An analysis of risk sharing in Islamic finance with reference to Pakistan

This item was submitted to Loughborough University's Institutional Repository by the/an author.

Additional Information:

- A Doctoral Thesis. Submitted in partial fulfillment of the requirements for the award of Doctor of Philosophy of Loughborough University.

Metadata Record: https://dspace.lboro.ac.uk/2134/6960

Publisher: © Tariqullah Khan

Please cite the published version.
This item is held in Loughborough University’s Institutional Repository (https://dspace.lboro.ac.uk/) and was harvested from the British Library’s EThOS service (http://www.ethos.bl.uk/). It is made available under the following Creative Commons Licence conditions.

For the full text of this licence, please go to: http://creativecommons.org/licenses/by-nc-nd/2.5/
AN ANALYSIS OF RISK SHARING
IN ISLAMIC FINANCE
WITH REFERENCE TO PAKISTAN

By
TARIQULLAH KHAN

A Doctoral Thesis
submitted in fulfillment
of the requirements for the award of
Ph.D.
Department of Economics,
Loughborough University

© by Tariqullah Khan
September - 1996
ABSTRACT

The Islamic law prohibits charging and paying of interest but allows earning profits on the basis of participation in the market. This legal injunction has motivated the establishment and successful operation of a number of Islamic financial institutions. The emergence and rise of these institutions is an important academic and practical development of our time. The theory of Islamic finance evolved on the basis of profit and loss sharing (PLS) principle underlying participatory Islamic financial contracts. However, the practice of Islamic finance does not conform to the theory and overwhelmingly relies on the mark-up principle which underlies deferred trade. The PLS is in striking contrast to the interest mechanism, but the mark-up is not.

The present research inquires the causes underlying the negligence of the mark-up mechanism at the time when the theory was developing. Looking at the preferences of users and suppliers of funds, the causes of the overwhelming use of mark-up in the practices of Islamic finance are also analyzed. Pakistan has remained at the forefront of financial Islamization. The research also draws on this practical experience with a view to explore how the market rewards risk. The study also analyzes the prospects of financial Islamization in a real world scenario in which most Muslim countries rely substantially on foreign financial resources.

The central conclusion of the study is that the mark-up and PLS mechanisms have their own merits and weaknesses. The merit of the mark-up is that it facilitates the acquisition of assets. The merit of the PLS is that it links financiers’ interests with the outcome of projects. The study concentrates on the analysis of the inherent characteristics of the PLS and mark-up as parent principles of Islamic finance rather than the institutional environment in which these are practiced. It implies that given the market environment, the strength of Islamic finance lies in the integration of the prime merits of mark-up and PLS and in developing a comprehensive set of Islamic financial instruments.
ACKNOWLEDGEMENTS

I have undertaken this research while working at the Islamic Research and Training Institute, Islamic Development Bank. Without an opportunity to work at these institutions I will not have been able to complete the work. My foremost gratitude goes to my institutions for providing me the opportunity to work as a researcher.

Among many people who have contributed to the progress of this research in different ways, the following deserve special mentioning: John R. Presley, my research supervisor, whose initiative, encouragement and guidance made it possible for me to present my work in the present form, my colleagues Monzer Kahf and Boulem Ben Djilali with whom I worked on beneficial joint papers, M. Fahim Khan, who motivated me to register for a research degree and encouraged me in pursuing it, M. Nejjatullah Siddiqi who helped me in focusing on the issues pursued in this research, Nevzat Yalcintas, Korkut Ozal, Munawar Iqbal, Hasmet Basar, Sami Homoud, Ausaf Ahmad, Abdallah Gul, Hussain Kamel Fahmi, M. A. Zarqa, M. Ali Al Qari, Leyachi Feddad, Mahmoud Gulaid, and Osman Babikir from whose comments and observations I benefited. To all these wonderful friends, I owe my sincere gratitude.
LIST OF KEY TERMS

Islamic Finance
Islamic Banking
Islamic Financial Institutions
Islamic Financial Instruments
Islamic Financial Markets
Profit and Loss Sharing (PLS)
Mark-up
Financial Islamization
Islamic Principles of Finance
Islamic Corporate Finance
CONTENTS

List of Tables
List of Exhibits
List of Charts
List of Figures

CHAPTER 1
INTRODUCTION
1.1 Background
1.2 The Issue
1.3 Objectives of the Study
1.4 Rationale
1.5 Methodology
1.6 Overview of the Research

CHAPTER 2
ISLAMIC FINANCE IN THEORY:
EVOLUTION AND ECONOMICS OF PROFIT SHARING
2.1 Introduction
2.2 Evolution of Profit Sharing Model
   2.2.1 Economic Interpretation of the Difference
        Between Interest and Trade
   2.2.2 The Alternative of Interest
   2.2.3 Support for Profit Sharing in Retrospect
2.3 Economics of Profit Sharing
   2.3.1 Monetary Models of Profit Sharing
   2.3.2 Some Practical Problems and Prospects

