strengthened. Cost-effective means are to be devised so that excess liquidity of Islamic banks is productively utilised, benefits of banking services are equitably distributed, and side by side a standard profit margin is ensured. Rural banking under the above mentioned model may be the alternative way to increase the fund utilisation rate as well as the image of Islamic banking.

Islamic banks may further take efforts in creating income generating activities for the unemployed youth in rural and urban areas. They can adopt innovative financing methods to develop small entrepreneurship among the un- and under-employed work force on experimental basis.

7.3.3 Improving Operational Efficiency

Islami Bank Bangladesh Limited should look into the matter whether its lower operational cost compared to that of private sector conventional bank is a demotivational factor for its lower profitability. If the finding is positive, the Bank may consider undertaking either of the two courses of action for improving the situation. It may give a second look to the incentive package for the bank personnel to motivate them towards attaining higher level of profitability for the Bank compared to its conventional

counterparts. Alternatively, keeping the incentive structure at its present level, further cost effective measures along with efficiency increasing steps are to be adopted. Whatever might be the course of action, the objective should be to raise the Bank's profitability to a fairly high level in comparison to its conventional counterparts. Besides the above, the following might be the complementary strategies to be applied by Islamic banks to raise their profitability level:

(a) They should be selective in selecting entrepreneurs for financing those that are honest, sincere, enterprising, and committed to the cause of Islamic banking;

(b) They should provide consultation services to entrepreneurs intending to undertake profitable ventures with bank finance on partnership basis, to help them in tapping up the opportunity, and to finance, guide and supervise them to that end;

(c) They should develop an entrepreneurs' community that is committed to enterprising and interested in making their fortune through Islamic banking services.

(d) Bank personnel/bankers should be trained in such a way that they play a catalyst role in promoting entrepreneurship.

The above steps may greatly improve the profitability of Islamic banks.

For revitalising the conventional banks in the public sector, **first**, standard banking norm should be revived by bringing back the rule of law; **secondly**, banking laws should be reformed in a way that wilful defaults are checked; **thirdly**, banks' post-financing supervision should be strengthened in order to improve the situation of overall loan recovery. For the improvement of the situation in the Public Sector Conventional Banks, an immediate appraisal should be made regarding whether their public status (government ownership) matters in the continuous decline of their profitability.

7.3.4 Stepping up for Distributional Efficiency

The task is more challenging for Islamic banks as they have to promote their distributional efficiency from all dimensions together with profitability. Islamic banks, step by step, have to be converted into profit-sharing banks by increasing their percentage share of investment financing through PLS-modes. The Islamic banks, to do that, can be selective in choosing clients for financing under PLS-modes.

Islamic banks should establish a direct functional relationship between the income of the bank and that of the depositors and between the income of the bank and that of the entrepreneurs. The relationship improves with the share of bank financing under PLS-modes increases.

Islamic banks should immediately take measures to revert the trends of resource transfer from both low income groups to high income groups and from rural to urban areas. This is extremely important from the viewpoint of their banking philosophy as well as for their tacit commitment for distributional equity. They should develop a monitoring mechanism by which distributional impact of their banking operation could be traced out and necessary policy can be formulated to continuously improve the equity situation. Banking inequality index developed in the present study might be useful for this purpose particularly in the case of inter-group transfer of incomes.

The Islamic banks should actively consider utilisation of rural potentials from both efficiency and equity grounds in the context of the present-day socio-economic conditions of Bangladesh. Strong commitments and stepping up through experiment and implementation of innovative ideas are the appropriate ways to do that.

7.3.5 Promotion of Allocative Efficiency

The Islamic banks can improve their allocative efficiency by satisfying social welfare conditions in the following manner: (a) they should allocate a reasonable portion of their investible funds to social priority sectors such as agriculture (including poultry and

fishery), small and cottage industries and export-led industries such as garments, shrimp cultivation, etc. (b) When the percentage shares of allocation of investible funds are determined, profitability of the projects should be the criterion for allocating loanable funds. The criterion would be best satisfied if more and more projects were financed under PLS-modes.

7.4 Conclusion

Islamic banks can satisfy most of the efficiency conditions if they can operate as a sole system in an economy. Conventional banking, on the other hand, does not satisfy any of the efficiency conditions analysed in the present study. However, when Islamic banks start operation within the conventional banking framework, their efficiency goes on decreasing in a number of dimensions. The deterioration is not because of Islamic bank's own mechanical deficiencies. Rather it is the efficiency-blunt operation of the conventional banking system that puts a negative impact on the efficient operation of Islamic banks. This does not mean that the survival of Islamic banks operating within the conventional banking framework is altogether threatened. Evidence from Bangladesh indicates that Islamic banks can survive within the conventional banking framework by switching over from PLS to trade related modes of financing.

Even under the conventional banking framework Islamic banks can operate with certain level of efficiency by applying in a reasonable percentage the PLS-modes -- the distinguishing features of Islamic banking. This has been possible in some countries of the Muslim world where the management of Islamic banks was cautious about possible impacts of every policy measure. Particularly, the management of these banks was judicious in selecting sectors or areas as major of their operations. Sudan Islamic Bank is a typical example in this respect. Islamic banks in Bangladesh have much to learn from the experience of this successful Islamic bank.

Having been considered the pro-efficiency character of Islamic banking and its beneficial impacts on the economy government policy in Muslim countries should be in favour of transforming conventional banking system into Islamic banking.

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TABLES

Table-1: Productive Efficiency of selected Public and Private Sector Conventional Banks and Islami Bank Bangladesh Limited.

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1984-92 average	1984-1993 average	1984-1994 average
PUBLIC SECTOR BANKS														
1. Fund Utilisation Rate(%)	81.98%	84.09%	78.95%	75.94%	85.05%	85.49%	80.58%	76.59%	78.80%	-	-	80.83%	-	-
2. Per employee deposit mobilisation in "000"tk.	1242	1451	1566	1735	1895	2137	2305	2644	3043	-	-	2002	-	-
3. Per employee Fund Utilisation in "000"Taka	993	1148	1193	1247	1409	1637	1656	1717	1916	-	-	1435	-	-
PRIVATE SECTOR BANKS														
1. Fund Utilisation Rate(%)	62.96%	67.36%	76.84%	79.51%	83.96%	87.43%	87.42%	88.87%	92.09%	86.85%	77.68%	80.72%	81.33%	81.00%
2. Per employee deposit mobilisation in "000"tk.	3187	2884	2812	3337	3489	3888	4111	4351	4569	4967	5602	3625	3760	3927
3. Per employee Fund Utilisation in "000"Taka	1993	1918	1900	2361	2538	2954	2970	3143	3491	3574	3490	2585	2684	2757
ISLAMI BANK BANGLADESH LTD.														
1. Fund Utilisation Rate(%)	84.70%	73.02%	70.69%	87.96%	88.40%	80.29%	85.74%	88.07%	84.96%	78.93%	92.91%	82.65%	82.28%	83.24%
2. Per employee deposit mobilisation in "000"tk.	2185	2901	3133	3361	4113	4099	5313	5723	6765	7067	8771	4177	4466	4857
3. Per employee Fund Utilisation in "000"Taka	1573	1801	1882	2513	3090	2798	3872	4264	4886	4741	6927	2964	3142	3486

Source: Developed on the basis of the figures available in the Annual Reports from 1984 to 1992 of the concerned banks. For details see Appendices I, II & III.

* Public Sector Banks include the Sonali, Janata and Agrani Bank.

** Private Sector Commercial Banks include the City Bank Ltd., National Bank Ltd., United Commercial Bank Limited and Arab-Bangladesh Bank Limited.

Table 2: Portfolio structure of financing by Islami Bank Bangladesh Ltd.

(In%)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
1. Short term financing(TDR)	1.13%	1.73%	3.09%	3.00%	2.27%	2.46%	3.11%	3.31%	3.38%		
2. Term financing(Musharaka,Hire Purchase	29.70%	14.91%	12.10%	8.88%	8.30%	15.82%	16.13%	16.58%	14.72%		
3. Trade financing(Murabaha, Bai-Muazzal)	69.14%	80.93%	75.56%	73.35%	73.41%	73.18%	73.83%	70.89%	72.98%		
4. Investment against securities	0.00%	0.00%	4.13%	3.27%	2.78%	2.51%	1.82%	0.49%	0.41%		
5. Others	0.02%	2.43%	5.13%	11.50%	13.24%	6.03%	5.11%	8.72%	8.51%		
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%		
Mode-wise investment											
1. Murabaha	53.54%	71.98%	64.99%	61.52%	57.49%	48.35%	50.63%	50.03%	53.04%	47.59%	53.43%
2. Musharaka	28.94%	14.47%	9.52%	6.47%	3.88%	2.72%	2.58%	2.30%	2.27%	3.45%	3.51%
3. Bai-e-Muazzal	15.60%	8.95%	10.56%	11.87%	15.93%	24.83%	23.20%	20.86%	19.93%	20.49%	18.19%
4. Hire Purchase	0.76%	0.44%	2.58%	2.42%	4.42%	13.10%	13.55%	14.27%	12.45%	13.92%	12.59%
5. Quard-e-Hasan (PF & BF)	0.02%	0.01%	0.01%	0.04%	0.08%	0.11%	0.12%	0.14%	0.15%	0.00%	0.00%
6. Quard-e-Hasan(TDR)	1.13%	1.73%	3.09%	3.00%	2.27%	2.46%	3.11%	3.31%	3.38%	3.97%	3.61%
7. Purchase & Negotiation	0.00%	2.42%	5.13%	10.78%	13.17%	5.92%	4.99%	8.58%	8.36%	10.58%	8.67%
8. Investment in share & securities	0.00%	0.00%	4.13%	3.27%	2.78%	2.51%	1.82%	0.49%	0.41%	0.00%	0.00%
9. Others	0.00%	0.00%	0.00%	0.63%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Central Accounts Department, Islami Bank Bangladesh Limited. For details see Appendix-XXX.

Table-3 Causes behind non-utilization of sizeable fund in Islami Bank Bangladesh Limited

Types of question responded	Calculated total value	Ordering of responses
1.Stagnant economic situation;	172	D
2.Careful selection of clients in order to avoid further deterioration in loan recovery;	368	B
3.Lack of sound management	144	E
4.Absense of Islamic financial instruments in the money market	396	A
5.Absense of investment opportunity in the money market due to presence of interest elements;	216	C
6.Non promotion of clients;	128	F

Source: Opinion Survey based on Questionnare-1. See Appendix-XXXII.

Table-4. Causes of highest deposit mobilization rate in Islami Bank Bangladesh Limited

Types of question responded	Calculated total value	Ordering of responses
1.No alternative investment opportunity exists	252	E
2.End of the year pre-arranged deposit mobilisation by bank personnel	196	I
3.Dull business activities	208	H
4.Lack of security in business activities due to deteroration in law and order siuation.	228	G
5.Favourable religious environment.	287	C
6.Popularity of Islamic Banking	468	A
7.Effective management	244	F
8.High profit offered by the Bank.	264	D
9.Strong desire of depositors to avoid interest on religious ground and firm confidence about religious character of IBBL;	298	B
10.Increased growth of confidence in IBBL.	40	J

Source: Opinion Survey based on Questionnare-1. See Appendix-XXXII.

Table-5. Causes of secular decline in the Fund Utilisation Rate of Public Sector Conventional Banks

Types of question	Calculated total value	Ordering of responses
1.Stagnant conomic situation	536	A
2.Careful selection of clients in order to avoid further deterioration in loan recovery	476	C
3.Lack of sound management	496	B
4.Absence of effort to promote clients	272	D
5.No. stuborn entrepreneurs are few;	24	E
6.Lack of proper attitude of the borrowers after availing the loans towards its investment properly	16	G
7.Unforeseen interference	20	F

Source: Opinion Survey based on Questionnare-1. See Appendix-XXXII.

Table 6: Profitability of Public and Private Sector Conventional Banks and Islami Bank Bangladesh Ltd.

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1984-1992 average	1984-1993 average	1984-1994 average
PUBLIC SECTOR BANKS*														
1. Income-Expn. Ratio	1.19	1.16	1.13	1.05	1.05	1.01	1.01	1.00	1.03	-	-	1.07	-	-
2. Profit-Expen. Ratio	0.19	0.16	0.13	0.05	0.05	0.01	0.01	0.00	0.03	-	-	0.07	-	-
3. Profit-Loanable Fund Ratio	0.016	0.016	0.014	0.006	0.005	0.001	0.001	0.000	0.001	-	-	0.007	-	-
4. Profit-Employed Fund Ratio	0.020	0.019	0.017	0.008	0.006	0.001	0.001	0.000	0.001	-	-	0.008	-	-
PRIVATE SECTOR BANKS**														
1. Income-Expn. Ratio	1.32	1.37	1.28	1.23	1.21	1.05	1.13	1.13	1.13	1.05	1.05	1.21	1.19	1.18
2. Profit-Expen. Ratio	0.32	0.37	0.28	0.23	0.21	0.05	0.13	0.13	0.13	0.10	0.11	0.21	0.20	0.19
3. Profit-Loanable Fund Ratio	0.022	0.036	0.031	0.028	0.026	0.007	0.019	0.018	0.018	0.013	0.011	0.023	0.022	0.021
4. Profit-Employed Fund Ratio	0.035	0.053	0.041	0.035	0.031	0.008	0.022	0.020	0.020	0.015	0.014	0.029	0.028	0.027
ISLAMI BANK BANGLADESH LTD														
1. Income-Expn. Ratio	1.24	1.11	1.06	1.09	1.19	1.11	1.53	1.29	1.01	1.15	1.37	1.18	1.18	1.20
2. Profit-Expen. Ratio	0.24	0.11	0.06	0.18	0.19	0.11	0.53	0.29	0.13	0.15	0.37	0.20	0.20	0.21
3. Profit-Loanable Fund Ratio	0.016	0.008	0.005	0.015	0.016	0.010	0.043	0.026	0.011	0.011	0.026	0.017	0.016	0.017
4. Profit-Employed Fund Ratio	0.019	0.011	0.007	0.017	0.018	0.013	0.050	0.030	0.013	0.014	0.028	0.020	0.019	0.020

Source: Developed from the data taken from Annual Reports of public,private sector banks and Islami Bank Bangladesh Limited and "Resume of Activities of Financial institution of Bangladesh" 1992-93, Ministry of Finance. For details see Appendices IV, V & VI.

* Conventional banks include Public Sector Banks such as Sonali, Janata and Agrani and private sector banks such as The City Bank Limited, National Bank Limited, United Commercial Bank Limited and Arab-Bangladesh Bank Limited.

Table-7: Composition of Demand Deposits and Time Deposits in Total Deposits.

Year	Demand Deposits	% growth of D/Ds	Demand as % of total deposits	Time Deposits	% growth of T/Ds	Total Deposits	% Growth of total Deposits
1974-75	508.90		52.50%	460.40		969.30	
1975-76	552.20	8.51	51.76%	514.70	11.79	1066.90	10.07%
1976-77	616.60	11.66	44.56%	767.00	49.02	1383.60	29.68%
1977-78	719.50	16.69	43.97%	916.90	19.54	1636.40	18.27%
1978-79	911.40	26.67	42.46%	1235.20	34.71	2146.60	31.18%
1979-80	1038.20	13.91	40.69%	1513.10	22.50	2551.30	18.85%
1980-81	1071.30	3.19	33.26%	2149.70	42.07	3221.00	26.25%
1981-82	1134.50	5.90	30.90%	2536.60	18.00	3671.10	13.97%
1982-83	1495.00	31.78	31.41%	3263.90	28.67	4758.90	29.63%
1983-84	1993.40	33.34	29.19%	4835.90	48.16	6829.30	43.51%
1984-85	2508.70	25.85	28.47%	6302.40	30.33	8811.10	29.02%
1985-86	2974.30	18.56	28.64%	7410.20	17.58	10384.50	17.86%
1986-87	3295.00	10.78	26.58%	9103.15	22.85	12398.15	19.39%
1987-88	2466.79	-25.14	17.63%	11526.21	26.62	13993.00	12.86%
1988-89	2845.10	15.34	17.28%	13617.40	18.14	16462.50	17.65%
1989-90	3180.50	11.79	16.64%	15928.90	16.97	19109.40	16.08%
1990-91	3591.90	12.94	16.79%	17800.60	11.75	21392.50	11.95%
1991-92	4184.60	16.50	17.11%	20268.70	13.87	24453.30	14.31%
1992-93 (June'93)	4582.50	9.51	16.94%	22473.00	10.88	27055.50	10.64%
1993-94 (Sept'93)	4317.20	-5.79	15.99%	22675.70	0.90	26992.90	-0.23%

Source: Bangladesh Bank Bulletin, January-March 1992-93.

Table-8. Causes of the decline in the profitability of Private Sector Conventional Banks

Types of question	Calculated total value	Ordering of responses
1.Fall in liquidity trap due to non-recovery of loans	336	A
2.Heavy borrowings by the directors of some commercial banks	300	B
3.High cost of deposit or borrowing;	156	C
4.Increase in overdue	220	F
5.Increase in percentage of bad loan to total loans	52	E
6.Inadequate monitoring by Bangladesh Bank	20	F
7.No fair scope for investment	56	D

Source: Opinion Survey based on Questionnare-1. See Appendix-XXXII.

Table-9. Causes of continuous decline in the profitability of Public and Private Sector Banks and Islami Bank Bangladesh Limited

Types of question	Calculated total value	Ordering of responses
1.Decline in Fund Utilization rate	336	C
2.Low recovery rate	484	B
3.Increase in the amount of provision for classified loans and advances	532	A
4.Low interest rate due to sluggish economic activities	240	E
5.High administrative and overhead costs	244	D
6.Due to heavy bad debt reserve required for low quality loan/investment	200	F
7.Low interest rate due to sluggish economic activi-ties	8	H
8.Mismanagement and unrest in the banking sector	48	G

Source: Opinion Survey based on Questionnare-1. See Appendix-XXXII.

Table-10: Project financing decisions under Public and Private Sector Conventional Banks

Types of question responded	Calculated total value	Ordering of responses
Which one of the two projects is preferred for financing ?		
1. One with higher prospective rate of return and the entrepreneur having been skilled and experienced but whose colateral security position is relatively weak	240	B
2. Another with relatively low prospective rate of return but having strong colateral back up and the entrepreneur having been equally skilled	284	A

Source: Opinion Survey based on Questionnaire-2 & 3. Please see Appendices XXXIII & XXXIV.