CHAPTER 3
ISLAMIC FINANCE IN THEORY:
EVOLUTION AND ECONOMICS OF MARK-UP
3.1 Introduction
3.2 Foundations of Trade-based Islamic Financing
   3.2.1 Relationship Between Sale and Finance
       Composition of Sale-based Finance
   3.2.3 Evolution of Mark-up
   3.2.4 Limits of Mark-up-based Finance Creation
   3.2.5 Time Value OF Money
   3.2.6 Issues in Mark-up-based Resource Mobilization
3.3 The Place of L.I.B.O.R
3.4 A Broader Case For Sale-based Financial Transactions
   3.4.1 Some Issues in a Cross-country Scenario
   3.4.2 Brief Comparison with Traditional Transactions
CHAPTER 4
ISLAMIC FINANCE IN PRACTICE:
RELATIVE SIGNIFICANCE OF PROFIT-LOSS SHARING
AND MARK-UP IN ISLAMIC BANKING
4.1 Introduction
4.2 Dichotomy in Theory and Practice of Islamic Banking:
   An Overview of Consequences
   4.2.1 Diversity of Islamic Modes of Financing
   4.2.2 Concentration of Islamic Bank's Short-term Assets
   4.2.3 Overview of Consequences
4.3 Preferences of Firms for Forms of Finance
   4.3.1 Attitude Towards Risk As Viewed BY Islamic Economists
   4.3.2 The Basis of Preference for the PLS
   *4.3.3 The Role of Islamic Banks
   *4.3.4 The Nature of PLS Contracts
   4.3.5 Utilization of the Improved Risk Profile
   4.3.6 The Need for Redeeming PLS Contracts
   4.3.7 Preferences of Growing Firms for Self-financing
   4.3.8 Some Empirical Evidence
   4.3.9 Implications for Forms of Funds
4.4 Asset Acquisition
4.5 Issuance of Bonds
   4.5.1 Issuance of Bonds Under the PLS and Mark-up
   4.5.2 The Problem of Implementing a Bond Contract
   4.5.3 Some Common Causes of Conflicts
   4.5.4 The Cost of Resolving the Conflict
   4.5.5 Profit Retention: Minimizing the Cost of a Bond Contract
4.6 The Tax Controversy
4.7 Preferences of Banks for Forms of Fund Flows
   4.7.1 Moral Hazard: The Case of Ongoing Enterprise
   4.7.2 Moral Hazard: The Case of Non-ongoing Enterprises
   4.7.3 Acquisition of Assets for Re-sale
   4.7.4 Collateral Conditions and Adverse Selection
4.8 Institutional Consideration
   4.8.1 Size and Management of Public Sector
   4.8.2 Behavioral Considerations
   4.8.3 Other Considerations
CHAPTER 5
ISLAMIC FINANCE IN PRACTICE:
MARKET PERFORMANCE OF PROFIT-LOSS-SHARING WITH SPECIAL
REFERENCE TO THE PAKISTANI MODARABA COMPANIES
5.1 Introduction
5.2 Institutional Setup, Evolution and Profile
   5.2.1 The Law and Regulation of Modaraba Companies
   5.2.2 Profile of Companies
5.3 The Market Environment
   5.3.1 Stock Markets in Pakistan
   5.3.2 Basis of Competition
   5.3.3 Overall Market Status of Modarabas
5.4 Do Modaraba Certificates Reward Risk?
   5.4.1 On Capital Assets Pricing in an Islamic Economy
   5.4.2 Reward for Risk
5.5 Challenges OF Modaraba Companies
   5.5.1 Salient Features of Modaraba Companies
   5.5.2 Salient Policies of Modaraba Companies
5.6 Value of Modaraba Certificates and the Role of Warrants

CHAPTER 6
PROFIT-LOSS SHARING IN RETROSPECT:
FIRM LEVEL CONSIDERATIONS
6.1 Introduction
• 6.2 Comprehensive Financing Mechanism and its Need
   in an Islamic Economy
   6.2.1 Modes of Financing and Comprehensive Financing Mechanism
   6.2.2 Forms of Enterprises and a Comprehensive Financing Mechanism
• 6.3 The Role of Comprehensive Financing In Capital Structure Of Enterprises
   6.3.1 Initiating Infant Enterprises
   6.3.2 Capital Structure of Sole Proprietorships
   6.3.3 Capital Structure of Joint Stock Companies
6.4 Declining Profit-loss-sharing:
   A Comprehensive Islamic Financing Mechanism
   6.4.1 Issues In The Redeemability Of PLS Funds
   6.4.2 Outlines Of The Proposed Redeemable PLS Scheme
6.5 Invoking Support For The Proposed Scheme
   6.5.1 A Lesson From Financing Awqaf Properties
   6.5.2 A Lesson From Financial Islamization In Pakistan
   6.5.3 A Lesson From Islamic Banks And Modaraba Companies
   6.5.4 Role Of The Government
6.6 Elements Of Growth Of An Enterprise
6.6.1 Growth: Relationship with Retention And Return On Equity
6.6.2 Relative Variability Of Retention And Gearing-Based Growth
6.6.3 Effects Of Redeemable PLS On Return On Equity
6.6.4 Effects Of Redeemable PLS On Profit Retention
6.7 Enhancing The Cash Flow Of Islamizing Enterprises
   6.7.1 The Option To Purchase Common Stock
   6.7.2 The Option To Convert Liabilities Into Common Stock
   6.7.3 Managing Accounts Receivables

CHAPTER 7
PROFIT-LOSS SHARING IN RETROSPECT:
OPEN ECONOMY CONSIDERATIONS
WITH SPECIAL REFERENCE TO PAKISTAN
7.1 Introduction
7.2 Financial Flows Among Muslim Countries: An Overview
   7.2.1 Salient Features of Financial Flows Among Muslim Countries
   7.2.2 Non-sustainable Public Flows
   7.2.3 Non-existence of Private Financial Flows
   7.2.4 Risk-sharing Versus Debt Finance
7.3 Rise of Contractual Investments and Its Relevance
   7.4 Challenges of External Resource Mobilization of Pakistan:
      A Case Study of an Islamic Ideological Country
      7.4.1 Challenges Of Islamization the External Sector: An Overview
      7.4.2 Reliance on Foreign Resources
      7.4.3 The Case for Interest-free Alternatives