Table-11: The causes responsible for receiving finance in the name of one project but utilising them elsewhere

Types of question responded	Calculated total value	Ordering of responses
1. Because bank's post-finance supervision is inadequate and not so much effective	252	A
2. Because bank's return is in no way linked to the yield generated from the project in which the bank has financeed	220	B
3. Because of both (a) and (b)	176	C
4. End-use of fund is not ensred	28	E
5. Lack of proper procedures in selection of experienced borrower	32	D
6. Weak terms and conditions of sanction and weak documentation	28	E
7. Lack of supervision during implementation	24	F
8. Borrowers' defalting mentality	32	D

Source: Opinion Survey based on Questionnaire-2 & 3. Please see Appendices XXXIII & XXXIV

Table-12: Causes for which a project financed by a bank could be sick and affect recovery of bank loans

Types of question	Calculated total value	Ordering of responses
1. Bank's post financing supervision is not adequate and effective	544	A
2. Wrong selection of projcts	480	B
3. Pre-financing appraisal of submitted projects was not correct	400	C
4. Non-economic factors matter widely in the selection of projects for financing.	368	D
5. Sudden changes in the govt. policy	332	E
6. Deterioration in the overall management of the economy	224	G
7. Lack of proper management in the banking sector	234	F
8. Black-marketing and unauthorized entry foreign goods.	368	D
9. Labour unrest.	24	H

Source: Opinion Survey based on Questionnaire-2 & 3. Please see Appendix-XXXIII & XXXIV.

Table-13: Causes of bank's post finance supervision not being adequate and effective

Types of question	Calculated total value	Ordering of responses
1. Bankers think it not to be important so far as its financing mechanism is concerned	308	B
2. Bankers think it to be expensive and not adding any thing to its income	224	D
3. Bankers think it to be important as their income is related to the performance of the project but cost of supervision is relatively high.	232	C
4. The mentality of the bankers that their concern is merely the recovery of interest and principal which need to be taken care of only when bnorrowers are in default.	376	A
5. The importance of post-finance supervision is not recognised properly;	56	E
6. No incentive for such a lending job;	40	F
7. Lack of adequate laws which could discharge default culture.	28	G

Source: Opinion Survey based on Questionnaire-2 & 3. Please see Appendices XXXIII & XXXIV.

Table-14: Whether bank as a financing partner play an active role in ensuring effectiveness of the projects in which it has financed and how

Types of question respoded	Calculated total value	Ordering of responses
1. It can introduce a financing arrangement by participating in some form in the management of the projects financing by it and bearding profits and losses in proportion to capital contribution	208	B
2. It can continue the interest-based financeing mechanism and creates some lagal provisions which permit effective supervision of the financed project.	132	C
3. Resumption of discipline and improvement of management in the banking sector is sufficient to ensure efficacy in the financed projects even without bringing about changes in the present financing mechanism of interest-based conventional and profit-loss-sharing banking system.	260	A
4. Providing corporate counseling.	12	D

Source: Opinion Survey based on Questionnaire-2 & 3. Please see Appendices XXXIII & XXXIV.

Table-15: Scaling of overdue of loan situation in the banking sector of Bangladesh

Questions responded	Number of response			
	Public sector banks	Private sector banks	IBBL	Toal reponse
1. Within manageable limit	6	2	0	8
2. Not a matter of that much concern	2	4	2	8
3. Matter of concern	18	14	23	55
4. Matter of great concern	1	1	1	3

Source: Opinion Survey based on Questionnaire-2 & 3. Please see Appendices XXXIII & XXXIV.

Table-16: Status of overdue loans in Bangladesh

Questions responded	Number of response			
	Public sector banks	Private sector banks	IBBL	Toal reponse
1. Overdue of loans situation is improving in the banking sector	19	13	10	42
2. Sign of improvement not visible	8	8	10	26
3. The situation is aggravating	2	2	2	6

Source: Opinion Survey based on Questionnaire-2 & 3. Please see Appendices XXXIII & XXXIV.

Table 17: Portfolio structure of financing by Public and Private Sector Conventional Banks and by Islami Bank Bangladesh Ltd.

(in %)

	Public Sector* Banks		Private Sector** Banks	
	1984	1992	1985	1992
1. Money at Call and Short Notice	10.93	3.31	0.75	5.19
1. Loans,overdraft & cash credit-Employed Fund ratio(%)	71.57	69.02	69.55	79.10
2. Bills purchased and discounted-Employed Fund Ratio(%)	6.00	3.45	12.36	1.79
3. Investment in securities-Employed Fund Ratio(%)	33.47	24.22	17.34	13.93
	100.00	100.00	100.00	100.00
ISLAMI BANK BANGLADESH LTD.			1984	1992
1. Short term financing(TDR)-Employed Fund Ratio(%)			1.13	3.38
2. Term financing(Musharaka,Hire Purchase)-Employed Fund Ratio(%)			29.7	14.72
3. Trade financing(Murabaha,Bai-Muazzal)-Employed Fund Ratio(%)			69.14	72.98
4. Investment against securities-Employed Fund Ratio(%)			0	0.41
5. Others- Employed Fund Ratio(%)			0.02	8.51
			100	100

Source: Annual Reports of respective banks.For details see the Appendices XXI, XXII, XXIII & XXIV and Table-2.

* Public Sector Banks includes the Sonali, Janata and Agrani Bank.

** Private Sector Commercial Banks include the City Bank Ltd., National Bank Ltd., United Commercial Bank Ltd. and the Arab-Bangladesh Bank Limited.

Table-18: Causes of gradual decline in the percentage share of PLS-financing by Islami Bank Bangladesh Limited since 1984

Questions responded	Calculated total value	Ordering of responses
1. Entrepreneurs think that cost of borrowing from Islami Bank Bangladesh Ltd. under modes Musharaka and Mudarabah is higher than conventional interest-based banks	186	C
2. Entrepreneurs consider terms and conditions for borrowing money under PLS-modes to be sheer interference to their business by the bank;	250	B
3. Bank personnel rather feel comfort with modes other than PLS-modes due to their easiness in handling and for risk consideration;	135	D
4. Bankers think it to be laborious, costlier and something beyond the limit of banking task;	12	E
5. Islami Bank's insistence about reporting of actual profit and keeping proper records of business transaction is contrary to conventional business practice in Bangladesh;	455	A

Source: Questionnaire-4 & 5. See Appendices XXXIII & XXXIV.

Table 19: Financing by Public and Private Sector Conventional Banks and Islami Bank an Bangladesh Limited

(in %)

	Public Sector* Banks		Private Sector** Banks		Islami Bank Bang-ladesh Ltd	
	1984	1992	1984	1992	1984	1992
1. Agri.,hunting Forestry and Fishing	9.53	5.65	0.22	0.28	1.07	0.26
2. Manufacturing	31.88	40.56	30.68	31.96	23.85	11.07
3. Wholesale and Retail trade, rest.& hotels	23.77	20.32	30.36	37.54	57.58	59.91
4. Insurance,Real Estate, and business serv	4.84	6.21	7.86	10.55	3.75	2.92
5. Transport, Stor -age & Commun.	1.61	1.15	1.57	1.24	1.71	1.59
6. Others	28.38	26.11	28.91	18.43	11.17	24.6
	100.00	100.00	100.00	100.00	100.00	100.00

Source: Ministry of Finance: "Resume of the Activities of Financial Institutions of Bangladesh, 1992-93. For details please see the appendices VII, VIII, IX.

* Public Sector Banks includes the Janata and Agrani Bank.

** Private Sector Commercial Banks include the City Bank Ltd., National Bank Ltd. United Commercial Bank Ltd. and the Arab Bangladesh Bank Limited.

Table 20: Operational Efficiency of selected Public and Private Sector Conventional Banks and Islami Bank Bangladesh Limited

(in Taka)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1984-92 average	1984-93 average	1984-94 average
PUBLIC SECTOR BANKS														
A. Per Employee Administrative Cost	28,181	37,087	40,067	41,777	45,533	53,785	56,660	63,024	72,237	-	-	48,706		
B. Administrative Cost - Loanable Fund Ratio	0.024	0.028	0.028	0.027	0.029	0.028	0.028	0.028	0.030			0.028		
PRIVATE SECTOR BANKS														
A. Per Employee Administrative Cost	86,859	99,020	97,456	115,173	108,992	114,976	124,478	130,910	132,433	140,168	142,853	112,255	115,047	117,574
B. Administrative Cost - Loanable Fund Ratio	0.027	0.035	0.039	0.039	0.036	0.034	0.036	0.037	0.035	0.034	0.032	0.035	0.035	0.035
ISLAMI BANK BANGLADESH LTD														
A. Per Employee Administrative Cost	64,261	57,885	76,685	83,056	91,304	106,287	124,643	139,657	166,698	164,585	176,329	101,164	107,506	113,763
B. Administrative Cost - Loanable Fund Ratio	0.035	0.023	0.029	0.029	0.026	0.031	0.028	0.029	0.018	0.027	0.024	0.028	0.028	0.027

Source: Annual Reports of respective banks from 1984 to 1992. For details see the Appendices X, XI & XII

* Public Sector Banks include the Sonali, Janata and Agrani Bank.

** Private Sector Commercial Banks include the City Bank Ltd., National Bank Ltd., United Commercial Bank Limited and Arab-Bangladesh Bank Limited. For details see Appendix-XVIII.

Table-21: Composite Productivity Index of Public and Private Sector Conventional Banks and Islami Bank Bangladesh Limited

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1984-92 average	1984-93 average	1984-94 average
PUBLIC SECTOR BANKS														
1. Profit-Loanable Fund Ratio	0.016	0.016	0.014	0.006	0.005	0.001	0.001	0.000	0.001			0.007	-	-
2. Administrative Cost-Loanable Fund Ratio	0.024	0.028	0.028	0.027	0.029	0.028	0.028	0.028	0.030			0.026	-	-
3. Composite Productivity Index (1/2)	0.67	0.57	0.50	0.22	0.17	0.04	0.04	0.00	0.03			0.25	-	-
PRIVATE SECTOR BANKS														
1. Profit-Loanable Fund Ratio	0.022	0.036	0.031	0.028	0.026	0.007	0.019	0.018	0.018	0.013	0.011	0.023	0.022	0.021
2. Administrative Cost-Loanable Fund Ratio	0.027	0.035	0.039	0.039	0.036	0.034	0.036	0.037	0.035	0.034	0.032	0.035	0.035	0.035
3. Composite Productivity Index (1/2)	0.81	1.03	0.79	0.72	0.72	0.21	0.53	0.49	0.51	0.38	0.34	0.65	0.62	0.59
ISLAMI BANK BANGLADESH LTD														
1. Profit-Loanable Fund Ratio	0.016	0.008	0.005	0.015	0.016	0.010	0.043	0.026	0.011	0.011	0.026	0.017	0.016	0.017
2. Administrative Cost-Loanable Fund Ratio	0.035	0.023	0.029	0.029	0.026	0.031	0.028	0.029	0.018	0.027	0.024	0.028	0.028	0.027
3. Composite Productivity Index (1/2)	0.46	0.35	0.17	0.52	0.62	0.32	1.54	0.90	0.61	0.41	1.08	0.61	0.59	0.63

Source: Developed on the basis of the figures available in the Annual Reports from 1984 to 1994 of the concerned banks. For details see Appendices IV, V, VI, XV & XVI.

* Public Sector Banks include the Sonali, Janata and Agrani Bank.
** Private Sector Commercial Banks include the City Bank Ltd., National Bank Ltd., United Commercial Bank Limited and Arab-Bangladesh Bank Limited.

Table-22: Interest-Income ratio of Public and Private Sector Coventional Banks and Profit-Income ratio of Islami Bank Bangladesh Limited

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1984-92 average	1984-1993 average	1984-1994 average
Interest-IncomeRatio														
Public Sector Banks	0.60	0.61	0.60	0.66	0.68	0.70	0.69	0.71	0.71	-	-	0.66	-	-
Private Sector Banks	0.46	0.46	0.52	0.54	0.6	0.73	0.63	0.66	0.61	0.67	0.61	0.58	0.59	0.59
Profit-IncomeRatio														
Islami Bank Bangladesh Ltd	0.19	0.1	0.06	0.17	0.16	0.1	0.34	0.23	0.13	0.13	0.27	0.16	0.16	0.17

Source: Collected and developed from the data taken from Annual Reports from respective public and private sector conventional banks and Islami Bank Bangladesh Ltd. for the period ranging 1984-1994.

Table-23: Deposit distribution and advances classified by size of A/Cs in the Public Sector Conventional Banks as on June 30,1993

C U M U L A T I V E

Size of accounts	Deposits		Advances		
	% of total accounts	% of total amount	% of total accounts	% of total amount	Banking Inequality Index:6=(5/3)
1	2	3	4	5	
Upto - 5000	71.55	8.90	38.59	1.47	0.17
5001 - 10000	83.89	15.53	71.68	4.47	0.29
10001 - 25000	93.42	26.51	87.27	7.34	0.28
25001 - 50000	96.81	35.51	91.91	9.37	0.26
50001 - 100000	98.48	44.36	95.12	12.33	0.28
100001 - 200000	99.34	53.27	97.27	16.29	0.31
200001 - 300000	99.60	58.12	98.03	18.68	0.32
300001 - 400000	99.72	61.24	98.42	20.41	0.33
400001 - 500000	99.80	63.88	98.69	21.97	0.34
500001 - 1000000	99.92	69.71	99.27	27.45	0.39
1000001 - 2500000	99.97	76.00	99.73	35.74	0.47
2500001 - 5000000	99.98	79.45	99.85	41.07	0.52
5000001 - 7500000	99.99	82.43	99.90	45.37	0.55
7500001 - 10000000	99.99	84.53	99.91	46.98	0.56
1000000 - 50000000	99.99	92.36	99.97	63.58	0.69
50000001 - 100000000	99.99	94.80	99.99	71.38	0.75
100000001 and above	100.00	100.00	100.00	100.00	1.00

Source: Calculated on the basis of data taken from Scheduled Banks Statistics, April-June 1993 published by Bangladesh Bank

Table-24: Deposit distribution and advances classified by size of A/Cs in the Private Sector Conventional Banks as on June 30,1993

C U M U L A T I V E

Size of accounts	Deposits		Advances		
	% of total accounts	% of total amount	% of total accounts	% of total amount	Banking inequality Index: 6=(5/3)
1	2	3	4	5	
Upto - 5000	63.70	3.94	14.69	0.03	0.01
5001 - 10000	76.70	7.24	27.53	0.13	0.02
10001 - 25000	87.90	13.43	40.47	0.41	0.03
25001 - 50000	92.80	19.37	51.25	0.94	0.05
50001 - 100000	95.70	27.57	60.36	1.85	0.07
100001 - 200000	97.80	38.49	69.33	3.62	0.09
200001 - 300000	98.50	45.05	74.93	5.50	0.12
300001 - 400000	98.90	50.37	78.32	7.11	0.14
400001 - 500000	99.20	54.86	83.31	8.95	0.16
500001 - 1000000	99.60	65.83	87.80	15.27	0.23
1000001 - 2500000	99.80	75.86	94.50	29.82	0.39
2500001 - 5000000	99.97	82.16	97.24	42.72	0.52
5000001 - 7500000	99.98	84.92	98.20	50.93	0.60
7500001 - 10000000	99.99	87.81	99.01	60.17	0.69
1000000 - 50000000	100.00	94.95	99.84	81.89	0.86
50000001 - 100000000	100.00	97.61	99.91	88.62	0.91
100000001 and above	100.00	100.00	100.00	100.00	1.00

Source: Calculated on the basis of data taken from Scheduled Banks Statistics, April-June 1993 published by Bangladesh Bank.

Table-25: Deposit distribution and outstanding advances classified by size of A/Cs of Islami Bank Bangladesh Limited as on December 31,1992

C U M U L A T I V E

Size of accounts	Deposits		Advances		
	% of total accounts	% of total amount	% of total accounts	% of total amount	Banking Inequality Index: 8=(5/3)
1	2	3	4	5	
Upto - 5000	52.55	1.1	9.27	0.08	0.07
5001 - 10000	63.39	2.99	19.14	0.25	0.08
10001 - 25000	75.81	7.08	29.16	0.69	0.10
25001 - 50000	88.84	19.87	39.56	1.59	0.08
50001 - 100000	92.65	27.23	49.57	3.11	0.11
100001 - 200000	96.33	39.29	58.85	5.85	0.15
200001 - 300000	97.69	48.23	66.73	9.52	0.20
300001 - 400000	98.39	55.13	74.22	14.41	0.26
400001 - 500000	98.85	61.95	80.11	19.86	0.32
500001 - 1000000	99.52	74.8	89.36	31.81	0.43
1000001 - 2500000	99.91	87.6	95.86	49.89	0.57
2500001 - 5000000	99.98	94.01	98.3	64.18	0.68
5000001 - 7500000	99.99	96.01	98.98	73.13	0.76
7500001 - 10000000	99.99	97.17	99.3	78.68	0.81
1000000 - 50000000	100	100	99.98	97.92	0.98
50000001 - 100000000			100	100	1.00
100000001 and above					

Source: Central Accounts Department,Islami Bank Bangladesh Limited, Head Office, Dhaka.

Table-26: Distributive Efficiency of Public and Private Sector Banks and of Islami Bank Bangladesh Limited in connection with Deposit Distribution and Advances classified by size of accounts as on June 30, 1993 and December 31, 1993 respectively

C U M U L A T I V E

Size of accounts	Public			Private			Islami Bank		
1	% of total amount deposited 2	% of total amount advanced 3	Banking inequality index 4=(3/2)	% of total amount deposited 5	% of total amount advanced 6	Banking inequality index 7=(6/5)	% of total amount deposited 8	% of total amount advanced 9	Banking inequality index 10=(9/8)
Upto - 5000	8.90	1.47	0.17	3.94	0.03	0.01	1.10	0.08	0.07
5001 - 10000	15.53	4.47	0.29	7.24	0.13	0.02	2.99	0.25	0.08
10001 - 25000	26.51	7.34	0.28	13.43	0.41	0.03	7.08	0.69	0.10
25001 - 50000	35.51	9.37	0.26	19.37	0.94	0.05	19.87	1.59	0.08
50001 - 100000	44.36	12.33	0.28	27.57	1.85	0.07	27.23	3.11	0.11
100001 - 200000	53.27	16.29	0.31	38.49	3.62	0.09	39.29	5.85	0.15
200001 - 300000	58.12	18.68	0.32	45.05	5.50	0.12	48.23	9.52	0.20
300001 - 400000	61.24	20.41	0.33	50.37	7.11	0.14	55.13	14.41	0.26
400001 - 500000	63.88	21.97	0.34	54.86	8.95	0.16	61.95	19.86	0.32
500001 - 1000000	69.71	27.45	0.39	65.83	15.27	0.23	74.80	31.81	0.43
1000001 - 2500000	76.00	35.74	0.47	75.86	29.82	0.39	87.60	49.89	0.57
2500001 - 5000000	79.45	41.07	0.52	82.16	42.72	0.52	94.01	64.18	0.68
5000001 - 7500000	82.43	45.37	0.55	84.92	50.93	0.60	96.01	73.13	0.76
7500001 - 10000000	84.53	46.98	0.56	87.81	60.17	0.69	97.17	78.68	0.81
1000000 - 50000000	92.36	63.58	0.69	94.95	81.89	0.86	100.00	97.92	0.98
50000001 - 100000000	94.80	71.38	0.75	97.61	88.62	0.91		100.00	1.00
100000001 and above	100.00	100.00	1.00	100.00	100.00	1.00			

Source: Bangladesh Bank, "Scheduled Bank Statistics", April-June, 1993 and Central Accounts Department, Islami Bank Bangladesh Limited. For details see Appendix-

Table-27: Deposits and outstanding advances of all commercial banks by Divisions and classified in Rural and Urban areas for 1988 & 1992.

	December,1988		December,1992	
	Deposits	Advances*	Deposits	Advances*
BANGLADESH	100.00%	100.00%	100.00%	100.00%
Rural	20.42%	23.06%	21.85%	19.84%
Urban	79.58%	76.94%	78.15%	80.16%
CHITTAGONG				
Chittagong Division	100.00%	100.00%	100.00%	100.00%
Rural	29.78%	25.21%	31.86%	20.91%
Urban	70.22%	74.79%	68.14%	79.09%
Chittagong Division (Exclud. Ctg.)	100.00%	100.00%	100.00%	100.00%
Rural	49.07%	63.52%	49.08%	60.09%
Urban	50.93%	36.48%	50.92%	39.91%
Chittagong	100.00%	100.00%	100.00%	100.00%
Rural	13.60%	4.35%	16.18%	3.49%
Urban	86.40%	95.65%	83.82%	96.51%
DHAKA				
Dhaka Division	100.00%	100.00%	100.00%	100.00%
Rural	8.88%	11.73%	10.25%	10.23%
Urban	91.12%	88.27%	89.75%	89.77%
Dhaka Division (Excl.Dhaka)	100.00%	100.00%	100.00%	100.00%
Rural	43.82%	57.28%	48.06%	52.19%
Urban	56.18%	42.72%	51.94%	47.81%
Dhaka	100.00%	100.00%	100.00%	100.00%
Rural	2.72%	1.25%	3.07%	1.38%
Urban	97.28%	98.75%	96.93%	98.62%
KHULNA				
Khulna Division	100.00%	100.00%	100.00%	100.00%
Rural	36.29%	34.08%	38.94%	29.39%
Urban	63.71%	65.92%	61.06%	70.61%
Khulna Division (Excl.Khulna)	100.00%	100.00%	100.00%	100.00%
Rural	47.14%	57.34%	48.81%	52.51%
Urban	52.86%	42.66%	51.19%	47.49%
Khulna	100.00%	100.00%	100.00%	100.00%
Rural	12.21%	4.41%	14.59%	4.21%
Urban	87.79%	95.59%	85.41%	95.79%
RAJSHAHI				
Rajshahi Division	100.00%	100.00%	100.00%	100.00%
Rural	44.93%	66.90%	45.37%	64.30%
Urban	55.07%	33.10%	54.63%	35.70%
Rajshahi Division (Excl.Rajshahi)	100.00%	100.00%	100.00%	100.00%
Rural	47.71%	68.99%	47.54%	65.84%
Urban	52.29%	31.01%	52.46%	34.16%
Rajshahi	100.00%	100.00%	100.00%	100.00%
Rural	30.87%	40.19%	33.82%	41.39%
Urban	69.13%	59.81%	66.18%	58.61%

Source: Calculated on the basis of data taken from Bangladesh Bank, January-March 1993. For details see Appendix-XXVI.

* Advances mean outstanding advances with interest.

Table-28:Deposits and outstanding advances of Islami Bank Bangladesh Ltd. by Divisions and classified in Rural and Urban areas for 1990 & 1992.

(Fig in %)

		December,1990			December,1992	
		Deposits	Advances*		Deposits	Advances*
BANGLADESH		100.00%	100.00%		100.00%	100.00%
	Rural	1.54%	0.83%		3.59%	2.10%
	Urban	98.46%	99.17%		96.41%	97.90%
CHITTAGONG						
Chittagong Division		100.00%	100.00%		100.00%	100.00%
		2.90%	1.19%		6.55%	1.95%
	Rural	97.10%	98.81%		93.45%	98.05%
	Urban					
Chittagong Division (Exclud. Ctg.)		100.00%	100.00%		100.00%	100.00%
	Rural	5.27%	27.61%		10.40%	6.76%
	Urban	94.73%	72.39%		89.60%	93.24%
Chittagong		100.00%	100.00%		100.00%	100.00%
	Rural	0.00%	0.00%		2.07%	0.34%
	Urban	100.00%	100.00%		97.93%	99.66%
DHAKA						
Dhaka Division		100.00%	100.00%		100.00%	100.00%
	Rural	0.83%	0.39%		1.76%	1.57%
	Urban	99.17%	99.61%		98.24%	98.43%
Dhaka Division (Excl.Dhaka)		100.00%	100.00%		100.00%	100.00%
	Rural	0.00%	0.00%		10.95%	2.53%
	Urban	100.00%	100.00%		89.05%	97.47%
Dhaka:		100.00%	100.00%		100.00%	100.00%
	Rural	0.86%	0.43%		1.17%	1.47%
	Urban	99.14%	99.57%		98.83%	98.53%
KHULNA						
Khulna Division		100.00%	100.00%		100.00%	100.00%
	Rural	1.88%	5.05%		7.74%	7.13%
	Urban	98.12%	94.95%		92.26%	92.87%
Khulna Division (Excl.Khulna)		100.00%	100.00%		100.00%	100.00%
	Rural	5.26%	22.88%		15.60%	16.77%
	Urban	94.74%	77.12%		84.40%	83.23%
Khulna		100.00%	100.00%		100.00%	100.00%
	Rural	0.00%	0.00%		0.51%	0.00%
	Urban	100.00%	100.00%		99.49%	100.00%
RAJSHAHI						
Rajshahi Division		100.00%	100.00%		100.00%	100.00%
	Rural	0.00%	0.00%		1.45%	0.24%
	Urban	100.00%	100.00%		98.55%	99.76%
Rajshahi Division (Excl.Rajshahi)		100.00%	100.00%		100.00%	100.00%
	Rural	0.00%	0.00%		1.85%	0.26%
	Urban	100.00%	100.00%		98.15%	99.74%
Rajshahi:		100.00%	100.00%	0.00%	100.00%	100.00%
	Rural	0.00%	0.00%		0.00%	0.00%
	Urban	100.00%	100.00%		100.00%	100.00%

Source: Calculated on the basis of data collected from Central Accounts Department , Islami Bank Bangladesh Limited, Head Office, Dhaka. For details see Appendix-XXVII.

* Advances mean outstanding advances with interest.

Table-29: Whether the "spread or gap between uncertain cash flow and payment commitments (interest plus principal) is the major cause of investment fluctuations" a concept which rightly aply to Bangladesh

Types of question responded	No. of persons responded	% of response
Yes	36	56.25
No	28	43.75

Source: Opinion Survey based on Questionnaire-2&3. See the Appendices XXXIII & XXXIV.

Table-30a: If the statement "spread or gap between uncertain cash flow and payment commitments (interest plus principal) is the major cause of investment fluctuations" does not aply to Bangladesh, what are the reasons for investment fluctuation in Bangladesh

Questions responded	Calculated total value	Ordering of responses
1. Lack of moral and ethical integrety of the entrepreneurs	24	C
2. Political influence in credit distribution	24	C
3. Narrow market	64	B
4. Political Instability	84	A
5. Lack of political commitmaent	16	E
6. Cumbersome rules	20	D

Source: Opinion Survey based on Questionnaire-2 & 3. See the Appendices XXXIII & XXXIV.

Table-30b: If the statement "spread or gap between uncertain cash flow and payment commitments (interest plus principal) is the major cause of investment fluctuations" rightly aplies to Bangladesh, what policy reforms you suggest as remedy

Questions responded	Calculated total value	Ordering of responses
1. Gradual conversion of conventional banking into Islamic banking	186	B
2. Develop adjustment mechanism in the conventional banking system to counterbalance cyclical fluctuations	135	C
3. As present-day Islamic banks rely less on PLS modes of financing these banks should explore possibilities and avenues to increase financing on PLS modes	250	A

Source: Opinion Survey based on Questionnaire-2 & 3. See the Appendices XXXIII & XXXIV.

Appendix-I: Productive efficiency of Public Sector Conventional Banks

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
1. Deposits	5952.70	7227.98	8079.35	9045.89	10377.44	11914.45	12858.13	15032.83	17162.53
2. Bills Payable	16.28	33.94	315.33	421.45	333.44	195.44	250.53	370.65	453.41
3. Borrowing from other banks and agents	1029.58	983.99	1018.09	903.32	955.74	1547.82	1574.02	1098.27	389.16
4. Borrowing from Bangladesh Bank	673.48	747.11	692.21	570.92	616.50	936.82	846.78	663.85	88.39
5. Lonable Funds*	5808.02	6800.31	7796.90	8561.48	9072.26	10679.10	11468.15	12743.54	13714.47
6. Fund Employed (Advances)	4761.66	5718.67	6155.83	6501.76	7716.25	9129.24	9240.75	9760.77	10806.66
7. No. of Employees	47940	49820	51586	52129	54774	55754	55789	56858	56395
8. Fund Utilisation Rate(%)=(6/5)*100	81.98%	84.09%	78.95%	75.94%	85.05%	85.49%	80.58%	76.59%	78.80%
9. Per employee deposit mobilisation "000" Tk.	1242	1451	1566	1735	1895	2137	2305	2644	3043
10.Per employee Fund utilisation in "000" Tk.	993	1148	1193	1247	1409	1637	1656	1717	1916

Source: Annual reports of respective public sector bank.

*Loanable fund has been calculated taking 80% of the items no.1 for the period 1984-87 and 75% for the period and 78% for the year 1992 adding items 2 & 3 for all the year under consideration. For more details see the Appendix-XIII.

Appendix-II: Productive efficiency of Private Sector Conventional Banks

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
1. Deposits	584.53	706.50	917.64	1224.99	1610.36	2019.81	2336.75	2645.24	2893.69	3127.49	3742.71
2. Bills Payable	8.67	14.21	12.61	25.52	28.71	35.84	47.03	51.22	46.78	60.43	52.85
3. Borrowing from other banks and agents	104.31	118.23	60.37	84.43	158.81	204.45	131.70	114.63	96.95	91.27	29.10
4. Borrowing from Bangladesh Bank	0.00	24.25	24.00	23.45	34.81	65.55	59.10	106.51	172.06	72.51	2.47
5. Lonable Funds*	580.60	697.64	807.09	1089.94	1395.29	1755.15	1931.29	2149.78	2400.81	2591.14	3001.26
6. Fund Employed (Advances)	365.56	469.91	620.13	866.58	1171.49	1534.58	1688.40	1910.58	2210.83	2250.45	2331.53
7. No. of Employees	1834	2450	3263	3671	4615	5195	5684	6079	6333	6296	6681
8. Fund Utilisation Rate(%)=(6/5)*100	62.96%	67.36%	76.84%	79.51%	83.96%	87.43%	87.42%	88.87%	92.09%	86.85%	77.68%
9. Per employee deposit mobilisation "000" Tk.	3187	2884	2812	3337	3489	3888	4111	4351	4569	4967	5602
10.Per employee Fund utilisation in "000" Tk.	1993	1918	1900	2361	2538	2954	2970	3143	3491	3574	3490

Source:Developed from data contained in the Annual Reports of respective banks for the period 1984-92.

* Private Sector Commercial Banks include the City Bank Ltd., National Bank Limited, United Commercial Bank Ltd. and Arab-Bangladesh Bank Limited.

*Loanable fund has been calculated taking 80%, 75% and 78% of the items no. 1 for the period 1984-87, 1988-91 and 1992 respectively adding item 2 and 3.

Appendix-III: Productivity of Islami Bank Bangladesh Ltd.

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
1. Deposits	63.59	156.39	223.06	241.97	283.79	345.55	446.27	567.16	715.08	826.1	1022.67
2. Borrowing from other banks and agents	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
3. Lonable Funds (85% of the item 1 & 2)	54.05	132.93	189.60	205.67	241.22	293.72	379.33	482.09	607.82	702.19	869.27
4. Fund Employed (Advance+Investment)	45.78	97.06	134.02	180.91	213.24	235.84	325.25	424.57	516.4	554.25	807.65
5. No. of Employees	291	539	712	720	690	843	840	991	1057	1169	1166
6. Fund Utilisation Rate(%) (4/3)*100	84.70%	73.02%	70.69%	87.96%	88.40%	80.29%	85.74%	88.07%	84.96%	78.93%	92.91%
7. Per employee deposit mobilisation "000"	2185	2901	3133	3361	4113	4099	5313	5723	6765	7067	8771
8. Per employee Fund utilisation in "000" (4/5)	1573	1801	1882	2513	3090	2798	3872	4284	4886	4741	6927

Source: Annual report of Islami Bank Bangladesh Ltd. & "Resume of the Activities of Financial Institutions in Bangladesh, 1992-93.

*Loanable fund has been calculated taking 85% of deposits for the period 1984-1992.

Appendix-IV: Profitability of Selected Public Sector Conventional Banks in Bangladesh

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
1. Gross Income	587.84	788.72	903.37	954.19	1069.77	1219.99	1413.48	1558.61	1633.47
2. Profit	95.41	110.78	105.43	49.09	46.24	11.99	12.15	1.86	12.82
3.Gross Expenditure	492.43	677.94	801.94	905.30	1023.53	1208.00	1401.33	1556.75	1620.65
4. Interest paid to depositors	350.35	484.67	545.56	632.88	727.12	859.42	976.00	1111.22	1160.97
5. Loanable Funds	5808.02	6800.31	7796.91	8561.48	9072.26	10679.10	11468.16	12743.55	14229.35
6. Fund Employed	4824.66	5718.67	6155.83	6501.76	7716.25	9131.24	9240.75	9760.77	10806.66
7. Income-Expenditure Ratio	1.19	1.16	1.13	1.05	1.05	1.01	1.01	1.00	1.01
8. Profit-Expenditure Ratio	0.19	0.16	0.13	0.05	0.05	0.01	0.01	0.00	0.01
9. Profit-Loanable Fund Ratio	0.016	0.016	0.014	0.006	0.005	0.001	0.001	0.000	0.001
10.Profit-Employed Fund Ratio	0.020	0.019	0.017	0.008	0.006	0.001	0.001	0.000	0.001

Source: Developed from the data taken from Annual Reports of public sector banks for 1984-1990. Figures for 1991 & 1992 have been collected from Central Accounts Department of the sampled banks and "Resume of Activities of Financial Institutions in Bangladesh" published by Ministry of Finance, Government of Bangladesh.

*Public sector banks include the Sonali , Agrani and Janata Bank. For details see the Appendix-XV.

Appendix-V: Profitability of Selected Private Sector Conventional Banks* in Bangladesh

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
1. Gross Income	52.65	91.51	115.45	158.98	213.48	238.43	310.04	340.74	379.14	341.76	323.67
2. Profit	12.83	25.04	25.19	30.08	36.63	11.98	36.78	38.53	43.70	33.59	32.39
3.Gross Expenditure	39.82	66.74	90.26	128.90	176.85	226.42	273.25	302.21	335.41	326.72	307.18
5. Loanable Funds	580.60	697.64	807.09	1089.94	1395.30	1755.15	1931.30	2149.78	2400.81	2591.14	300.24
6. Funds Employed	365.56	469.91	620.13	866.58	1171.49	1534.58	1688.39	1908.58	2210.83	2250.45	2331.53
7. Income-Expenditure Ratio	1.32	1.37	1.28	1.23	1.21	1.05	1.13	1.13	1.13	1.05	1.05
8. Profit-Expenditure Ratio	0.32	0.38	0.28	0.23	0.21	0.05	0.13	0.13	0.13	0.10	0.11
9. Profit-Loanable Fund Ratio	0.022	0.036	0.031	0.028	0.026	0.007	0.019	0.018	0.018	0.013	0.108
10.Profit-Employed Fund Ratio	0.035	0.053	0.041	0.035	0.031	0.008	0.022	0.020	0.020	0.015	0.014

Source: Collected and developed from the data taken from Annual Reports of respective private banks for the period ranging 1984-1994.

*Loanable fund has been calculated taking 80% of the item no.1 for the period 1984-87, 75% for the period 1988-1991 and 78% for 1992 adding items 2 & 3. For deails see Appendix-XVI.

Appendix-VI: Profitability of Islami Bank Bangladesh Ltd.

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
1. Gross Income(including item 3 & 4 below)	4.61	11.18	15.42	18.83	24.12	29.33	47.54	56.31	53.01	62.29	82.66
2. Profit	0.78	0.89	0.78	2.35	3.07	2.26	14.06	10.58	6.4	8	22.26
3. Interest recievable on Reserve Requirement with Bangladesh Bank	0.00	0.00	0.00	0.60	0.70	0.52	1.45	1.44	0.31	0	0
4. Interest recieved on ICB Unit Cetificates but not included in profit	0.11	0.18	0.16	0.16	0.13	0.23	0.86	0.69	0.00	0	0
5. Profit comparable with Public & Private Sector banks(2+3+4)	0.89	1.07	0.94	3.11	3.90	3.01	16.37	12.71	6.71	8.00	22.26
3. Gross Expenditure	3.72	10.11	14.48	17.34	20.22	26.32	31.17	43.6	52.7	54.29	60.4
4. Profit paid to depositors & shareholders	1.84	6.01	8.21	11.37	13.92	17.36	20.7	29.76	35.08	37.45	42.23
5. Investible(Loanable) Funds*	54.05	132.93	189.60	205.67	240.16	293.72	379.33	482.09	607.82	702.19	869.27
5. Fund Employed	45.78	97.06	134.02	180.91	213.24	235.84	325.25	428.31	516.42	554.25	807.65
7. Income-Expenditure Ratio	1.24	1.11	1.06	1.09	1.19	1.11	1.53	1.29	1.01	1.15	1.37
8. Profit-Expenditure Ratio	0.24	0.11	0.06	0.18	0.19	0.11	0.53	0.29	0.13	0.15	0.37
9. Profit-Loanable Fund Ratio	0.016	0.008	0.005	0.015	0.016	0.010	0.043	0.026	0.011	0.011	0.026
10.Profit-Employed Fund Ratio	0.019	0.011	0.007	0.017	0.018	0.013	0.050	0.030	0.013	0.014	0.028

Source: Annual reports of Islami Bank Bangladesh Limited for the period ranging 1984-92.