CHAPTER 8
TOWARDS A CONTRACTUAL MODEL OF PROFIT-LOSS-SHARING
8.1 Introduction
8.2 A Basic Limitation of the PLS Model
   8.2.1 A Proposed Reform in the PLS Model
   8.2.2 A Model of Redeemable PLS
8.3 Some Implications: Recapitulated

CHAPTER 9
CONCLUSIONS AND IMPLICATIONS
9.1 Conclusions
9.2 Implications

Bibliography
List of Tables

Table 3(a): Amortization of Mark-up Based Debts

Table 4(a): Concentration of Islamic Banks’ Assets

Table 4(b): Efficiency Implications of Ownership Structure

Table 5(a): Modaraba Certificate Holders by Category in %, end of June 1992

Table 5(b): Source of Current Income

Table 5(c): Frequency Distribution of 20 Modaraba Companies and ICP Mutual Funds in Terms of ROE

Table 5(d): Frequency Distribution of 20 Modaraba Companies and ICP Mutual Funds in Terms of EPS Rs.

Table 5(e): Profile of Modaraba Companies

Table 5(f): Profile of Leasing Companies

Table 5(g-a): Modarabas, Leasing Companies and Banks: Over-all Status in the Karachi Stock Exchange (as on June 31, 1994, otherwise indicated)

Table 5(g-b): Modarabas, Leasing Companies and Banks: Over-all Status in the Karachi Stock Exchange (as on June 31, 1994, otherwise indicated)

Table 5(h): Sectoral Composition of SBPI of Share Prices


Table 5(j): Sharpe and Trynor Indices for Banks, Leasing and Modaraba Companies


Table 5(l): Monthly Rates and Variability of Return on Market Portfolio and Individual Stocks.

Table 5(m): Modarabas: Relationship with other Sectors

Table 8(a): Efficiency Considerations in Net and Gross Income Sharing
List of Exhibits

Exhibit 6(a): Comprehensive Financing Mechanism and Modes of Financing
Exhibit 6(b): Matching Financing Mechanisms with Important Considerations of Enterprises
Exhibit 6(c): Causes of Indebtedness, Counter-Value of Debt and Possibility of Using Debt as a Capital of a Mudharabah
Exhibit 6(d): Growth Possibilities without External Financing
Exhibit 6(e): Growth Possibilities with the Involvement of a Financier
Exhibit 7(a): Explanatory Determining Incentives in Foreign Private Resource Flows
Exhibit 7(b): Characteristics of Contractual Investments & Islamic Modes of Finance
Exhibit 7(c): Benefits & Risks in Some Contractual Investment Relations
Exhibit 7(d): Elements of Sale-based External Financing

List of Charts

Chart 4. (a): Diversity of Islamic Modes of Financing
Chart 5(a): Yearly Listing of Modaraba Companies
Chart 5(b): Cumulative Yearly Listing of Modaraba Companies
Chart 5(c): Yearly Listing by paid-up capital (million Rs.)
Chart 5(d): Cumulative increase in paid-up capital (million Rs.)
Chart 5(e): Paid up capital (million Rs.)
Chart 5(f): MCos, distribution of bonus shares (%) 1993
Chart 5(g): MCos, Distribution of Cash Dividends (%) 1993
Chart 5(h): Return on Equity 1993 %
Chart 5( i): Earning per share 1993 Rs.
Chart 5(j): Profit after tax 1993 (million Rs.)

Chart 5(k): Market Valuation Ratio

Chart 5(l): Number of Companies listed in the KSE

Chart 5(m): Size of the KSE in billion Rupees

Chart 5(n): Valuation Ratio of the Market (Market Capitalization/Listed Capital)

Chart 5(o-a): After Tax Profits 1993 (million Rs.)

Chart 5(o-b): After Tax Profits 1994 (million Rs.)

Chart 5(p-a): EPS 1993 Rs.

Chart 5(p-b): EPS 1994 Rs.

Chart 5(q-a): Net Investment in Leasing 1993 (million Rs.)

Chart 5(q-b): Net Investment in Leasing 1994 (million Rs.)

Chart 5(r): Systematic and Non-systematic Risk of Companies


Chart 7(b): Projected External Resource Requirements (billions US dollars)

Chart 7(c): Projected Total External Long-term Debt (billion US dollars)

Chart 7(d): Pakistan: Total Debt Service and Interest Payments as % of Total Exports

Chart 7(e): Pakistan: Net Flow of Total Long-term Debt (000 Dollars)

Chart 7(f): Servicing Pakistan's Long-term Public Debt
List of Figures

Fig. 2(a): Termination of Determination of Profit-Sharing Ratio under PLS

Fig. 2(b): Demand for Investment under PLS

Fig. 3(a): Credit Creation by the Markets of Goods and Services

Fig. 3(b): Limitations of Credit Creation by Deferred Sales

Fig. 3(c): Timeline of Cash Flow Sequence of a Mark-up Annuity

Fig. 4(a): The Case of Irrelevance of PLS Mechanism

Fig. 4(b): Efficiency of a Declining PLS

Fig. 5(a): \( E_R \) and \( \sigma_R \) Relationship under Presence of \( R_f \)

Fig. 5(b): Uncertainty of Projects' Outlays and Value of Managerial Options

Fig. 5(c): Value of Assets in Place and Limitations of Equity Financing

Fig. 7(a): Some Aspects of Debt Managing Existing Debt
CHAPTER 1
INTRODUCTION
CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

The Islamic law prohibits charging and paying of interest\(^1\) but allows earning profits on the basis of participation in the market. This legal injunction has motivated the establishment and successful operation of a number of Islamic financial institutions. These institutions include Islamic banks, and non-banking Islamic financial intermediaries, namely, Islamic insurance companies, Islamic investment funds, *mudharabah* and *ijara* (leasing) companies\(^2\). In addition, a secondary market for Islamic financial instruments and an inter-bank Islamic money market are also emerging.