*Investibe fund has been calculated taking 85% of deposits for the period 1984-1992.

Appendix-VII:Financing by Selected Public Sector Conventional Banks classified by by economic purpose

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
1. Agriculture, hunting Forestry and Fishing	243.04	349.25	367.31	297.88	384.41	467.46	491.27	299.72	383.42
%	9.53%	11.98%	11.65%	8.71%	9.16%	9.30%	8.91%	5.26%	5.65%
2. Manufacturing	812.73	858.73	1054.60	1051.37	1558.58	1971.04	1688.75	2598.92	2751.34
%	31.88%	29.46%	33.45%	30.73%	37.13%	39.22%	30.64%	45.61%	40.56%
3. Wholesale and Retail trade, resturant and hotels	605.90	317.10	381.77	958.68	1014.38	895.54	1391.67	1225.40	1378.24
%	23.77%	10.88%	12.11%	28.02%	24.16%	17.82%	25.25%	21.50%	20.32%
4. Financving Insurance, Real Estate, and business services	123.30	213.34	98.50	164.05	188.62	230.89	335.84	358.80	421.30
%	4.84%	7.32%	3.12%	4.80%	4.49%	4.59%	6.09%	6.30%	6.21%
5. Transport, Storage and Communication	40.96	72.57	48.47	48.17	74.41	73.07	79.35	100.71	78.23
%	1.61%	2.49%	1.54%	1.41%	1.77%	1.45%	1.44%	1.77%	1.15%
6. Others	723.46	1103.43	1201.97	900.85	977.79	1387.18	1524.53	1115.11	1771.05
%	28.38%	37.86%	38.13%	26.33%	23.29%	27.60%	27.66%	19.57%	26.11%
Total	2549.39	2914.42	3152.62	3421.00	4198.19	5025.18	5511.41	5698.66	6783.58
%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Ministry of Finance: "Resume of the Activities of Financial Institutions of Bangladesh, 1992-93.

* Public Sector Banks includes the Janata and Agrani Bank. For more details see the Appendix-XVII.

Appendix-VIII: Loans and advances of Selected Private Sector Conventional Banks** in Bangladesh classified by economic purpose

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
1. Agriculture, hunting Forestry and Fishing	0.78	0.63	4.71	1.57	2.07	4.09	4.23	5.75	5.41
%	0.22%	0.14%	0.76%	0.17%	0.18%	0.27%	0.25%	0.30%	0.28%
2. Manufacturing	109.04	138.58	187.49	268.87	370.3	463.73	460	558.17	612.09
%	30.89%	29.72%	30.21%	29.24%	31.73%	30.08%	27.28%	28.79%	31.96%
3. Wholesale and Retail trade, resturant and hotels	107.88	191.54	227.26	298.55	355.15	446.89	551.84	598.53	718.88
%	30.56%	41.08%	36.62%	32.47%	30.43%	28.99%	32.73%	30.87%	37.54%
4. Financving Insurance, Real Estate, and business services	27.74	30.12	32.24	60.95	102.89	120.62	131.71	152.73	202.05
%	7.86%	6.46%	5.19%	6.63%	8.82%	7.83%	7.81%	7.88%	10.55%
5. Transport, Storage and Communication	5.54	8.82	8.61	16.63	23.23	29.37	33.18	22.48	23.78
%	1.57%	1.89%	1.39%	1.81%	1.99%	1.91%	1.97%	1.16%	1.24%
6. Others	102.05	96.52	160.31	272.93	313.41	476.75	504.988	601.38	353.01
%	28.91%	20.70%	25.83%	29.68%	26.85%	30.93%	29.95%	31.01%	18.43%
Total	353.03	466.21	620.62	919.5	1167.05	1541.45	1685.948	1939.04	1915.22
%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Ministry of Finance: "Resume of the Activities of Financial Institutions of Bangladesh, 1992-93.

** Private Sector Commercial Banks include the City Bank Ltd., National Bank Ltd., United Commercial Bank Limited and the Arab-Bangladesh Bank Limited. For details see Appendix-XVIII.

Appendix-IX: Financing by Islami Bank Bangladesh Ltd. classified by economic purpose

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
1. Agriculture, hunting Forestry and Fishing	0.50	0.08	1.23	1.78	2.06	2.15	2.16	2.08	1.49
%	1.07%	0.08%	0.86%	0.98%	0.99%	0.94%	0.68%	0.49%	0.26%
2. Manufacturing	10.66	20.60	28.06	24.81	27.46	35.64	43.4	55.51	62.48
%	22.85%	21.46%	19.73%	13.60%	13.18%	15.50%	13.59%	13.02%	11.07%
3. Wholesale and Retail trade, resturant and hotels	26.86	64.37	100.35	143.52	163.92	172.31	203.63	255.91	338.16
%	57.58%	67.06%	70.57%	78.70%	78.70%	74.94%	63.77%	60.04%	59.91%
4. Financving Insurance, Real Estate, and business services	1.75	2.44	0.98	0.81	0.98	1.24	2.61	13.61	16.47
%	3.75%	2.54%	0.69%	0.44%	0.47%	0.54%	0.82%	3.19%	2.92%
5. Transport, Storage and Communication	0.80	1.75	4.81	4.97	5.88	7.60	6.99	8.65	9.00
%	1.71%	1.82%	3.38%	2.73%	2.82%	3.31%	2.19%	2.03%	1.59%
6. Others	5.21	5.82	5.82	5.52	7.02	10.98	60.53	90.44	138.89
%	11.17%	6.06%	4.09%	3.03%	3.37%	4.78%	18.96%	21.22%	24.60%
Total	46.64967	95.98968	142.2024	182.3744	208.2817	229.92	319.32	426.2	564.49
%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Ministry of Finance: "Resume of the Activities of Financial Institutions of Bangladesh,1992-93.

Appendix-X: Operational efficiency of Selected Public Sector Conventional Banks*

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
1. Administrative cost	142.07	193.27	220.35	233.88	266.36	299.82	316.1	358.34	407.38
2. Fund employed (Advance)	4761.66	5718.67	6155.83	6501.76	7716.25	9131.24	9240.75	9760.77	10806.66
3. No. of employees	50,414	52,113	54,995	55,983	58,498	55,744	55,789	56,858	56,395
4. Per employee Administrative cost(in Taka)	28,181	37,087	40,067	41,777	45,533	53,785	56,660	63,024	72,237
5. Administrative cost per taka employed(in Taka)	0.030	0.034	0.036	0.036	0.035	0.033	0.034	0.037	0.038

Source: Developed from the data taken from Annual Reports of public sector banks under study for the period ranging 1984-92.

* Public Sector Banks includes the Sonali, Janata and Agrani Bank. For details see Appendix-XIX.

Appendix-XI: Operational efficiency of Selected Private Sector Conventional Banks*

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
1. Gross Expenditure	39.82	66.72	90.26	128.90	176.85	226.42	273.25	302.21	335.39	326.72	307.18
2. Administrative cost	15.93	24.26	31.80	42.28	50.30	59.73	70.38	79.58	83.87	88.25	95.44
3. Fund employed	365.56	469.91	620.13	866.58	1171.49	1534.58	1688.40	1910.58	2210.83	2250.45	2331.53
4. No. of employees	1834	2450	3263	3671	4615	5195	5654	6079	6333	6296	6681
5. Per employee administrative cost(in taka)	86,859	99,020	97,456	115,173	108,992	114,976	124,478	130,910	132,433	140,168	142,853
6. Administrative cost per taka employed(in Taka)	0.044	0.052	0.051	0.049	0.043	0.039	0.042	0.042	0.038	0.039	0.041

* Private Sector Commercial Banks include the City Bank Ltd., National Bank Ltd., United Commercial Bank Ltd. and the Arab-Bangladesh Bank Limited. For details see Appendix-XX.

Appendix-XII: Operational Efficiency of Islami Bank Banladesh Limited

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
1. Administrative Cost	1.87	3.12	5.45	5.98	6.3	8.96	10.47	13.84	11.23	19.24	20.56
2. Investible(loanable) Fund	54.05	132.93	189.6	205.67	241.22	293.72	379.33	482.09	607.82	702.19	869.27
3. No. of Employees	291	539	712	720	690	843	840	991	1057	1169	1166
4. Per Employee Admn. Cost	64,261	57,885	76,545	83,056	91,304	106,287	124,643	139,657	106,244	164,585	176,329
5. Admn. Cost - Loanable Fund Ratio	0.035	0.023	0.029	0.029	0.026	0.031	0.028	0.029	0.018	0.027	0.024

Source: Annual Reports of Islami Bank Bangladesh Limited from 1984 to 1992.

Appendix-XIII: Productive efficiency of Public Sector Conventional Banks

	1984	1985	1986	1987	1988	1989	1990	1991	1992
SONALI BANK									
1. Deposits	2703.12	3457.6	3835.32	3962.92	4579.54	5221.43	5739.18	6876.58	7924.63
2. Bills Payable	0	0	278.09	364.5	277.48	122.88	152.5	258.51	304.53
3. Borrowing from other banks and agents	574.16	490.87	498.24	453.41	497.71	834.91	798.93	373.3	185.38
4. Borrowing from Bangladesh Bank	340.15	376.7	362.96	321.46	365.45	717.71	648.48	245.62	67.17
5. Lonable Funds*	2736.656	3256.95	3844.586	3988.246	4209.845	4873.863	5255.815	5789.245	6671.121
6. Fund Employed (Advances)	2212.28	2734.12	2927.15	2980.76	3527.7	4186.72	4431.06	4521.76	5060.9
7. No. of Employees	24420	25271	25785	25589	25840	25702	25258	25122	24762
8. Fund Utilisation Rate(%)=(6/5)*100	0.808388	0.839472513	0.761369	0.747386	0.837964	0.859015	0.8430776	0.781062	0.758628
9. Per employee deposit mobilisation "000" Tk.	1106.929	1368.208619	1487.423	1548.681	1772.268	2031.527	2272.2227	2737.274	3200.319
10.Per employee Fund utilisation in "000" Tk.	905.9296	1081.919987	1135.214	1164.86	1365.209	1628.947	1754.3194	1799.92	2043.817

(Contd..)

(Contd..)

Appendix-XIII: Productive efficiency of Public Sector Conventional Banks

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
AGRANI BANK									
1. Deposits	1441.29	1742.3	1966.77	2381.09	2625.83	3060.29	3187.53	3667.11	4175.88
2. Bills Payable	16.28	19.46	22.39	35.54	35.03	47.69	70.65	97.51	133.34
3. Borrowing from other banks and agents	156.76	192.72	221.94	166.82	171.36	320.1	396.18	479.03	92.58
4. Borrowing from Bangladesh Bank	120.45	146.08	168.9	133.84	146.64	43.00	0.00	418.23	21.22
5. Lonable Funds*	1326.07	1606.02	1817.75	2107.23	2175.76	2663.01	2857.48	3326.87	3483.11
6. Fund Employed (Advances)	1031.34	1285.78	1466.56	1649.98	1916.42	2242.81	2193.36	2457.7	2665.68
7. No. of Employees	10523	11128	11196	11343	12605	13213	13152	13154	13142
8. Fund Utilisation Rate(%)=(6/5)*100	77.77%	80.06%	80.68%	78.30%	88.08%	84.22%	76.76%	73.87%	76.53%
9. Per employee deposit mobilisation "000" Tk.	1370	1566	1757	2099	2083	2316	2424	2788	3178
10.Per employee Fund utilisation in "000" Tk.	980	1155	1310	1455	1520	1697	1668	1868	2028

(Contd..)

Appendix-XIII: Productive efficiency of Public Sector Conventional Banks									(Taka in crore)	
	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
JANATA BANK										
1. Deposits	1808.29	2028.08	2277.26	2701.88	3172.07	3632.73	3931.42	4489.14	5062.02	5471.79
2. Bills Payable	0	14.48	14.85	21.41	20.93	24.87	27.38	14.63	15.54	1775.4
3. Borrowing from other banks and agents	298.66	300.4	297.91	283.09	286.67	392.81	378.91	245.94	111.2	126.8
4. Borrowing from Bangladesh Bank	212.88	224.33	160.35	115.62	104.41	176.11	198.3	0	0	0
5. Lonable Funds*	1745.292	1937.344	2134.568	2466.004	2686.653	3142.228	3354.855	3627.425	4075.116	5899.192
6. Fund Employed (Advances)	1518.04	1698.77	1762.12	1871.02	2272.13	2699.71	2616.33	2781.31	3080.08	3553.13
7. No. of Employees	12997	13421	14605	15197	16329	16839	17379	18582	18491	18414
8. Fund Utilisation Rate(%)=(6/5)*100	0.869791	0.876855	0.825516	0.758725	0.84571	0.859171	0.779864	0.766745	0.755826	0.602308
9. Per employee deposit mobilisation "000" Tk.	1391.313	1511.124	1559.233	1777.904	1942.599	2157.331	2262.167	2415.854	2737.559	2971.538
10.Per employee Fund utilisation in "000" Tk.	1167.993	1265.755	1206.518	1231.177	1391.469	1603.248	1505.455	1496.776	1665.718	1929.581
Source: Annual reports of respective public sector bank.										
*Loanable fund has been calculated taking 80% of the items no.1 for the period 1984-87 and 75% for the period and 78% for the year 199										
adding items 2 & 3 for all the year under conside	For more details see the Appendix-XIII.									

Appendix-XIV: Productive efficiency of Private Sector Conventional Banks

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
National Bank Limited											
1. Deposits	250.73	264.84	294.73	440.19	565.69	740.86	843.34	858.77	906.82	955.09	1264.21
2. Bills Payable	6.75	10.30	8.76	16.49	21.67	27.98	30.56	35.24	22.59	23.24	30.28
3. Borrowing from other banks and agents	15.95	24.41	36.00	35.45	62.28	102.66	59.1	86.88	90.38	84.95	15.89
4. Borrowing from Bangladesh Bank	0.00	24.25	24.00	23.45	34.81	65.55	59.1	106.51	172.06	72.51	0.00
5. Lonable Funds*	223.28	246.58	280.54	404.09	508.22	686.29	722.17	766.20	820.29	853.16	1032.25
6. Fund Employed (Advances)	157.07	188.80	243.74	362.63	477.29	622.19	651.54	729.09	786.91	784.69	841.91
7. No. of Employees	707	836	1163	1299	1599	1642	1699	1723	1687	1641	1675
8. Fund Utilisation Rate(%)=(6/5)*100	70.35%	76.57%	86.88%	89.74%	93.91%	90.66%	90.22%	95.16%	95.93%	91.97%	81.56%
9. Per employee deposit mobilisation "000" Tk.	3546	3168	2534	3389	3538	4512	4964	4984	5375	5820	7548
10.Per employee Fund utilisation in "000" Tk.	2222	2258	2096	2792	2985	3789	3835	4232	4665	4782	5026

(Contd..)

Appendix-XIV: Productive efficiency of Private Sector Conventional Banks

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
United Commercial Bank Ltd											
1. Deposits	106.10	146.44	205.11	256.85	327.18	384.55	500.26	578.01	576.91	615.09	734.17
2. Bills Payable	1.46	3.10	2.59	5.72	5.57	5.82	14.18	10.78	13.03	23.91	16.29
3. Borrowing from other banks and agents	0.00	0.00	0.00	5.50	0.00	0.00	0.00	0.00	0.00	0.00	2.47
4. Borrowing from Bangladesh Bank	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.47
5. Lonable Funds*	86.34	120.25	166.68	216.70	250.96	294.23	389.38	444.29	463.02	503.68	591.41
6. Fund Employed (Advances)	52.01	86.63	124.87	197.00	188.88	236.47	303.44	336.56	404.88	383.3	437.98
7. No. of Employees	379	645	862	952	1255	1334	1534	1706	1781	1695	1805
8. Fund Utilisation Rate(%)=(6/5)*100	60.24%	72.04%	74.92%	90.91%	75.26%	80.37%	77.93%	75.75%	87.44%	76.10%	74.06%
9. Per employee deposit mobilisation "000" Tk.	2799	2270	2379	2698	2607	2883	3261	3388	3239	3629	4067
10.Per employee Fund utilisation in "000" Tk.	1372	1343	1449	2069	1505	1773	1978	1973	2273	2261	2426

(Contd..)

Appendix-XIV: Productive efficiency of Private Sector Conventional Banks

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
The City Bank Limited											
1. Deposits	89.17	126.35	182.47	213.43	372.58	435.75	455.28	539.63	582.42	655.87	800.53
2. Bills Payable	0.46	0.81	1.26	3.31	1.47	2.04	2.29	5.20	11.16	13.28	6.28
3. Borrowing from other banks and agents	0.00	4.65	0.00	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4. Borrowing from Bangladesh Bank	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. Lonable Funds*	71.80	106.54	147.24	181.05	280.91	328.85	343.75	409.92	465.45	524.86	630.69
6. Fund Employed (Advances)	49.72	65.69	91.66	102.02	225.62	313.34	311.76	334.17	366.42	401.32	427.12
7. No. of Employees	337	474	636	772	1064	1381	1491	1612	1619	1607	1747
8. Fund Utilisation Rate(%)=(6/5)*100	69.25%	61.66%	62.25%	56.35%	80.32%	95.28%	90.69%	81.52%	78.72%	76.46%	67.72%
9. Per employee deposit mobilisation "000" Tk.	2646	2666	2869	2765	3502	3155	3054	3348	3597	4081	4582
10. Per employee Fund utilisation in "000" Tk.	1475	1386	1441	1322	2120	2269	2091	2073	2263	2497	2445

(Contd..)

Appendix-XIV: Productive efficiency of Private Sector Conventional Banks

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	.1993	1994
Arab-Bangladesh Bank Ltd.											
1. Deposits	138.53	168.87	235.33	314.52	344.91	458.65	537.87	668.83	827.54	901.44	943.8
2. Bills Payable	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
3. Borrowing from other banks and agents	88.36	89.17	24.37	36.48	96.53	101.79	72.60	27.75	6.57	6.32	10.74
4. Borrowing from Bangladesh Bank	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. Lonable Funds*	199.18	224.27	212.63	288.10	355.21	445.78	476.00	529.37	652.05	709.44	746.90
6. Fund Employed (Advances)	106.76	128.79	159.86	204.93	279.70	362.58	421.66	510.76	652.62	681.14	624.52
7. No. of Employees	411	495	602	648	697	838	960	1038	1246	1353	1454
8. Fund Utilisation Rate(%)=(6/5)*100	53.60%	57.43%	75.18%	71.13%	78.74%	81.34%	88.58%	96.48%	100.09%	96.01%	83.61%
9. Per employee deposit mobilisation "000" Tk.	3371	3412	3909	4854	4948	5473	5603	6443	6642	6663	6491
10.Per employee Fund utilisation in "000" Tk.	2598	2602	2655	3163	4013	4327	4392	4921	5238	5034	4295

Source:Developed from data contained in the Annual Reports of respective banks for the period 1984-92.