The evolution of a complete interest-free Islamic financial system is thus, not far from reality. At the present, the international financial community seems ready to consider any viable alternative financing arrangement. Given this readiness, the emergence of the Islamic financial system can be considered as a significant development. The real strength of the Islamic alternative however, shall rest on its own inherent characteristics as well as

---

\(^1\)Abolition of *riba* is the fundamental issue in the contemporary discussions on Islamic financing. In the contemporary context the term *riba* includes interest (*riba* of debts) and trading in the forward currency markets (*riba* of sales). However, in the common usage, *riba* is a synonym of interest. Throughout this research therefore, we use the terms *riba* and interest interchangeably.

\(^2\)There are different estimates of the size of funds managed by the Islamic financial institutions at the present. The most systematic source of information about Islamic banks is the International Association of Islamic Banks (IAIB). IAIB (1994) reports that there are 166 registered members, about 100 of these provide information. The reporting institutions have a combined strength of US dollars 2.5 billion paid-up capital; these institutions are managing US dollars 42 billion in deposits and 54 billion in assets. Another estimate by the FT puts the deposits between US dollars 50-80 billion (FT: 28-11-1995). The WSJ (9-4-1996) estimates the size of funds managed by the Islamic financial institutions at US dollars 30 billion. It can therefore, safely be estimated that at the present the Islamic financial institutions are managing at least US dollars 35-40 billion, which is expected to increase in the future. See, also Ahmad (1996).
the clarity and ease with which it can be distinguished from the conventional interest-based financial system.

The Islamic financial system has started evolving only during the early seventies. However, Muslim thinking in this regard has a long history. For example, opposition of the *shari'ah* scholars to institutionalized (bank) interest is traced back to 1903. This year, in Egypt, the payment of interest on Post Office Savings Funds was declared unlawful by Shaikh Mohammed Abdu3.

In fact, an Islamic critique of interest-based banking had started earlier. A branch of the Barclays Bank was established in Cairo during the last quarter of the nineteenth century. Through this branch, the bank financed construction of the Suez Canal. Ever since the establishment of this first interest-based bank in the Muslim world, Shaikh Abdu had initiated a critique of its operations4.

Similarly, the seminal work of Siddiqi (1976) on contemporary Muslim economic thinking tracks the critique of the institution of interest by a Muslim economist to 1946 when an important book was published on Islam and the theory of interest5.

Interests in Islamic banking and finance are not only limited to the Muslim countries. Since the early eighties, European as well as American academic circles have taken keen interest in the subject. So far, a large number of Ph.D., thesis have been written on the subject in many Western universities. Prominent Western scholars and institutions are actively contributing books and articles in the area6. Western financial institutions are increasingly offering Islamic investment opportunities to their clients7.

4I came to know about this fact while discussing the historical data reported in *ibid* with the author and followed it with other Egyptian scholars as well.
7See Ahmad (1996).
1.2 THE ISSUE

Research studies to find an Islamic alternative to interest-based banking were initiated by the late forties and intensified during the fifties, sixties, and early seventies. Muslim economists in particular took the task very thoughtfully. As a result, largely between 1955 and 1974-75, the theory of Islamic banking developed. In 1955 the first formal model of an Islamic bank was presented. During 1974-75, two Islamic banks, namely, the Dubai Islamic Bank, UAE, and the Islamic Development Bank (IDB), Jeddah, respectively, initiated their operations for the first time.

As a matter of consensus among majority of writers on the subject during the 1955-75 period, an Islamic bank must primarily be based on the principle of profit/risk-sharing. Profit sharing is the common basis of the two popular Islamic financial contracts: mudharabah and musharakah (MM). Therefore, the banking model emerging from the MM contracts is often termed as profit and loss sharing - PLS banking (for convenience, in the present research, until otherwise specifically mentioned, we also use the acronym - PLS, interchangeably, for the MM contracts on one hand and for risk-sharing on the other).

---

8See, Siddiqi (ibid).
9For the review of these efforts, see Siddiqi (1983b) and Kahf and Khan (1992).
11Two unique experiences are worth mentioning here. First, during the 1963-67 period, an attempt towards establishing an Islamic financial institution was made in Mit-Ghamr, rural area of Egypt. This operationally unsuccessful, but conceptually a precursor Islamic banking experience was an attempt to combine the concepts of German savings banks, rural banking and the Islamic participatory modes of financing (for details see, e.g., Khan 1983). Second, during 1962-69, the Pilgrims' Management and Fund Board (Tabung Hajji - TH) evolved in Malaysia. The TH is not only a viable Islamic financial institution, but is also a dynamic concept. As a concept, the TH suggests that the performance of Hajj and Umrah involves substantial cost (I estimated that, about two hundred thousand people performed Hajj and Umrah from one country during 1994. For the year, the cost of Hajj per an individual was about US dollars 1400, hence the total expenditure on Hajj and Umrah incurred by the citizens of the country during 1994 was US dollars 280 million). Every Muslim aspires to perform Hajj and Umrah. Performance of these religious duties are therefore an important motive for saving. Since, Hajj and Umrah are spiritual acts, people would refrain to keep their savings made for this purpose in interest-based banks. Thus, institutions like the TH are needed in the Muslim countries to mobilize these savings. These savings can then be invested in accordance with Islamic principles. Working on this philosophy, the TH is the only Islamic financial institution which has won the prestigious IDB Prize for Islamic Banking (for more details, see, IRTI 1987).
12Some writers also consider the Nasser Social Bank Egypt established in 1972 as an Islamic bank. This is a public sector institution which largely functions as a non-profit organization.
Nevertheless, since the actual emergence of the Islamic financial
institutions in the market during the early seventies, the proportion of the PLS
in their total operations has remained negligible. Scholars, who had
envisioned a significant role for the PLS are naturally discontented with this
situation13. Through the IDB operations, the mark-up first appeared in Islamic
banking in 1976. Ever since its first appearance, the mark-up is the most
predominant form of financing among the emerging Islamic financial
institutions. Although permissible in the contemporary Islamic law14,15, in terms
of non-risk sharing characteristics, the mark-up principle doesn't differ much
from the conventional interest-based banking system. Instead of interest-
based money lending, under the mark-up principle, the creation of finance
takes the form of deferred trading.

Hence, compared to the mark-up, in terms of risk-sharing, the PLS
presents a striking contrast to the traditional interest-based banking. It may
also be noted that most Muslim countries are plagued by chronic public
budget deficit and skyrocketing public debts. Credit markets and financial
systems are inefficient, domestic and foreign risk capital are shy in most of
these countries. In this environment in particular, an overwhelming majority of
Islamic economists consider that compared to the mark-up, the PLS can offer
an efficient and stable alternative to the existing interest-based financial

13 This discontentment is being shown in various forum. Islamic economists are more
pronounced in this regard. Sharia'h scholars who have legitimized the mark-up are also
showing their growing displeasure at the disproportionate reliance of the Islamic financial
institutions on the mark-up. During discussions in the 1415H IRTI Ramadhan Fiqh Lectures,
some sharia'h scholars even suggested that the Islamic banks' reliance on the mark-up is far
more than the reliance of the conventional banks on interest. Islamic economists and sharia'h
scholars agree that this is unhealthy trend for the future of Islamic banking (see, also, IRTI-
OICFA, 1993).

14 It needs to be noted that the Report on the Elimination of Riba from the Economy (of
Pakistan) had recommended very limited and exceptional use of mark-up; otherwise, it was
warned that it will open a back door to interest (see, the report in Ahmad, et. al eds., 1983).
The Sharia'h Court Pakistan Judgment on Riba 1991, is an important source of the
contemporary Islamic law. Despite, wide scale consensus among Islamic jurists on the
permissibility of the mark-up principle, the judgment condemns the mark-up as practiced in
Pakistan.

15 It must be noted that a minority of Islamic scholars also maintains the view that a whole-sale
acceptance of the mark-up will open a back door to interest.
markets in these countries. Consequently, among the Islamic economists the preference for the PLS is much stronger compared to the mark-up.

The PLS and mark-up are in fact two parent principles of Islamic financing\(^\text{16}\). Ironically, the theory of Islamic finance entirely relies on the PLS, while the practice is dominated by the mark-up! Thus, a dichotomy between the theory and practice of Islamic financing can be observed. An analysis of the causes and effects of this dichotomy is important for understanding the basis of Islamic financing, the future of Islamic financial institutions and the contribution which these institutions may make to individual Muslim economies as well as to the global economic scene.

The research works and ideological rhetoric related to the theory and practice of Islamic financing can be classified into a number of groups. First, a large amount of the existing literature reflects on the hesitation of Islamic financial institutions to offer PLS funds due to many institutional reasons. Second, a small but influential literature also tries to show that the users of funds are not much interested in the PLS either. The existing literature however, does not compare the characteristics of the mark-up and the PLS, in simultaneously meeting the preferences of users of funds and banks. Third, ideologically, in a closed economy context, the PLS is strongly favored. Paradoxical as it is, in an open economy context, the same sentiments disfavor foreign control of national resources which the PLS will seemingly bring with it. It is noticeable that most Muslim countries cannot meaningfully Islamize their domestic financial systems without at the same time dealing

\(^{16}\text{Service-fee is in fact a third Islamic mechanism which underlies loan financing. The OIC Fiqh Academy (Resolution No. 1 Session No. 3, held in Amman Jordan during October 11-16, 1986) allows charging service-fee on loans which should be exactly equal to the cost of administering the loan (Service-fee = loan amount \times implementation period \times annual rate). Annual rate is an average of the past five years actual administrative expense on such loans which should not however exceed 2.5\%}. \text{In case, service-fee is estimated and charged and is found more than the actual expense on ex post basis, the excess amount is refunded. In case of default, the principal loan amount or service fee does not change. However, the most prominent contemporary Islamic jurist ShaikhMustafa al Zarqa has reportedly called for an imposition of a financial penalty by the lender if the borrower is found to be actually solvent but defaults in payment. See, Hussain Kamel Fahmi (forthcoming) "Problems of Compensating Islamic Banks for Delay of Payment of Financial Debts and Solutions", Jeddah: IRTI.}
with the rest of the world using Islamic modes of finance. Compared to the previous two aspects of the theory and practice, this important paradoxical phenomena is least talked about, letting alone any serious research. Finally, but importantly, if the PLS has to establish an edge over the mark-up, in practice, it must reward risk. In the literature, this matter has so far not been investigated empirically.