* Private Sector Commercial Banks include the City Bank Ltd., National Bank Limited, United Commercial Bank Ltd. and Arab-Bangladesh Bank Limited.

*Loanable fund has been calculated taking 80%, 75% and 78% of the items no. 1 for the period 1984-87, 1988-91 and 1992 respectively adding item 2 and 3.

Appendix-XV: Profitability of Selected Public Sector Conventional Banks in Bangladesh

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
SONALI BANK									
1. Gross Income	254.38	333.3	384.88	393.15	433.72	501.78	591.26	658.66	691.57
2. Profit	55.23	49.91	49.94	16.43	15.96	5.24	5.14	1.69	4.47
3.Gross Expenditure	199.15	283.39	338.94	376.72	417.76	496.54	586.12	656.97	687.1
4. Interest paid to depositors	136.96	199.75	207.04	247.35	280.38	332.85	377.8	435.49	476.16
5. Loanable Funds	2736.66	3256.95	3844.59	3988.25	4209.85	4873.86	5255.82	5789.25	6671.12
6. Funds Employed	2212.28	2734.12	2927.15	2980.76	3527.70	4186.72	4431.06	4521.76	5060.90
7. Income-Expenditure Ratio	1.277	1.176	1.136	1.044	1.038	1.011	1.009	1.003	1.007
8. Profit-Expenditure Ratio	0.277	0.176	0.147	0.044	0.038	0.011	0.009	0.003	0.007
9. Profit-Loanable Fund Ratio	0.0202	0.0153	0.0130	0.0041	0.0038	0.0011	0.0010	0.0003	0.0007
10.Profit-Employed Fund Ratio	0.0250	0.0183	0.0171	0.0055	0.0045	0.0013	0.0012	0.0004	0.0009

Appendix-XV: Profitability of Selected Public Sector Conventional Banks in Bangladesh

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
AGRANI BANK									
1. Gross Income	135.55	200.58	232.9	257.32	297.68	326.35	372.59	410.16	431.55
2. Profit	17.09	32.32	27.79	17.74	12.62	0.85	2.13	0.02	8.18
3.Gross Expenditure	118.46	168.26	205.11	239.78	285.06	325.5	370.46	410.14	423.37
4. Interest paid to depositors	87.5	123.58	152.95	179.58	214.27	240.12	259.21	289.38	311.93
5. Loanable Funds	1326.07	1606.02	1817.75	2107.23	2175.76	2663.01	2857.48	3326.87	3483.11
6. Funds Employed	1031.34	1285.78	1466.56	1649.98	1916.42	2244.81	2193.36	2457.70	2665.68
7. Income-Expenditure Ratio	1.14	1.19	1.14	1.07	1.04	1.00	1.01	1.00	1.02
8. Profit-Expenditure Ratio	0.14	0.19	0.14	0.07	0.04	0.003	0.01	0.00	0.02
9. Profit-Loanable Fund Ratio	0.013	0.020	0.015	0.008	0.006	0.0003	0.001	0.000	0.002
10.Profit-Employed Fund Ratio	0.017	0.025	0.019	0.011	0.007	0.0004	0.001	0.000	0.003

(Contd.)

Appendix-XV: Profitability of Selected Public Sector Conventional Banks in Bangladesh

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
JANATA BANK										
1. Gross Income	197.91	254.84	285.59	303.72	338.37	391.86	449.63	489.79	510.35	480.95
2. Profit	23.09	26.55	27.70	14.92	17.66	5.90	4.88	0.15	0.17	0.52
3.Gross Expenditure	174.82	226.29	257.89	288.80	320.71	385.96	444.75	489.64	510.18	480.30
4. Interest paid to depositors	125.89	161.34	185.57	205.95	232.47	286.45	338.99	386.35	372.88	334.17
5. Loanable Funds	1745.29	1937.34	2134.57	2466.00	2686.65	3142.23	3354.86	3627.43	4075.12	5530.49
6. Funds Employed	1581.04	1698.77	1762.12	1871.02	2272.13	2699.71	2616.33	2781.31	3080.08	3553.13
7. Income-Expenditure Ratio	1.132	1.126	1.107	1.052	1.055	1.015	1.011	1.000	1.000	1.001
8. Profit-Expenditure Ratio	0.132	0.126	0.107	0.052	0.055	0.015	0.011	0.000	0.000	0.001
9. Profit-Loanable Fund Ratio	0.0132	0.0147	0.0130	0.0061	0.0066	0.0019	0.0015	0.0000	0.0000	0.0001
10.Profit-Employed Fund Ratio	0.0146	0.0168	0.0157	0.0080	0.0078	0.0022	0.0019	0.0001	0.0001	0.0001

Source: Developed from the data taken from Annual Reports of public sector banks for 1984-1990. Figures for 1991 & 1992 have been collected from Central Accounts Department of the sampled banks and "Resume of Activities of Financial Institutions in Bangladesh" published by Ministry of Finance, Government of Bangladesh.

Appendix-XVI: Profitability of Selected Private Sector Conventional Banks* in Bangladesh

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
NATIONAL BANK LIMITED											
1. Gross Income	19.37	33.74	42.44	57.65	78.98	86.08	108.30	118.49	130.59	108.29	98.95
2. Profit	5.21	8.74	9.50	9.84	12.06	1.52	3.95	9.43	13.30	8.54	9.88
3.Gross Expenditure	14.16	25.27	32.94	47.81	66.92	84.57	104.34	109.06	117.26	99.75	89.07
4. Loanable Funds	223.28	246.58	280.54	404.09	508.22	686.29	722.17	766.20	820.29	853.16	1032.25
5. Funds Employed ?	157.07	188.80	243.74	362.63	477.29	622.19	651.53	727.09	786.91	800.59	876.62
6. Income-Expenditure Ratio	1.37	1.34	1.29	1.21	1.18	1.02	1.04	1.09	1.11	1.09	1.11
7. Profit-Expenditure Ratio	0.37	0.35	0.29	0.21	0.18	0.02	0.04	0.09	0.11	0.09	0.11
8. Profit-Loanable Fund Ratio	0.0233	0.0354	0.0339	0.0244	0.0237	0.0022	0.0055	0.0123	0.0162	0.0100	0.0096
9. Profit-Employed Fund Ratio	0.0332	0.0463	0.0390	0.0271	0.0253	0.0024	0.0061	0.0130	0.0169	0.0107	0.0113

(Contd..)

Appendix-XVI: Profitability of Selected Private Sector Conventional Banks* in Bangladesh

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
UNITED COMMERCIAL BANK LTD.											
1. Gross Income	7.95	16.77	23.30	35.30	42.32	41.22	59.06	68.63	66.63	66.46	64.22
2. Profit	1.43	4.23	3.85	6.41	7.96	0.06	7.22	3.55	1.07	5.46	6.01
3.Gross Expenditure	6.52	12.54	19.45	28.89	34.36	41.16	51.84	65.08	65.56	61.01	58.21
4. Loanable Funds	86.34	120.25	166.68	216.70	250.96	294.23	389.38	444.29	463.02	503.68	591.41
5. Funds Employed	52.01	86.63	124.87	197.00	188.88	236.47	303.44	336.56	404.88	383.3	437.98
6. Income-Expenditure Ratio	1.22	1.34	1.20	1.22	1.23	1.00	1.14	1.05	1.02	1.09	1.10
7. Profit-Expenditure Ratio	0.22	0.34	0.20	0.22	0.23	0.00	0.14	0.05	0.02	0.09	0.10
8. Profit-Loanable Fund Ratio	0.0166	0.0352	0.0231	0.0296	0.0317	0.0002	0.0185	0.0080	0.0023	0.0108	0.0102
9. Profit-Employed Fund Ratio	0.0275	0.0488	0.0308	0.0325	0.0421	0.0003	0.0238	0.0105	0.0026	0.0142	0.0137

(Contd..)

Appendix-XVI: Profitability of Selected Private Sector Conventional Banks* in Bangladesh

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
CITY BANK LIMITED											
1. Gross Income	6.93	13.51	17.27	27.39	41.52	52.51	66.40	65.76	71.15	49.6	47.91
2. Profit	1.17	4.77	4.61	6.66	8.89	0.85	12.70	8.40	8.41	-6.14	-16.49
3.Gross Expenditure	5.76	8.74	12.66	20.73	32.63	51.66	53.70	57.36	62.74	65.74	64.4
4. Loanable Funds	71.80	106.54	147.24	181.05	280.91	328.85	343.75	409.92	465.45	528.86	630.69
5. Funds Employed	49.72	65.69	91.66	102.02	225.62	313.34	311.76	334.17	366.42	401.32	427.12
6. Income-Expenditure Ratio	1.20	1.55	1.36	1.32	1.27	1.02	1.24	1.15	1.13	0.75	0.74
7. Profit-Expenditure Ratio	0.20	0.55	0.36	0.32	0.27	0.02	0.24	0.15	0.13	-0.09	-0.26
8. Profit-Loanable Fund Ratio	0.0163	0.0448	0.0313	0.0368	0.0316	0.0026	0.0369	0.0205	0.0181	-0.0116	-0.0261
9. Profit-Employed Fund Ratio	0.0235	0.0726	0.0503	0.0653	0.0394	0.0027	0.0407	0.0251	0.0230	-0.0153	-0.0386

(Contd..)

Appendix-XVI: Profitability of Selected Private Sector Conventional Banks* in Bangladesh

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
ARAB-BANGLADESH BANK LTD.											
1. Gross Income	18.40	27.49	32.44	38.64	50.66	58.62	76.28	87.86	110.77	117.41	112.59
2. Profit	5.02	7.30	7.23	7.17	7.72	9.55	12.91	17.15	20.92	25.73	32.99
3.Gross Expenditure	13.38	20.19	25.21	31.47	42.94	49.03	63.37	70.71	89.85	91.68	79.61
4. Loanable Funds	199.18	224.27	212.63	288.10	355.21	445.78	476.00	529.37	652.05	709.44	746.9
5. Funds Employed	106.76	128.79	159.86	204.93	279.70	362.58	421.66	510.76	652.62	681.14	624.52
6. Income-Expenditure Ratio	1.38	1.36	1.29	1.23	1.18	1.20	1.20	1.24	1.23	1.28	1.41
7. Profit-Expenditure Ratio	0.38	0.36	0.29	0.23	0.18	0.19	0.20	0.24	0.23	0.28	0.41
8. Profit-Loanable Fund Ratio	0.0252	0.0326	0.0340	0.0249	0.0217	0.0214	0.0271	0.0324	0.0321	0.0363	0.0442
9. Profit-Employed Fund Ratio	0.0470	0.0567	0.0452	0.0350	0.0276	0.0263	0.0306	0.0336	0.0321	0.0378	0.0528

Source: Collected and developed from the data taken from Annual Reports from respective private sector banks for the period ranging 1984-1994.

*Loanable fund has been calculated taking 80% of the item no.1 for the period 1984-87, 75% for the period 1988-1991 and 78% for 1992 adding items 2 & 3.

* Private Sector Commercial Banks include the City Bank Ltd., National Bank Limited, United Commercial ank Limited and Arab-Bangladesh Bank Limited.

Appendix-XVII:Financing by Public Sector Conventional Banks in Bangladesh classified by economic purpose

(Tk. in Crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
AGRANI BANK									
1. Agriculture, hunting Forestry and Fishing	86.70	122.30	122.99	110.80	147.07	189.25	176.34	81.09	122.94
%	8.41%	9.53%	8.39%	7.15%	7.69%	8.34%	6.78%	2.73%	3.82%
2. Manufacturing	324.87	398.01	467.53	429.95	602.57	906.22	774.67	1223.06	1416.91
%	31.50%	31.01%	31.89%	27.74%	31.50%	39.91%	29.79%	41.18%	43.99%
3. Wholesale and Retail trade, resturant and hotels	231.35	299.24	362.96	478.78	581.03	492.66	823.84	541.11	481.11
%	22.43%	23.31%	24.76%	30.89%	30.37%	21.70%	31.68%	18.22%	14.94%
4. Financving Insurance, Real Estate, and business services	45.24	153.89	58.02	91.65	95.20	122.06	155.68	190.07	209.51
%	4.39%	11.99%	3.96%	5.91%	4.98%	5.38%	5.99%	6.40%	6.50%
5. Transport, Storage and Communication	9.99	39.93	17.28	19.34	44.19	42.49	48.73	42.91	43.3
%	0.97%	3.11%	1.18%	1.25%	2.31%	1.87%	1.87%	1.44%	1.34%
6. Others	333.19	270.19	437.33	419.46	442.98	517.84	621.25	891.72	947.13
%	32.31%	21.05%	29.83%	27.06%	23.16%	22.81%	23.89%	30.02%	29.41%
Total	1031.34	1283.56	1466.11	1549.98	1913.04	2270.52	2600.51	2969.96	3220.9
%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Ministry of Finance: "Resume of the Activities of Financial Institutions of Bangladesh, 1992-93.

Appendix-XVII:Financing by Public Sector Conventional Banks in Bangladesh classified by economic purpose

(Tk. in Crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
JANATA BANK									
1. Agriculture, hunting Forestry and Fishing	156.34	226.95	244.32	187.08	237.34	278.21	314.93	218.63	260.48
%	10.30%	13.92%	14.49%	10.00%	10.39%	10.10%	10.82%	8.01%	7.31%
2. Manufacturing	487.86	460.72	587.07	621.42	956.01	1064.82	914.08	1375.86	1334.43
%	32.14%	28.25%	34.81%	33.21%	41.84%	38.66%	31.40%	50.42%	37.46%
3. Wholesale and Retail trade, resturant and hotels	374.55	17.86	18.81	479.90	433.35	402.88	567.83	684.29	897.13
%	24.67%	1.10%	1.12%	25.65%	18.96%	14.63%	19.51%	25.08%	25.18%
4. Financving Insurance, Real Estate, and business services	78.06	59.45	40.48	72.40	93.42	108.83	180.16	168.73	211.79
%	5.14%	3.65%	2.40%	3.87%	4.09%	3.95%	6.19%	6.18%	5.94%
5. Transport, Storage and Communication	30.97	32.64	31.19	28.83	30.22	30.58	30.62	57.8	34.93
%	2.04%	2.00%	1.85%	1.54%	1.32%	1.11%	1.05%	2.12%	0.98%
6. Others	390.27	833.24	764.64	481.39	534.81	869.34	903.28	223.39	823.92
%	25.71%	51.09%	45.34%	25.73%	23.40%	31.56%	31.03%	8.19%	23.13%
Total	1518.05	1630.86	1686.51	1871.02	2285.15	2754.66	2910.9	2728.7	3562.68
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Ministry of Finance: "Resume of the Activities of Financial Institutions of Bangladesh, 1992-93.

Appendix-XVIII:Loans and advances of Private Sector Conventional Banks* in Bangladesh classified by economic purpose

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
CITY BANK LTD									
1. Agriculture, hunting Forestry and Fishing	0.00	0.00	0.00	0.00	0.00	1.39	1.35	2.25	0.50
%	0.00%	0.00%	0.00%	0.00%	0.00%	0.43%	0.43%	0.62%	0.12%
2. Manufacturing	2.25	15.17	15.80	16.80	28.33	42.00	40.53	47.40	63.99
%	4.76%	23.09%	17.14%	10.31%	12.61%	13.00%	13.00%	13.00%	15.57%
3. Wholesale and Retail trade, resturant and hotels	4.54	14.00	25.43	78.97	124.00	177.05	171.47	200.55	238.15
%	9.61%	21.31%	27.59%	48.44%	55.20%	54.80%	55.00%	55.00%	57.95%
4. Financving Insurance, Real Estate, and business services	7.42	6.50	0.44	1.34	1.20	2.16	4.76	5.81	31.75
%	15.71%	9.89%	0.48%	0.82%	0.53%	0.67%	1.53%	1.59%	7.73%
5. Transport, Storage and Communication	0.00	0.02	0.12	0.00	0.00	0.00	0.00	0.00	0.00
%	0.00%	0.03%	0.13%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
6. Others	33.01	30.00	50.38	65.91	71.09	100.50	93.65	108.63	76.58
%	69.91%	45.67%	54.66%	40.43%	31.65%	31.10%	30.04%	29.79%	18.63%
Total	47.22	65.69	92.17	163.02	224.62	323.1	311.76	364.64	410.97
NATIONAL BANK LTD	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
1. Agriculture, hunting Forestry and Fishing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2. Manufacturing	87.89	105.93	144.83	199.20	264.62	351.19	310.47	350.59	345.00
%	56.71%	54.50%	57.87%	55.44%	55.44%	56.44%	47.68%	48.22%	46.20%
3. Wholesale and Retail trade, resturant and hotels	24.49	30.97	36.38	50.28	66.80	87.18	94.25	104.04	105.58
%	15.80%	15.94%	14.54%	13.99%	14.00%	14.01%	14.48%	14.31%	14.14%
4. Financving Insurance, Real Estate, and business services	19.23	23.26	29.38	52.75	70.07	88.30	90.47	100.31	121.91
%	12.41%	11.97%	11.74%	14.68%	14.68%	14.19%	13.90%	13.80%	16.33%
5. Transport, Storage and Communication	3.67	7.79	6.79	15.10	20.05	25.27	26.64	16.10	16.35
%	2.37%	4.01%	2.71%	4.20%	4.20%	4.06%	4.09%	2.21%	2.19%
6. Others	19.71	26.40	32.89	41.95	55.75	70.25	129.26	156.04	157.86
%	12.72%	13.58%	13.14%	11.68%	11.68%	11.29%	19.85%	21.46%	21.14%
Total	154.99	194.35	250.27	359.28	477.29	622.19	651.088	727.08	746.7
%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

(Contd.)

Appendix-XVIII:Loans and advances of Private Sector Conventional Banks* in Bangladesh classified by economic purpose

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
UNITED COMMERCIAL BANK LTD									
1. Agriculture, hunting Forestry and Fishing	0.21	0.00	3.89	0.14	0.00	0.00	0.00	0.00	0.00
%	0.40%	0.00%	3.12%	0.07%	0.00%	0.00%	0.00%	0.00%	0.00%
2. Manufacturing	5.92	3.93	7.79	30.95	33.98	28.08	58.10	97.64	127.48
%	11.38%	4.59%	6.24%	15.71%	17.99%	11.87%	19.15%	29.01%	31.49%
3. Wholesale and Retail trade, resturant and hotels	13.96	62.73	77.15	85.15	64.90	69.02	135.26	108.60	169.81
%	26.84%	73.26%	61.78%	43.22%	34.36%	29.19%	44.58%	32.27%	41.94%
4. Financving Insurance, Real Estate, and business services	0.87	0.00	1.77	2.88	5.10	7.49	8.11	11.75	11.47
%	1.67%	0.00%	1.42%	1.46%	2.70%	3.17%	2.67%	3.49%	2.83%
5. Transport, Storage and Communication	0.06	0.59	0.85	0.56	1.98	0.76	2.25	1.14	1.12
%	0.12%	0.69%	0.68%	0.28%	1.05%	0.32%	0.74%	0.34%	0.28%
6. Others	30.99	18.38	33.42	77.32	82.92	131.12	99.72	117.43	95.00
%	59.58%	21.46%	26.76%	39.25%	43.90%	55.45%	32.86%	34.89%	23.46%
	52.01	85.63	124.87	197.00	188.88	236.47	303.44	336.56	404.88
ARAB-BANGLADESH BANK LTD	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
1. Agriculture, hunting Forestry and Fishing	0.57	0.63	0.82	1.43	2.07	2.70	2.88	3.50	4.91
%	0.58%	0.52%	0.53%	0.71%	0.75%	0.75%	0.69%	0.69%	1.39%
2. Manufacturing	12.98	13.55	19.07	21.92	43.37	42.46	50.90	62.54	75.62
%	13.14%	11.24%	12.44%	10.95%	15.70%	11.80%	12.13%	12.24%	21.44%
3. Wholesale and Retail trade, resturant and hotels	64.89	83.84	88.30	84.15	99.45	113.64	150.86	185.34	205.34
%	65.67%	69.55%	57.60%	42.03%	36.00%	31.59%	35.95%	36.29%	58.22%
4. Financving Insurance, Real Estate, and business services	0.22	0.36	0.65	3.98	26.52	22.67	28.37	34.86	36.92
%	0.22%	0.30%	0.42%	1.99%	9.60%	6.30%	6.76%	6.83%	10.47%
5. Transport, Storage and Communication	1.81	0.42	0.85	0.97	1.20	3.34	4.29	5.24	6.31
%	1.83%	0.35%	0.55%	0.48%	0.43%	0.93%	1.02%	1.03%	1.79%
6. Others	18.34	21.74	43.62	87.75	103.65	174.88	182.36	219.28	23.57
%	18.56%	18.04%	28.45%	43.83%	37.52%	48.62%	43.45%	42.93%	6.68%
Total	98.81	120.54	153.31	200.2	276.26	359.69	419.66	510.76	352.67
%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Ministry of Finance: "Resume of the Activities of Financial Institution of Bangladesh, 1992-93.

* Private Sector Commercial Banks include the City Bank Ltd., National Bank Ltd., United Commercial Bank Limited and Arab-Bangladesh Bank Limited.

Appendix-XIX: Operational efficiency of Selected Public Sector Coventional Banks*

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
SONALI BANK									
1. Administrative cost	62.19	83.64	95.86	90.87	114.33	127.09	133.14	155.08	171.33
2. Fund employed (Advance)	2212.28	2734.12	2927.15	2980.76	3527.7	4186.72	4431.06	4521.76	5060.90
3. No. of employees	24420	25271	25785	25589	25840	25702	25258	25122	24762
4. Per employee Administrative cost(in Taka)	25467	33097	37177	35511	44245	49448	52712	61731	69191
5. Administrative cost per taka employed(in Taka)	0.028	0.031	0.033	0.030	0.032	0.030	0.030	0.034	0.034
JANATA BANK									
1. Administrative cost	48.92	64.95	72.32	82.85	88.24	99.51	105.76	120.28	137.30
2. Fund employed (Advance)	1518.04	1698.77	1762.12	1871.02	2272.13	2699.71	2616.33	2781.31	3080.08
3. No. of employees	12997	13421	14605	15197	16329	16829	17379	18582	18491
4. Per employee Administrative cost(in Taka)	37639	48394	49517	54517	54039	59130	60855	64729	74252
5. Administrative cost per taka employed(in Taka)	0.032	0.038	0.041	0.044	0.039	0.037	0.040	0.043	0.045
AGRANI BANK									
1. Administrative cost	30.96	44.68	52.17	60.16	63.79	73.22	77.2	82.98	98.75
2. Fund employed (Advance)	1031.34	1285.78	1466.56	1649.98	1916.42	2244.81	2193.36	2457.7	2665.68
3. No. of employees	12997	13421	14605	15197	16329	13213	13152	13154	13142
4. Per employee Administrative cost(in Taka)	23821	33291	35721	39587	39065	55415	58698	63083	75141
5. Administrative cost per taka employed(in Taka)	0.030	0.035	0.036	0.036	0.033	0.033	0.035	0.034	0.037

'Source: Developed from the data taken from Annual Reports of public sector banks under study for the period ranging 1984-92.

* Public Sector Banks includes the Sonali, Janata and Agrani Bank.

Appendix-XX: Operational efficiency of Selected Private Sector Conventional Banks*

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
CITY BANK LTD.											
1. Gross Expenditure	5.76	8.74	12.66	20.73	32.63	51.66	53.70	57.36	62.74	65.74	64.4
2. Administrative cost	2.69	3.79	5.39	7.41	9.93	13.35	17.04	18.46	19.4	20.76	22.6
3. Fund employed	49.72	65.69	91.66	102.02	225.62	313.34	311.76	334.17	366.42	401.32	427.12
4. No. of employees	337	474	636	772	1064	1381	1491	1612	1619	1607	1747
5. Per employee administrative cost(in taka)	79,822	79,958	84,748	95,984	93,327	96,669	114,286	114,516	119,827	129,185	129,365
6. Administrative cost per taka employed(in Taka)	0.054	0.058	0.059	0.073	0.044	0.043	0.055	0.055	0.053	0.052	0.053
NATIONAL BANK LTD											
1. Gross Expenditure	14.16	25.27	32.94	47.81	66.92	84.57	104.34	109.06	117.26	108.29	98.95
2. Administrative cost	5.67	9.14	11.73	15.74	18.64	21.81	23.94	25.16	25.78	25.86	27.98
3. Fund employed	157.07	188.8	243.74	362.63	477.29	622.19	651.54	729.09	786.91	784.69	841.91
4. No. of employees	707	836	1163	1299	1599	1642	1669	1723	1687	1641	1675
5. Per employee administrative cost(in taka)	80,198	109,330	100,860	121,170	116,573	132,826	143,439	146,024	152,816	157,587	167,045
6. Administrative cost per taka employed(in Taka)	0.036	0.048	0.048	0.043	0.039	0.035	0.037	0.035	0.033	0.033	0.033

(Contd..)

Appendix-XX: Operational efficiency of Selected Private Sector Conventional Banks*

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
UNITED COMMERCIAL BANK LTD											
1. Gross Expenditure	6.52	12.52	19.45	28.89	34.36	41.16	51.84	65.08	65.56	61.01	64.22
2. Administrative cost	2.97	5.28	6.75	9.13	11.14	12.17	14.79	17.89	18.12	19.36	20.68
3. Fund employed	52.01	86.63	124.87	197.00	188.88	236.47	303.44	336.56	404.88	383.3	437.98
4. No. of employees	379	645	862	952	1255	1334	1534	1706	1781	1695	1805
5. Per employee administrative cost(in taka)	78,364	81,860	78,306	95,903	88,765	91,229	96,415	104,865	101,741	114,218	114,571
6. Administrative cost per taka employed(in Taka)	0.057	0.061	0.054	0.046	0.059	0.051	0.049	0.053	0.045	0.051	0.047
ARAB-BANGLADESH BANK LTD											
1. Gross Expenditure	13.38	20.19	25.21	31.47	42.94	49.03	63.37	70.71	89.83	91.68	79.61
2. Administrative cost	4.6	6.05	7.93	10	10.59	12.4	14.61	18.07	20.57	22.27	24.18
3. Fund employed	106.76	128.79	159.86	204.93	279.7	362.58	421.66	510.76	652.62	681.14	624.52
4. No. of employees	411	495	602	648	697	838	960	1038	1246	1353	1454
5. Per employee administrative cost(in taka)	111,922	122,222	131,728	154,321	151,937	147,971	152,188	174,085	165,088	164,597	166,300
6. Administrative cost per taka employed(in Taka)	0.043	0.047	0.050	0.049	0.038	0.034	0.035	0.035	0.032	0.033	0.039

Source:Annual Reports of respective banks for the period ranging 1984-94.

* Private Sector Commercial Banks include the City Bank Ltd., National Bank Ltd., United Commercial Bank Limited and Arab-Bangladesh Bank Limited.

Appendix-XXI: Portfolio structure of financing by selected Public Sector Conventional Banks

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
1. Money at Call and Short Notice	391.68	718.5	434.41	522.6	575.57	609.56	625.15	690.45	483.63
2. Loans,overdraft & cash credit	4546.78	5532.38	5935.23	6211.69	7449.14	8803.01	8807.03	9367.06	10094.77
3. Bills purchased and discounted	214.89	206.63	220.16	290.17	267.11	331.26	433.71	393.72	504.50
4. Investment in securities	1199.38	1095.94	1560.70	1535.10	1461.23	1416.81	2677.87	2995.05	3542.56
5. Asset of the bank (1+2+3+4)	6352.73	7553.45	8150.50	8559.56	9753.05	11160.64	12543.76	13446.28	14625.46
6. Money at Call & Short Notice-Asset Ratio(%)	6.17%	9.51%	5.33%	6.11%	5.90%	5.46%	4.98%	5.13%	3.31%
7. Loans,overdraft & cash credit- Asset Ratio(%)	71.57%	73.24%	72.82%	72.57%	76.38%	78.88%	70.21%	69.66%	69.02%
8. Bills purchased and discounted- Asset Ratio(%)	3.38%	2.74%	2.70%	3.39%	2.74%	2.97%	3.46%	2.93%	3.45%
9. Investment in securities Asset Ratio(%)	18.88%	14.51%	19.15%	17.93%	14.98%	12.69%	21.35%	22.27%	24.22%

Source: Collected and developed from the data taken from Annual Repor of respective public sector bank. For details see Appendix-XXII.

Appendix-XXII: Portfolio structure of financing by Public Sector Conventional Banks

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
SONALI BANK									
1. Money at Call and Short Notice		294.37	332.04	361.12	357.87	361.36	484.39	557.26	373.58
2. Loans,overdraft & cash credit	2122.42	2670.67	2838.99	2838.25	3400.11	3969.8	4174.98	4330.57	4651.44
3. Bills purchased and discounted	89.86	83.45	88.16	142.61	127.59	216.95	256.07	191.19	217.89
4. Investment in securities	556.98	422.10	586.34	577.86	637.68	515.14	983.93	907.29	1422.61
5. Asset of the bank	2769.26	3470.59	3845.53	3919.84	4523.25	5063.25	5899.37	5986.31	6665.52
6. Money at Call & Short Notice-Asset Ratio		8.48%	8.63%	9.21%	7.91%	7.14%	8.21%	9.31%	5.60%
7. Loans,overdraft & cash credit- Asset Ratio(%)		76.95%	73.83%	72.41%	75.17%	78.40%	70.77%	72.34%	69.78%
8. Bills purchased and discounted- Asset Ratio(%)		2.40%	2.29%	3.64%	2.82%	4.28%	4.34%	3.19%	3.27%
9. Investment in securities Asset Ratio(%)		12.16%	15.25%	14.74%	14.10%	10.17%	16.68%	15.16%	21.34%
JANATA BANK									
1. Money at Call and Short Notice	79.03	83.52	86.62	125.48	161.2	136.2	126.76	114.19	101.05
2. Loans,overdraft & cash credit	1438.28	1638.59	1699.54	1796.21	2192.98	2631.45	2516.73	2683.91	2943.35
3. Bills purchased and discounted	79.77	60.52	62.59	74.81	79.15	68.26	99.6	97.4	136.72
4. Investment in securities	329.75	333.23	501.30	522.76	436.04	455.68	832.76	998.89	1056.72
5. Asset of the bank	1926.83	2115.86	2350.05	2519.26	2869.37	3291.79	3575.85	3894.39	4237.84
6. Money at Call & Short Notice-Asset Ratio	4.10%	3.95%	3.69%	4.98%	5.62%	4.14%	3.54%	2.93%	2.38%
7. Loans,overdraft & cash credit- Asset Ratio(%)	74.64%	77.44%	72.32%	71.30%	76.43%	79.94%	70.38%	68.92%	69.45%
8. Bills purchased and discounted- Asset Ratio(%)	4.14%	2.86%	2.66%	2.97%	2.76%	2.07%	2.79%	2.50%	3.23%
9. Investment in securities Total Asset Ratio(%)	17.11%	15.75%	21.33%	20.75%	15.20%	13.85%	23.29%	25.65%	24.94%

Source: Developed from the data taken from Annual Reports of public sector banks under study for the period ranging 1984-92

Appendix-XXII: Portfolio structure of financing by Public Sector Conventional Bank (Contd.)

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
AGRANI BANK LTD.									
1. Money at Call and Short Notice	312.65	340.61	15.75	36.00	56.50	112.00	14.00	19.00	9.00
2. Loans,overdraft & cash credit	986.08	1223.12	1396.70	1577.23	1856.05	2201.76	2115.32	2352.58	2499.98
3. Bills purchased and discounted	45.26	62.66	69.41	72.75	60.37	46.05	78.04	105.13	149.89
4. Investment in securities	312.65	340.61	473.06	434.48	387.51	445.79	861.18	1088.87	1063.23
5. Asset of the bank	1656.64	1967.00	1954.92	2120.46	2360.43	2805.60	3068.54	3565.58	3722.10
6. Money at Call & Short Notice-Asset Ratio	18.87%	17.32%	0.81%	1.70%	2.39%	3.99%	0.46%	0.53%	0.24%
7. Loans,overdraft & cash credit- Asset Ratio(%)	59.52%	62.18%	71.45%	74.38%	78.63%	78.48%	68.94%	65.98%	67.17%
8. Bills purchased and discounted- Asset Ratio(%)	2.73%	3.19%	3.55%	3.43%	2.56%	1.64%	2.54%	2.95%	4.03%
9. Investment in securities Asset Ratio(%)	18.87%	17.32%	24.20%	20.49%	16.42%	15.89%	28.06%	30.54%	28.57%

Source: Developed from the data taken from Annual Reports of public sector banks under study for the period ranging 1984-92.

Appendix-XXIII: Portfolio structure of financing by selected Private Sector Conventional Banks

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
1. Money at Call and Short Notice	0.00	4.8	49.04	31.95	72.34	165.27	47.31	55.12	141.87
2. Loans,overdraft & cash credit	336.11	446.6	583.51	856.14	1084.47	1399.59	1589.08	1869.76	2162.05
3. Bills purchased and discounted	26.48	79.39	116.24	70.45	87.03	132.1	87.33	38.58	48.83
4. Investment in securities	79.34	111.34	142.19	108.39	272.94	233.29	318	423.52	380.7
5. Asset of the bank (1+2+3+4)	441.93	642.13	890.98	1066.93	1516.78	1930.25	2041.72	2386.98	2733.45
6. Money at Call & Short Notice-Asset Ratio(%)	0.00%	0.75%	5.50%	2.99%	4.77%	8.56%	2.32%	2.31%	5.19%
7. Loans,overdraft & cash credit- Asset Ratio(%)	76.06%	69.55%	65.49%	80.24%	71.50%	72.51%	77.83%	78.33%	79.10%
8. Bills purchased and discounted- Asset Ratio(%)	5.99%	12.36%	13.05%	6.60%	5.74%	6.84%	4.28%	1.62%	1.79%
9. Investment in securities Asset Ratio(%)	17.95%	17.34%	15.96%	10.16%	17.99%	12.09%	15.58%	17.74%	13.93%

Source: Collected and developed from the data taken from Annual Report of respective public sector bank. For details see Appendix-XXIV.

Appendix-XXIV: Portfolio structure of financing by selected Private Sector Conventional Banks.

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
CITY BANK LTD									
1. Money at Call and Short Notice	-	-	-	-	6.5	65	18	31.07	38.2
2. Loans,overdraft & cash credit	36.96	56.08	79.63	126.25	176	245.75	255.83	329.18	352.45
3. Bills purchased and discounted	10.26	65.69	91.66	35.77	49.63	67.58	43.96	4.99	13.97
4. Investment in securities	17.07	19.59	35.2	16.43	57.65	49.39	44.62	84.5	86.34
5. Asset of the bank	64.29	141.36	206.49	178.45	289.78	427.72	362.41	449.74	490.96
6. Money at Call & Short Notice-Asset Ratio(%)	0.000	0.000	0.000	0.000	0.022	0.152	0.050	0.069	0.078
7. Loans,overdraft & cash credit- Asset Ratio(%)	0.575	0.397	0.386	0.707	0.607	0.575	0.706	0.732	0.718
8. Bills purchased and discounted- Asset Ratio(%)	0.160	0.465	0.444	0.200	0.171	0.158	0.121	0.011	0.028
9. Investment in securities Asset Ratio(%)	0.266	0.139	0.170	0.092	0.199	0.115	0.123	0.188	0.176
NATIONAL BANK LTD.									
1. Money at Call and Short Notice			31.71	29.69	65.38	66.09	6	0.6	97.86
2. Loans,overdraft & cash credit	145.88	182.99	231.83	346.07	455.36	582.47	623.55	706.91	766.15
3. Bills purchased and discounted	11.19	5.82	11.91	16.57	21.93	39.72	27.97	20.18	20.77
4. Investment in securities	21.97	35.09	31.71	29.69	65.38	66.09	97.89	101.21	97.86
5. Asset of the bank	179.04	223.9	307.16	422.02	608.05	754.37	755.41	828.9	982.64
6. Money at Call & Short Notice-Asset Ratio(%)	0.000	0.000	0.103	0.070	0.108	0.088	0.008	0.001	0.100
7. Loans,overdraft & cash credit- Asset Ratio(%)	0.815	0.817	0.755	0.820	0.749	0.772	0.825	0.853	0.780
8. Bills purchased and discounted- Asset Ratio(%)	0.063	0.026	0.039	0.039	0.036	0.053	0.037	0.024	0.021
9. Investment in securities Asset Ratio(%)	0.123	0.157	0.103	0.070	0.108	0.088	0.130	0.122	0.100

Source: Collected and developed from the data taken from Annual Reports of respective private sector banks.