Related to the dichotomy of the theory and practice of Islamic financing, many specific questions can also be posed. Why didn't, the Muslim economists incorporate the mark-up in their initial theoretical models of Islamic banking? Why didn't, the Islamic banks adopt the PLS which is strikingly different from interest-based system and simultaneously, is considered to be more efficient and stable than the interest-based banking? Will the domination of the PLS by the mark-up continue or will the Islamic banks develop and keep balanced proportion between the mark-up and PLS? How can the PLS take care for the preferences of user of funds (firms) for different types of finance? What are the requirements for those firms which opt for Islamic financing to fair well in the globalizing markets as compared to their competitors? What are the prospects of mark-up vis-à-vis PLS in mobilizing external resources so urgently needed by the Muslim countries?

1.3 OBJECTIVES OF THE STUDY

The literature on Islamic financing is vast. The question that why should mark-up and not PLS and vice-versa be adopted, has also been discussed either by the proponents of the PLS or the mark-up\(^\text{17}\). However, to gauge the causes of the dichotomy in theory and practice of Islamic financing, a comparative and objective analysis of the inherent characteristics of the two, vis-à-vis the perspective of user of funds and the banks has never been

\(^{17}\text{See for example, Homoud (1974) and Ismail (1989) in support of mark-up, Council of Islamic Ideology (1981), Siddiqi (1988) and Khan (1992) in support of the PLS.}\)
undertaken. Such an analysis is essential for understanding the causes of the phenomenon, its evaluation and suggesting appropriate strategies for the formulation of policies.

In the present research, we aim to seek answers to most of the questions raised above. Compared to the nature and importance of the issue, neither the list of questions can be considered complete, nor an exhaustive treatment of all the questions raised is possible. Therefore, to limit the scope of the study, and to make it manageable in the given resource-time frame, specific objectives of the research need to be identified. These are to:

1. Trace the causes of the double edged phenomenon: the missed mark-up in the initial models of Islamic banking and the subdued PLS and overwhelming mark-up in the operations of Islamic financial institutions,

2. Discuss the evolution of the mark-up vis-à-vis the PLS in a short and longer-term perspective and the implication of this for the future shape of Islamic financing,

3. Study the preferences of suppliers (banks) and users (firms) for PLS and mark-up funds with a view to understand the phenomenon of subdued nature of PLS in the operations of Islamic banks,

4. Study the financial market performance of the PLS in a mixed environment where interest-based instruments also exist,

5. Examine the inherent characteristics of the PLS in retrospect focusing on firm level considerations,

6. Examine the mark-up and PLS mechanisms in retrospect focusing on an open economy scenario, in particular, formally present the seemingly paradoxical phenomena related to the prospects of using the PLS in external resource mobilization and
7. Suggest possible reform in the PLS for enhancing risk sharing in Islamic financing.

1.4 RATIONALE

Islamic financing is an important area of contemporary academic and policy interest. Opposing views in the area are analyzed in the light of empirical evidence. The implication of answers to questions cited above and similar others for the future shape of Islamic financing is immense. As these questions directly deal with the issue of preferences of users and suppliers of funds with a view to resolve their conflicts and enhance risk capital, we also expect that the study has a general relevance. The study is of general theoretical importance as well as of particular practical significance for policy makers who intend to conform their existing financial systems to Islamic rules.

1.5 METHODOLOGY

Two important considerations have determined our approach in this research. One of these is general in nature and is related to the state of the existing theory and practices of Islamic financing. The other consideration is related to the specific aspects of the study.

General Considerations

A number of general considerations effect the environment in which this research has to be conducted. First, recently the expansion of Islamic financing practices has out-paced the theoretical developments in the area. Due to this phenomenon it is natural to confront difficulties in choosing a suitable theoretical framework for evaluating various aspects of the practices.
Second, the existing theoretical works mostly relate to Islamic banking. Compared to financing, banking has a narrower connotation. The extension of the theoretical framework of Islamic banking to cover the broader area of Islamic financing is again subject to certain limitations.

Finally, the present age is the age of international interdependence and globalization of financial markets. Economies and firms can neither be expected to remain competitive nor can Islamize effectively by adopting financial policies in isolation from the rest of the world economy. Firms which opt for Islamic financing cannot remain competitive and acquire value by ignoring the availability of finance to their conventional competitors. This requires understanding the challenges and opportunities for opting for Islamic financing in a market where the competitors have access to a wide range of flexible financial alternatives.

Specific Considerations

The above and related considerations were not pertinent even five years ago. We understand that these need to be integrated in attempts to study the theoretical and practical realities of the Islamic financial system. These broader considerations are therefore, incorporated in the approach of the present study.

As for specific considerations are concerned, four separate but inter-related aspects of the present study are clearly identifiable. The study of each of these aspects requires a suitable methodology.

A. We are trying to understand the dichotomy between the PLS-based theory and mark-up based practices of Islamic financing. A comparative study of the evolution and economics of PLS and mark-up is therefore inevitable. This requires an analytical and critical review of the relevant literature in order to gauge why the mark-up was not incorporated in the PLS theory of Islamic banking. At the same time it is also necessary to critically follow the evolution of the theory of mark-up. In this regard, it is
necessary to note that we are dealing with both the PLS and mark-up as two parent mechanisms rather than as modes of financing.