Appendix-XXV: Interest-Income ratio of Public and Private Sector Coventional Banks and Profit-Income ratio of Islami Bank Bangladesh Limited

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1984-92 average	1984-1993 average	1984-1994 average
Public Sector Banks														
1. Income of the bank	587.84	788.72	903.37	954.19	1069.77	1219.99	1413.48	1558.61	1633.47	-	-	1125.49	-	-
2. Interest paid to depositors	350.35	484.67	545.56	632.88	727.12	859.42	976	1111.22	1160.97	-	-	760.91	-	-
3. Interest-Income Ratio(2/1)	0.60	0.61	0.60	0.66	0.68	0.70	0.69	0.71	0.71	-	-	0.66	-	-
Private Sector Banks														
1. Income of the bank	53.25	91.51	113.45	158.98	213.48	238.43	310.04	340.74	379.14	340.89	319.71	211.00	223.99	232.69
2. Interest paid to depositors	24.09	42.53	58.79	85.35	127.25	173.2	196.25	224.64	231.18	229.42	195.83	129.25	139.27	144.41
3. Interest-Income Ratio(2/1)	0.45	0.46	0.52	0.54	0.60	0.73	0.63	0.66	0.61	0.67	0.61	0.58	0.59	0.59
Islami Bank Bangladesh Ltd														
1. Income of the bank	4.61	11.18	15.42	18.83	24.12	29.33	47.54	56.31	53.01	62.29	82.66	28.93	32.26	36.85
2. Profit paid to depositors	0.89	1.07	0.94	3.11	3.9	3.01	16.37	12.71	6.71	8.00	22.26	5.41	5.67	7.18
3. Profit-Income Ratio(2/1)	0.19	0.10	0.06	0.17	0.16	0.10	0.34	0.23	0.13	0.13	0.27	0.16	0.16	0.17

Source: Collected and developed from the data taken from Annual Reports from respective private sector banks for the period ranging 1984-1994. For details see the Appendices XXVI & XXVII.

Appendix-XXVI: Interest-Income ratio of the Public Sector Conventional Banks

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
Sonali Bank									
1. Income of the bank	254.38	333.30	384.88	393.15	433.72	501.78	591.26	658.66	691.57
2. Interest paid to depositors	136.96	199.75	207.04	247.35	280.38	332.85	377.8	435.49	476.16
3. Interest-Income Ratio	0.54	0.60	0.54	0.63	0.65	0.66	0.64	0.66	0.69
Agrani Bank									
1. Income of the bank	197.91	254.84	285.59	303.72	338.37	391.86	449.63	489.79	510.35
2. Interest paid to depositors	125.89	161.34	185.57	205.95	232.47	286.45	338.99	386.35	372.88
3. Interest-Income Ratio	0.64	0.63	0.65	0.68	0.69	0.73	0.75	0.79	0.73
Janata Bank									
1. Income of the bank	135.55	200.58	232.9	257.32	279.68	326.35	372.59	410.16	431.55
2. Interest paid to depositors	87.5	123.58	152.95	179.58	214.27	240.12	259.21	289.38	311.93
3. Interest-Income Ratio	0.65	0.62	0.66	0.70	0.77	0.74	0.70	0.71	0.72

Source: Collected and developed from the data taken from Annual Reports from respective private sector banks for the period ranging 1984-94.

Appendix-XXVII: Interest-Income ratio of Private Sector Conventional Banks

(Taka in crore)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1984-1994 average
National Bank Limited												
1. Income of the bank	19.97	33.74	42.44	57.65	78.98	86.08	108.30	118.49	130.59	108.29	98.95	80.32
2. Interest paid to depositors	8.49	16.13	21.21	32.07	48.28	62.76	70.26	78.70	71.22	73.89	61.08	49.46
3. Interest-Income Ratio	0.43	0.48	0.50	0.56	0.61	0.73	0.65	0.66	0.55	0.68	0.62	0.59
United Commercial Bank Ltd.												
1. Income of the bank	7.95	16.77	23.30	35.30	42.32	41.22	59.06	68.63	66.63	66.47	64.22	44.72
2. Interest paid to depositors	3.55	7.24	12.70	19.76	23.22	28.99	36.89	47.08	47.32	41.65	37.53	27.81
3. Interest-Income Ratio	0.45	0.43	0.55	0.56	0.55	0.70	0.62	0.69	0.71	0.63	0.58	0.59
City Bank Limited												
1. Income of the bank	6.93	13.51	15.27	27.39	41.52	52.51	66.40	65.76	71.15	65.74	64.40	44.60
2. Interest paid to depositors	3.07	4.95	7.27	13.32	22.70	38.29	36.66	38.90	43.36	44.98	41.80	26.85
3. Interest-Income Ratio	0.44	0.37	0.48	0.49	0.55	0.73	0.55	0.59	0.61	0.68	0.65	0.56
Arab-Bangladesh Bank Ltd												
1. Income of the bank	18.40	27.49	32.44	38.64	50.66	58.62	76.28	87.86	110.77	100.39	92.14	63.06
2. Interest paid to depositors	8.98	14.21	17.61	20.20	33.05	43.16	52.44	59.96	69.28	68.90	55.42	40.29
3. Interest-Income Ratio	0.49	0.52	0.54	0.52	0.65	0.74	0.69	0.68	0.63	0.69	0.60	0.61

Source: Collected and developed from the data taken from Annual Reports from respective private sector banks for the period ranging 1984-1994.

Appendix-XXVIII:Deposit and outstanding advances of all Conventional Banks by Divisions and classified in Rural and Urban areas for 1988 & 1992.

	December,1988		December,1992	
	Deposits	Advances*	Deposits	Advances*
BANGLADESH	17114.5	15236.24	28581.69	24909.92
Rural	3494.61	3513.12	6245.97	4943.26
Urban	13619.89	11723.12	22335.72	19966.66
CHITTAGONG				
Chittagong Division	4857.05	2817.25	8054.45	4698.64
Rural	1446.19	710.27	2565.91	982.37
Urban	3410.86	2106.98	5488.54	3716.27
Chittagong Division (Exclud. Ctg.)	2214.72	993.13	3838.44	1446.25
Rural	1086.77	630.85	1883.88	869.02
Urban	1127.95	362.28	1954.56	577.23
Chittagong	2642.33	1824.12	4216.01	3252.39
Rural	359.42	79.42	682.03	113.35
Urban	2282.91	1744.7	3533.98	3139.04
DHAKA				
Dhaka Division	9236.13	9059.08	15578.42	15081.92
Rural	820.59	1062.77	1597.36	1542.38
Urban	8415.54	7996.31	13981.06	13539.54
Dhaka Division (Excl.Dhaka)	1385.38	1694.65	2487.76	2627.09
Rural	607.11	970.76	1195.64	1371.07
Urban	778.27	723.89	1292.12	1256.02
Dhaka	7850.75	7364.43	13090.66	12454.83
Rural	213.48	92.01	401.72	171.31
Urban	7637.27	7272.42	12688.94	12283.52
KHULNA				
Khulna Division	1500.94	1546.94	2526.37	2519.34
Rural	544.69	527.18	983.67	740.35
Urban	956.25	1019.76	1542.7	1778.99
Khulna Division (Excl.Khulna)	1034.74	867.06	1797.32	1313.2
Rural	487.76	497.2	877.29	689.6
Urban	546.98	369.86	920.03	623.6
Khulna	466.2	679.88	729.05	1206.14
Rural	56.93	29.98	106.38	50.75
Urban	409.27	649.9	622.67	1155.39
RAJSHAHI				
Rajshahi Division	1520.38	1812.97	2422.45	2610.02
Rural	683.14	1212.9	1099.03	1678.16
Urban	837.24	600.07	1323.42	931.86
Rajshahi Division (Excl.Rajshahi)	1269.17	1681.18	2038.49	2445.12
Rural	605.58	1159.93	969.16	1609.9
Urban	663.59	521.25	1069.33	835.22
Rajshahi	251.21	131.79	383.96	164.9
Rural	77.56	52.97	129.87	68.26
Urban	173.65	78.82	254.09	96.64

* Advances mean outstanding advances with interest.

Source: Bangladesh Bank, Bangladesh Bank Bulletin, January-March,1993.

Appen.-XXIX: Deposits and outstanding advances of IBBL by Divisions and classified in Rural and Urban areas for 1990 & 1992.

(Figure in '000')

	December,1990		December,1992	
	Deposits	Advances*	Deposits	Advances*
BANGLADESH	4472100	3482140	7290854	5666709
Rural	68940	28940	261972	119244
Urban	4403160	3453200	7028882	5547465
CHITTAGONG				
Chittagong Division	1506230	806810	2349616	1359017
Rural	43670	9610	153968	26438
Urban	1462560	797200	2195648	1332579
Chittagong Division (Exclud. Clg.)	828290	34800	1263410	340061
Rural	43670	9610	131450	22988
Urban	784620	25190	1131960	317073
Chittagong	677940	545230	1086206	1018956
Rural	0	0	22518	3450
Urban	677940	545230	1063688	1015506
DHAKA				
Dhaka Division	2400460	2261660	4057779	3257049
Rural	19860	8760	71237	51187
Urban	2380600	2252900	3986542	3205862
Dhaka Division (Excl.Dhaka)	94150	204480	242697	304198
Rural	0	0	26572	7686
Urban	94150	204480	216125	296512
Dhaka:	2306310	2057180	3815082	2952851
Rural	19860	8760	44665	43501
Urban	2286450	2048420	3770417	2909350
KHULNA				
Khulna Division	287440	209400	381215	567053
Rural	5410	10570	29503	40440
Urban	282030	198830	351712	526613
Khulna Division (Excl.Khulna)	102890	46190	182677	241207
Rural	5410	10570	28493	40440
Urban	97480	35620	154184	200767
Khulna	184550	163210	198538	325846
Rural	0	0	1010	0
Urban	184550	163210	197528	325846
RAJSHAHI				
Rajshahi Division	277970	204270	502244	483590
Rural	0	0	7264	1179
Urban	277970	204270	494980	482411
Rajshahi Division (Excl.Rajshahi)	206560	183730	392726	451861
Rural	0	0	7264	1179
Urban	206560	183730	385462	450682
Rajshahi:	71410	20540	109318	31729
Rural	0	0	0	0
Urban	71410	20540	109318	31729

Source: Central Accounts Department, Islami Bank Bangladesh Limited.

* Advances mean outstanding advances with interest.

Appendix-XXX: Portfolio structure of financing by Islami Bank Bangladesh Ltd.							(Tk. in crore)	
	1984	1985	1986	1988	1989	1990	1991	1992
1. Short term financing(TDR)	0.46	1.58	4.36	4.84	5.81	10.12	14.17	17.45
2. Term financing(Musharaka,Hire Purchase	12.05	13.6	17.09	17.69	37.31	52.46	71.01	76.04
3. Trade financing(Murabaha, Bai-Muazzal)	28.05	73.84	106.73	156.54	172.59	240.12	303.65	376.86
4. Investment against securities	0	0	5.83	5.92	5.92	5.92	2.12	2.12
5. Others	0.01	2.22	7.25	28.24	14.21	16.62	37.36	43.95
Total	40.57	91.24	141.26	213.23	235.84	325.24	428.31	516.42
Mode-wise investment								
1. Murabaha	21.72	65.67	91.81	122.58	114.04	164.67	214.3	273.93
2. Musharak	11.74	13.2	13.45	8.27	6.41	8.38	9.87	11.73
3. Bai-e-Muazzal	6.33	8.17	14.92	33.96	58.55	75.45	89.35	102.93
4. Hire Purchase	0.31	0.4	3.64	9.42	30.9	44.08	61.14	64.31
5. Quard-e-Hasan (PF & BF)	0.01	0.01	0.01	0.16	0.26	0.4	0.59	0.79
6. Quard-e-Hasan(TDR)	0.46	1.58	4.36	4.84	5.81	10.12	14.17	17.45
7. Purchase & Negotiation	0	2.21	7.24	28.08	13.95	16.22	36.77	43.16
8. Investment in share & securities	0	0	5.83	5.92	5.92	5.92	2.12	2.12
9. Others	0	0	0	0	0	0	0	0
	40.57	91.24	141.26	213.23	235.84	325.24	428.31	516.42
Source: Central Accounts Department, Islami Bank Bangladesh Limited.								

Appendix- XXXI: Deposit distribution classified by size of accounts in Islami Bank Bangladesh Limited for 1990 & 1992.

Size of accounts	ABSOLUTE								CUMULATIVE			
	1990				1992				1990		1992	
	No. of Accounts	% of Total A/Cs	Total amount in '000' Tk.	% of total deposits	No. of Accounts	% of Total A/Cs	Total amount in '000' Tk.	% of total deposits	% of Total A/Cs	% of total deposits	% of Total A/Cs	% of total deposits
Upto - 5000	93563	60.52%	70,329	1.58%	119472	52.55%	78,714	1.10%	60.52%	1.58%	52.55%	1.10%
5001 - 10000	11075	7.16%	63,106	1.41%	24646	10.84%	135,095	1.89%	67.68%	2.99%	63.39%	2.99%
10001 - 25000	16584	10.75%	182,525	4.09%	28242	12.42%	292,458	4.09%	78.48%	7.08%	75.81%	7.08%
25001 - 50000	20144	13.03%	570,781	12.79%	29625	13.03%	914,567	12.79%	91.51%	19.87%	88.84%	19.87%
50001 - 100000	5890	3.81%	328,455	7.36%	8662	3.81%	526,299	7.36%	95.31%	27.23%	92.65%	27.23%
100001 - 200000	2889	1.87%	538,203	12.06%	8367	3.68%	862,386	12.06%	97.18%	39.29%	96.33%	39.29%
200001 - 300000	1306	0.84%	398,966	8.94%	3083	1.36%	639,252	8.94%	98.03%	48.23%	97.69%	48.23%
300001 - 400000	883	0.57%	307,927	6.90%	1587	0.70%	493,405	6.90%	98.60%	55.13%	98.39%	55.13%
400001 - 500000	689	0.45%	304,357	6.82%	1055	0.46%	487,685	6.82%	99.05%	61.95%	98.85%	61.95%
500001 - 1000000	1036	0.67%	573,458	12.85%	1523	0.67%	918,878	12.85%	99.72%	74.80%	99.52%	74.80%
1000001 - 2500000	303	0.20%	571,227	12.80%	887	0.39%	915,302	12.80%	99.91%	87.60%	99.91%	87.60%
2500001 - 5000000	108	0.07%	286,060	6.41%	159	0.07%	458,386	6.41%	99.98%	94.01%	99.98%	94.01%
5000001 - 7500000	15	0.01%	89,254	2.00%	23	0.01%	143,016	2.00%	99.99%	96.01%	99.99%	96.01%
7500001 - 10000000	6	0.00%	51,767	1.16%	10	0.00%	82,949	1.16%	99.99%	97.17%	99.99%	97.17%
10000000 - 50000000	9	0.01%	126,295	2.83%	13	0.01%	202,356	2.83%	100.00%	100.00%	100.00%	100.00%
50000001 - 100000000	-		-		-		-					
100000001 and above	-		-		-		-					
	154600	100.00%	4,462,710	100.00%	227358	100.00%	7,150,800	100.00%				

Source: Central Accounts Department, Islami Bank Bangladesh Limited, Head Office, Dhaka.

QUESTIONNAIRES

Appendix-XXXII

QUESTIONNAIRE-1

(For Bank Personnel)

PRIMARY SAMPLE SURVEY ON THE TREND OF BANKS' EFFICIENCY CRITERIA

Name of the Respondent:

Address:

1. What are the causes of secular decline in the Fund Utilisation Rate of Public Sector Banks? Please serialize in order of importance.

   [ ] Stagnant economic situation;

   [ ] Careful selection of clients in order to avoid further deterioration in loan recovery;

   [ ] Lack of sound management;

   [ ] Absence of effort to promote clients;

   [ ] Lack of proper attitude of the borrowers after availing the loans towards its investment properly;

   [ ] Unforeseen interference.

2. What are the reasons for constant decline in the growth rate of deposits in the banks since 1983-84 ?

   Because-
   [ ] Slow growth of money supply.

   [ ] Low interest offered on deposits.

   Any Other reasons such as
   [ ]
   [ ]

   [ ]

3. What are the reasons for percentage increase of Time Deposits in deposit structure of commercial banks ?

   [ ]

   [ ]

   Please serialize in order of importance.

4. Why the profitability of private sector banks is declining inspite of relative improvements of fund utilization rate in Nineties?

[ ] Fall in liquidity trap due to non-recovery of loans;

[ ] Heavy borrowings by the directors of some commercial banks

[ ] High cost of deposit or borrowing;

[ ] Increase in overdue;

[ ] Increase in percentage of bad loan to total loans;

[ ] Inadequate monitoring by Bangladesh Bank;

[ ] No fair scope for investment

5. Why profitability of banks is continuously declining in Public, Private Sector banks and Islami Bank Bangladesh Limited?

[ ] Decline in Fund Utilization rate

[ ] Low recovery rate

[ ] Increase in the amount of provision for classified loans and advances;

[ ] Low interest rate due to sluggish economic activities

[ ] High administrative and overhead costs.

[ ] Due to heavy bad debt reserve required for low quality loan/investment;

[ ] Low interest rate due to sluggish economic activities;

[ ] Mismanagement and unrest in the banking sector.

6. What are the causes behind non-utilization of sizable fund in Islami Bank Bangladesh Limited ?

[ ] Stagnant economic situation;

[ ] Careful selection of clients in order to avoid further deterioration in loan recovery;

[ ] Lack of sound management
[ ] Absence of Islamic financial instruments in the money market;

[ ] Absence of investment opportunity in the money market due to presence of interest elements;

[ ] Non promotion of clients;

Any other causes such as
[ ]

[ ]

[ ]

Please serialize in order of importance.

7. Why the rate of growth of deposit mobilization is highest in Islami Bank Bangladesh Limited ?

[ ] No alternative investment opportunity exists

[ ] End of the year prearranged deposit mobilization by bank personnel

[ ] Dull business activities

[ ] Lack of security in business activities due to deterioration in law and order situation.

[ ] Favourable religious environment

[ ] Popularity of Islamic Banking

[ ] Effective management

[ ] High profit offered by the Bank.

[ ] Strong desire of depositors to avoid interest on religious ground and firm confidence about religious character of IBBL;

[ ] Increased growth of confidence in IBBL.