B. We want to know why the mark-up is overwhelming in the operations of Islamic banks. In this regard ours is not the first attempt. However, we approach the subject differently.

In the outset it should be mentioned that compared to the PLS, mark-up is certainly more consistent with the traditions and conventions of conventional commercial banking. The orientation of the bank staff, the language, terminology, technology and culture of banking, the premises of competition, similarity of bank products, services, laws and regulations, all put the mark-up at comparatively advantageous situation compared to the PLS. Unless, these parameters are changed in favor of the PLS, mark-up will dominate the operations of the Islamic banks.

As these conditions are related to the banking environment, efforts are required by the Islamic banks to change the conditions for an extended use of the PLS. Thus, the existing research by the Islamic economists on the subject assigns relatively, a greater responsibility to the Islamic banks. This approach implicitly implies that the banks are in a position to dictate forms of financial (PLS) contracts to their clients. Consequently, the preferences of the users of funds for the PLS and mark-up are not discussed in detail simultaneously.

There is no doubt that as suppliers of funds, the banks must be playing important role in influencing the choice of their clients for particular forms of funds. Nevertheless, it is also true that in a competitive environment the banks cannot always dictate funding conditions against the preferences and desires of their clients. Therefore, along with the supply side considerations, the perspective of the users of funds must also be studied in order to improve our objective understanding of the observed phenomenon. Given the considerations of the banks and their clients, the task, then is to critically
compare the inherent characteristics of the PLS and mark-up contracts, in simultaneously meeting these considerations.

The lack of emphasis on the demand side considerations by the Islamic economists is not without reasons. In the PLS modes of Islamic banking developed by Siddiqi (1967, 1983 and 1983b, subsequently used by other researchers as a synonym for Islamic financing), the Islamic economy was visualized to be a debt free economy. Elimination of interest-based debt was taken to leave the companies (user of funds) with only one option - 100% PLS. Moreover, during the last three decades the famous Miller-Modigliani (MM) proposition (that under perfect competition, considerations for the cost of finance is irrelevant in choosing between debt or equity) almost dominated the field of finance. Given the indifference of the firms between debt and equity as implied by the proposition from the cost side, and their clear preference for equity for Islamic reasons, the non-existence of the PLS in the flow of funds can justifiably be seen as a reflection on the banks' attitude.

Nevertheless, the innovation of mark-up as an Islamic form of debt financing has however, restored the users' choice for debt and equity. In addition, the M-M proposition has been weakened substantially due to its very restrictive assumptions which have been proved unrealistic both theoretically as well as empirically. It implies that users' preferences cannot be ignored while explaining the reasons for the overwhelming use of the mark-up as a form of debt finance.

Moreover, the existing works do not consider the most important source of financing the growth of a firm i.e., its retained profits. The reason for this is also understandable - the PLS particularly, pure mudharabah does not allow retention and re-investment of profits in the enterprise.

In addition to the supply side factors, in the present research, we also discuss the preferences of firms for the mark-up as well as profit retention.
These considerations allow a comparison of the inherent characteristics of the PLS and mark-up vis-à-vis the preferences of the banks and users of funds. This approach is expected to help the development of such PLS contracts which can simultaneously be consistent with the preferences of both users and suppliers of funds. In our understanding, this is a crucial requirement for the promotion of the PLS principle in some form.

C. We intend to study the actual performance of the pure PLS. It may be noted that theoretically, the case for the PLS has been strongly presented. But, there is no empirical evidence of its actual performance. In this regard two scenarios can be presented. In the first scenario we need to show that in practice, the Islamic banking is dominated by the mark-up. This is easily done by extracting information from the Islamic banking practices.

The second scenario is related to the practical performance of the pure PLS in a mixed environment. As the Islamic banks do not do PLS, this cannot be done based on their experience. Fortunately, we have a practical experience of the Modaraba Companies of Pakistan with the pure PLS, in the form of the mudharabah certificates. The analysis of the practices and performance of these companies provides a useful case study and covers the third aspect of the present study.

No specific Islamic theoretical framework is available to analyze the performance of the Islamic companies. Therefore, we have the flexibility to select a suitable one from the conventional methodologies. After a thoughtful comparison between the competing methodologies we select the capital assets pricing model (CAPM). Some Islamic economic considerations for selecting this model, the simple model used and the nature of data on which the model is applied has been explained in the relevant chapter. It is sufficient to mention here that the central concern of the CAPM is valuation of assets

\(^{18}\)It need to be noted that the matter of debt financing by issuance of bonds and other debt instruments is not yet settled.
under conditions of risk. For this reason, as compared to its counter-parts, the CAPM is directly relevant for the evaluation of the pure form of the PLS.

D. The fourth distinct aspect of the present research is the fact that we deal with a number of issues which are not discussed in the existing literature on the subject. In Islamic economics, the researcher is required to work within a premises which must be consistent with the shari’ah. During the research whenever, there was a need, we referred back to the shari’ah sources. Some of the prominent contemporary scholars in the area were also accessible. These scholars were frequently consulted, both in writing as well as verbally. After consultation, we have synthesized each relevant issue in the light of the shari’ah opinion as well as our own framework. In case no shari’ah solution was found, we either dropped the issue or approached it from a different angle. This approach was highly rewarding as we found that most problems of the contemporary financial markets can be meaningfully discussed without violating the general shari’ah framework. Therefore, this work has the merit to explore the flexibility of discussing a number of issues of contemporary financial markets within the framework of Islamic economic principles.