8. What are the causes behind dramatic rise in profit of Islami Bank Bangladesh Limited in 1990 and 1991 ?

[ ] Increase in the productivity of bank personnel;

[ ] Rationalisation of administrative cost;

[ ] Increase in volume of investment and resultant increase in investment income;
[ ] Increase in income from banking services;

Other reasons such as
[ ]

[ ]

9. Why financing in manufacturing has increased in public sector banks and declined in both private sector bank and Islami Bank Bangladesh Limited ?

[ ] Mandatory implementation of Government credit policy;

[ ] Low profitability but high risk in industrial financing;

[ ] Apprehended liquidity problem in long term financing based on short term resources

Other reasons such as-
[ ]

[ ]

[ ]

10. Why the public sector banks are not efficient even if per employee administrative cost being lowest ?

[ ] Deterioration in the quality of loans and advances portfolio and consequent fall in the interest income;

[ ] Low productivity of bank employees;

[ ] Low service income due to poor customer services;

Other reasons such as
[ ]

[ ]

[ ]

Please serialize in order of importance.

Appendix-XXXIII

QUESTIONNAIRE-2

(For Bank Personnel)

PRIMARY SAMPLE SURVEY ON BANKING TYPES, PROBLEMS AND POLICY RECOMMENDATIONS FOR IMPROVED BANKING

Name of the Respondent:

Address:

Part-A: Identification of the Nature of Banking:

1. If for instance, two projects are equally feasible and viable from technical, financial economic and marketing considerations and the entrepreneurs of both the projects are men of integrity from banking viewpoint. If so, which of the two projects is preferred by the banker for financing ?

[ ] (a) One with higher prospective rate of return and the entrepreneur having been skilled and experienced but whose collateral security position is relatively weak;

[ ] (b) Another with relatively low prospective rate of return but having strong collateral back up and the entrepreneur having been equally skilled.

Please put tick mark against either (a) or (b).

Part-B: State of and Reasons for Overdue Loans

2. How do you scale the overdue loan situation at your bank ? Please put tick mark against any of the following alternatives:

[ ] within manageable limit

[ ] not a matter of that much concern

[ ] matter of concern

[ ] matter of great concern

3. Please put tick mark against any of the following alternatives:

[ ] overdue of loans situation is improving in the banking sector;

[ ] sign of improvement not visible;

[ ] the situation is aggravating.

4. If you think that overdue of loans in your bank has been a matter of concern, please serialize in order of importance the causes responsible for it.

[ ] Improper selection of clients and projects;

[ ] Inadequate supervision;

[ ]. Improper selection of goods;

[ ] Market fluctuation;

[ ] Delay in decision making;

[ ] Govt policy

[ ] Lack of introducing scientific mechanics;

[ ] Inadequate judicial support/legal support;

[ ] Unstable political situation;

[ ] Inculcation of non-repayment culture;

[ ] Political propagation of forgiveness of loans;

[ ] Business loss and failures.

5. (a) Do you find any procedural shortcomings in the financing mechanism which has led to overdue of loans ?

[ ] Yes [ ] No.

(b) If yes, what are those?

(a) (b)
(c) (d)

Part-C: Causes Affecting Loan Recovery

6. Please serialize in order of importance the causes which might be responsible for receiving finance in the name of one project but utilizing them elsewhere.

[ ] Because bank's post-finance supervision is inadequate and not so much effective.

[ ] because bank's return is in no way linked to the yield generated from the project in which the bank has financed.

[ ] because of both (a) and (b)

Because of other reasons such as

[ ]
[ ]

[ ]

7. Please serialize in order of importance the following causes for which a project financed by a bank could be sick and affect recovery of bank loans;

[ ] bank's post financing supervision is not adequate and effective.

[ ] wrong selection of projects.

[ ] pre-financing appraisal of submitted projects was not correct

[ ] non-economic factors matter widely in the selection of projects for financing.

[ ] sudden changes in the govt. policy

[ ] deterioration in the overall management of the economy

[ ] lack of proper management in the banking sector

[ ] black-marketing and unauthorized entry foreign goods.

[ ] Labour unrest.

Part-D: Policy Prescriptions for Improving Banking Efficiency

8. Bank's post finance supervision is not adequate and effective because:-

[ ] bankers think it not to be important so far as its financing mechanism is concerned

[ ] bankers think it to be expensive and not adding any thing to its income

[ ] bankers think it to be important as their income is related to the performance of the project but cost of supervision is relatively high.

[ ] the mentality of the bankers that their concern is merely the recovery of interest and principal which need to be taken care of only when borrowers are in default.

[ ] The importance of post-finance supervision is not recognized properly;

Other c auses such as:

[ ]

[ ]

[ ]

9. Situation in the recovery of bank loan may greatly improve

[ ] if bank's income could somehow be related to the performance of the projects financed by it.
[ ] if bank's supervision may be extended to the whole period covering inception and termination of financing contract

[ ] if factors other than standard financing procedures could be dishnonored while deciding cases for financing and taking steps for timely recovery

[ ] if existing financing procedures could be implemented in letter and spirit

Other measures such as

[ ]

[ ]

[ ]

Please serialize in order of importance.

10. Do you think that bank as a financing partner should play an active role in ensuring effectiveness of the projects in which it has financed?

[ ] Yes [ ] No

If Yes, by applying which of the following alternatives

[ ] It can introduce a financing arrangement by participating in some form in the management of the projects financing by it and bearing profits and losses in proportion to capital contribution

[ ] It can continue the interest-based financing mechanism and creates some legal provisions which permit effective super vision of the financed project.

[ ] Resumption of discipline and improvement of management in the banking sector is sufficient to ensure efficacy in the financed projects even without bringing about changes in the present financing mechanism of interest-based conven tional and profit-loss-sharing banking system.

[ ]. Providing corporate counseling.

Other alternatives such as

[ ]

[ ]

[ ]

Part-E: Allocation of Loanable Funds and Distributional Equity of Banks

11. Do you think that commercial banks' loanable funds are allocated to socially and economically desirable directions?

[ ] Yes [ ] No

If No, what are the appropriate causes among the followings:

[ ] there is no clear cut rules and regulations for the commercial banks in regard to allocations of their loanable funds

[ ] there exists rules and regulations but banks face difficulties in their application.

Other reasons such as

[ ]

[ ]

[ ]

12. Do you think that conventional banking practices help increase in income inequality with group bias ?

[ ] Yes [ ] No

If Yes,in which of the following fields;

[ ] between rural and urban with urban bias
[ ] between low income and high income group with bias to high income group

[ ] between depositors and entrepreneurs with entrepreneurial bias

[ ]. between regions

Please serialize in order of importance.

13. Do you find any attempt in Govt. and bankers level to correct any of the above biases?

[ ] Yes [ ] No

If Yes,in what field (s)

[ ]

[ ]

[ ]

[ ]

Part-F: Banking and Economic Stability

14. Do you think the "spread or gap between uncertain cash flows (entrepreneurial profit) and fixed payment commitment (interest plus principal) is the major cause of investment fluctuations" a concept which rightly apply to Bangladesh ?

[ ] Yes [ ] No

If No,what are the other reasons ?

[ ]

[ ]

[ ]

Please serialize in order of importance.

Appendix-XXIV

QUESTIONNAIRE-3

(For Bangladesh Bank Personnel)

PRIMARY SAMPLE SURVEY ON BANKING TYPES, PROBLEMS AND POLICY RECOMMENDATIONS FOR IMPROVED BANKING

Name of the Respondent:

Address:

Part-A: Identification of the Nature of Banking:

1. How, according to you, decisions for project financing by public and private sector banks excluding Islamic banks are taken place ?

   Two projects are equally feasible and viable from technical, financial economic and marketing considerations and the entrepreneurs of both the projects are men of integrity from banking viewpoint. If so, which of the two projects is preferred for financing?

[ ] (a) One with higher prospective rate of return and the entrepreneur having been skilled and experienced but whose collateral security position is relatively weak;

[ ] (b) Another with relatively low prospective rate of return but having strong collateral back up and the entrepreneur having been equally skilled.

Please put tick mark against either (a) or (b).

Part-B: State of and Reasons for Overdue Loans

2. How do you scale the overdue loan situation in the banking sector of Bangladesh ? Please put tick mark against any of the following alternatives:

   [ ] within manageable limit

   [ ] not a matter of that much concern

   [ ] matter of concern

   [ ] matter of great concern

3. Please put tick mark against any of the following alternatives:

   [ ] overdue of loans situation is improving in the banking sector;

[ ] sign of improvement not visible;

[ ] the situation is aggravating.

4. If you think that overdue of loan in the banking sector has been a matter of concern, please serialize in order of importance the causes responsible for it.

[ ] Improper selection of clients and projects;

[ ] Inadequate supervision;

[ ]. Improper selection of goods;

[ ] Market fluctuation;

[ ] Insufficient fund;

[ ] Political programme

[ ] Delay in decision making;

[ ] Govt policy

[ ] Lack of introducing scientific mechanics;

[ ] Inadequate judicial support/legal support;

[ ]. Customers are not committed;

[ ] lack of Islamic laws 13. Unstable political situation;

[ ] Inculcation of non-repayment culture;

[ ] Political propagation of forgiveness of loans;

[ ] Business loss and failures.

5. (a) Do you find any procedural shortcomings in the financing mechanism which has led to overdue of loans ?

[ ] Yes [ ] No.

(b) If yes, what are those?

(a) (b)
(c) (d)

Part-C: Causes Affecting Loan Recovery

6. Please serialize in order of importance the causes which might be responsible for receiving finance in the name of one project but utilizing them elsewhere.

[ ] Because bank's post-finance supervision is inadequate and not so much effective.

[ ] because bank's return is in no way linked to the yield generated from the project in which the bank has financed.

[ ] because of both (a) and (b)

Because of other reasons such as

[ ]

[ ]

7. Please serialize in order of importance the following causes for which a project financed by a bank could be sick and affect recovery of bank loans;

[ ] bank's post financing supervision is not adequate and effective.

[ ] wrong selection of projects.

[ ] pre-financing appraisal of submitted projects was not correct

[ ] non-economic factors matter widely in the selection of projects for financing.

[ ] sudden changes in the govt. policy

[ ] deterioration in the overall management of the economy

[ ] lack of proper management in the banking sector

[ ] black-marketing and unauthorized entry foreign goods.

[ ] Labour unrest.

Part-D: Policy Prescriptions for Improving Banking Efficiency

8. Bank's post finance supervision is not adequate and effective because:-

[ ] bankers think it not to be important so far as its financing mechanism is concerned

[ ] bankers think it to be expensive and not adding any thing to its income

[ ] bankers think it to be important as their income is related to the performance of the project but cost of supervision is relatively high.

[ ] the mentality of the bankers that their concern is merely the recovery of interest and principal which need to be taken care of only when borrowers are in default.

[ ] The importance of post-finance supervision is not recognized properly;

Other causes such as:

[ ]

[ ]

[ ]

9. Situation in the recovery of bank loan may greatly improve

[ ] if bank's income could somehow be related to the performance of the projects financed by it.

[ ] if bank's supervision may be extended to the whole period covering inception and termination of financing contract;

[ ] if factors other than standard financing procedures could be dishnonored while deciding cases for financing and taking steps for timely recovery;

[ ] if existing financing procedures could be implemented in letter and spirit

Other measures such as

[ ]

[ ]

Please serialize in order of importance.

10. Do you think that bank as a financing partner should play an active role in ensuring effectiveness of the projects in which it has financed?

[ ] Yes [ ] No

If Yes, by applying which of the following alternatives

[ ] It can introduce a financing arrangement by participating in some form in the management of the projects financing by it and bearing profits and losses in proportion to capital contribution;

[ ] It can continue the interest-based financing mechanism and creates some legal provisions which permit effective supervision of the financed project.

[ ] Resumption of discipline and improvement of management in the banking sector is sufficient to ensure efficacy in the financed projects even without bringing about changes in the present financing mechanism of interest-based conven tional and profit-loss-sharing banking system.

[ ]. Providing corporate counseling.

Other alternatives such as

[ ]

[ ]

[ ]

Part-E: Allocation of Loanable Funds and Distributional Equity of Banks

11. Do you think that commercial bank's loanable funds are allocated to socially and economically desirable direction?

[ ] Yes [ ] No

If No, what are the appropriate causes among the followings:

[ ] there is no clear cut rules and regulations for the commercial banks in regard to allocations of their loanable funds

[ ] there exists rules and regulations but banks face difficulties in their application.

Other reasons such as

[ ]

[ ]

[ ]

12. Do you think that conventional banking practices help increase in income inequality with group bias ?

[ ] Yes [ ] No

If Yes,in which of the following fields;

[ ] between rural and urban with urban bias

[ ] between low income and high income group with bias to high income group

[ ] between depositors and entrepreneurs with entrepreneurial bias

[ ]. between regions

Please serialize in order of importance.

13. Do you find any attempt in Govt. and bankers level to correct any of the above biases?

[ ] Yes [ ] No

If Yes,in what field (s)

[ ]

[ ]

[ ]

[ ]

Part-F: Banking and Economic Stability

14. Do you think the "spread or gap between uncertain cash flows(entrepreneurial profit) and fixed payment commitment (interest plus principal) is the major cause of investment fluctuations" a concept which rightly apply to Bangladesh ?

[ ] Yes [ ] No

If No,what are the other reasons ?

[ ]

[ ]

[ ]

Please serialize in order of importance.

QUESTIONNAIRE-4

(For Bank Personnel)

Name of the Respondent:
Address:

Part-A: Distinguishing Features of Islamic Banking

1. Do you think that the major distinguishing feature of an Islamic bank from its conventional counterpart is the overwhelming prevalence of PLS-modes over other Shariah-approved modes of financing?

   [ ] Yes [ ] No

   If 'No' why ?

   [ ]

   [ ]

   [ ]

Part-B: Islamic Bank Practicing PLS-modes

2. What are the causes of gradual decline in the percentage share of PLS-financing by Islami BAnk Bangladesh Limited ?

   [ ] Entrepreneurs think that cost of borrowing from Islami Bank Bangladesh Limited is higher than conventional interest-based banks as they have to surrender more and more of their profits with the increase of rate return from their investments. Whereas they have to pay fixed rate of interest to the conventional bank for their projects with any rate of return (high or low but greater than the rate of interest);

   [ ] Entrepreneurs consider terms and conditions for borrowing under PLS-modes to be sheer interference to their business by the bank;

   [ ] Entrepreneurs do not feel comfort with PLS-modes of financing as these require keeping of proper accounting of profits and records of business transitions which subsequently make them liable to pay high tax;

[ ] Bank personnel rather feel comfort with modes other than PLS-modes due to their easiness in handling and for risk consideration;

[ ] Bankers think it to be laborious, costlier and something beyond the limit of banking task;

[ ] Bankers think that without total conversion of conventional banking into Islamic one PLS-modes cannot be applied successfully.

3. Why do the entrepreneurs prefer modes of financing other than PLS-modes like Musharakah and Mudarabah;

[ ]

[ ]

[ ]

4. Why weightage was put to portfolio distribution in percentage term in allocating loanable funds during period as mentioned below ?

	1985	1986	1987	1988	1989	1990	1991	1992
Musharakah								
Mudarabah								
Murabaha								
Bai-salam								
Bai-muazzal								
Karje Hasan								

5. How much the projects (in %) stand to correct in terms of their proposed IRR after appraisal by the bank personnel ?

6. How many projects, on and average, could achieve in percentage term the IRR (appraised by the bank) after getting fund from IBBL?

Appendix-XXXVI

QUESTIONNAIRE-5

(For the Entrepreneurs)

PRACTICE OF PLS-MODES BY ISLAMIC BANK AS PERCEIVED BY ENTREPRENEURS

Name of the Respondent:

Address:

1. Did you ever go to Islami Bank Bangladesh Limited to ask for financing under PLS-modes ?

   [ ] Yes [ ] No

2. If 'No' why ?

   [ ] Cost of borrowing is higher under PLS-modes such as Musharaka and Mudarabah in compared to conventional banks;

   [ ] Terms and conditions of financing under PLS-modes are sheer interference to entrepreneurs' business;

   [ ] Islami Bank's insistence on reporting of actual profit and keeping records of business transaction is contrary to conventional business practice in Bangladesh;

3. If 'Yes' why ?

   [ ]

   [ ]

   [ ]

4. Had you ever have any transaction with Islami Bank Bangladesh Limited under PLS-modes of financing ?

   [ ] Yes [ ] No

5. If 'Yes' is it now continuing ?

   [ ] Yes [ ] No

6. If 'No' why ?

   [ ]

   [ ]

   [ ]

Appendix-XXXVII

QUESTIONNAIRE-6

(For Entrepreneurs)

PRIMARY SAMPLE SURVEY ON DISTRIBUTIONAL EFFICIENCY OF BANKS

Part-A: Information on Deposits and Advances

1. Name of the Respondent:

2. Address:

3. Name of the bank in you have the account.....

4. How many accounts do have in this bank? .....

5. Total amount of deposited money you have in different accounts of this bank. Tk. .....

6. Total amount of deposited money you have in other banks.

   Tk. .....

7. Total amount of money you have received as loan from this bank.

   Tk. .....

8. Total amount of money you have received as on-going loan from other banks. Tk. .....

Part-B: Information on Asset Holding

9. Your monthly income. Tk. .....

10. Statement of your assets:

   (a) Landed property (value at current market price)

      Tk.....

   (b) House(value at current market price) Tk.....

   (c) Vehicles value at current market price) Tk.....

   (d) Other assets (value at current market price) Tk.....

11. Name of the enterprise for which you have received the loan.

   .....

12. Investment size of the enterprise. In Tk. .....

Appendix-XXXVIII

QUESTIONNAIRE-7

(For Depositors)

PRIMARY SAMPLE SURVEY ON DISTRIBUTIONAL EFFICIENCY OF BANKS

Part-A: Information on Deposits and Advances

1. Name of the Respondent:

2. Address:

3. Name of the bank in you have the account.....

4. How many bank accounts do you have with this bank? .....

5. Total amount of deposited money you have in different accounts of this bank. Tk. .....

6. Total amount of deposited money you have in other banks. Tk. .....

7. Total amount of money you have received as loan from this bank. Tk. .....

8. Total amount of money you have received as on-going loan from other banks. Tk. .....

Part-B: Information on Asset Holding

9. Your monthly income. Tk. .....

10. Statement of your assets:

a) Landed property (value at current market price) Tk.....

b) House (value at current market price) Tk.....

c) Vehicles (value at current market price) Tk.....

d) Other assets (value at current market price) Tk.....

11. Name of the enterprise for which you have received the loan.....

12. Investment size of the enterprise. In Tk. .....