E. It must also be clarified that this research is not a case study of Pakistan. Rather, it relates to the evolution of the central theme of Islamic financing. The case of Pakistan has been introduced only to derive some lessons from the practice of Islamic financing. The Pakistani case is representative for a number of reasons. First, the nation has made conscious efforts to introduce an Islamic financial system. Second, it is an open and liberalizing economy. Third, for economic reasons, recently it has targeted at reducing the interest cost of debt for the economy. Finally, above all, data is available for meaningful analysis.
1.6 OVERVIEW OF THE RESEARCH

The work has been organized thematically. Chapters two and three, respectively, deal with the theory of PLS and mark-up, both in terms of evolution and economics. Chapters four and five deal with the analysis of the practice of PLS. Chapter four specifically deals with our interpretations of the reasons for the lack of use of the PLS by the Islamic banks. In chapter five we formally evaluate the market performance of the pure PLS. The theme of chapters six and seven is a retrospective look at the PLS as well as its prospects. In chapter six we put forward firm-level (micro-economic) considerations. In chapter seven we discuss the relative significance of mark-up and the PLS in an open economy context. Chapter eight provides an analytical recapitulation of the central idea emerging from the discussion of the previous chapters. Conclusions of different chapters are put together in chapter nine in summary form.
CHAPTER 2
ISLAMIC FINANCE IN THEORY:
EVOLUTION AND ECONOMICS OF PROFIT SHARING
Chapter 2

ISLAMIC FINANCE IN THEORY:
EVOLUTION AND ECONOMICS OF PROFIT SHARING

"...Mark-up system, as in vogue, is held to be repugnant to the injunctions of Islam and the word 'mark-up' be deleted from the provisions of sections 79 and 80 of Negotiable Instruments Act, 1881...the best modes of Islamic (financial) system as alternate to the present system, are Mudharabah and Musharakah..." Emphasis added.


2.1 INTRODUCTION

In chapter one we set the background and basic issue to be discussed in the present research. We explained that PLS and mark-up are the two parent principles of Islamic financing but the theory relies on the PLS and the practice on the mark-up.

The objective of the present chapter is to explore the emergence of PLS as a theoretical model of Islamic banking, discuss the reasons for the non-existence of mark-up in the theoretical model of Islamic financing, analyze the economics of PLS financing and discuss the challenges confronted by the PLS in its practical application. The description of the various Islamic financial contracts, the meaning of riba (interest) etc., are well documented in the existing literature (See, e.g., Siddiqi 1985, Chapra 1986, Abod et. al., 1992, Homoud 1986, FSC 1995 and CII 1981 etc.). Therefore, in this or subsequent chapters we do not aim to formally describe any of these concepts.
2.2 EVOLUTION OF THE PROFIT SHARING MODEL

Economic rationalization of the prohibition of interest and evolution of an efficient interest-free alternative have dominated contemporary Islamic economic thinking. During the last two decades some Muslim countries have also put financial Islamization in the agenda of their respective economic policies. With a view to highlight the evolution and significance of the PLS, in this section we examine major academic and policy oriented works.

2.1.1 The Economic Interpretation of the difference Between Interest (riba) and Trade (bai')

The basic guideline for Islamic financing is contained in the verse:

*Those who devour usury (interest) will not stand except as stands one who the evil one by his touch has driven to madness. That is because they say, "Trade is like usury (interest)", but God has permitted trade and forbidden usury (interest)"* (The Holly Qur'an, II:275, Translation by Yousuf Ali). The first step in designing an alternative to interest is to compare it with trading and highlight the differences.

The conceptual differentiation between interest and trading is undertaken in the framework of economics on one hand and Islamic law on the other. For the purpose of comparing PLS with mark-up, we hypothesize that the PLS is the result of an economic comparison of interest and trading and the mark-up is the outcome of a legal comparison. We discuss mark-up in its turn in chapter three. Here we elaborate on the premises of the economic comparison of interest and trading and its consequences for the development of PLS.

The economic critique of the institution of interest offered by the Muslim scholars is based on their challenge to the rationality of interest as fixed rate of return on financial capital. In this regard, Qurishi (1946) and

---

1 This section has been adapted from Kahf and Khan (1992).
Maududi (1961, this work was partly published as early as 1950) have led the debate by acting as precursors.

In differentiating trade from interest, referring to al Qaffal (circa 417H), Qurishi says: "One, who sells clothes worth Rs. 10 for Rs. 20 does so believing that the clothes are equivalent to that sum. When mutual agreement has been arrived at, the exchanges value become equal, with the result that the parties to the transactions all benefit. But if a person were to acquire Rs. 20 for Rs. 10, the additional Rs. 10 does not represent any real benefit. It will not be then admissible for him to say that he obtained the additional sum in exchange for time, in as much as "time" is neither a commodity of exchange nor any such thing which could be pointed out as an exchangeable wealth". (1946, p. 50).

From the above comparison between interest and trading, we can easily infer that in the interest-based transactions, time becomes the object of sale and interest plays the role of price. As quoted from the Holly Qur'an, certain people are so irrational that they confuse this with trading.

In our discussion of the mark-up we will see that some causes of price differential, e.g. between Rs. 10 and Rs. 20 have far reaching consequences for the Islamic financial system. But Qurishi does not discuss this subject. We understand that if the causes and consequences of the price differential were elaborated upon, the mark-up would have entered the initial models of the PILS.

Maududi looks into the difference between trade and interest in context of equitable distribution and efficient management of risk. In interest-based transactions, risk is transferred to the borrower so that all interest-bearing assets become risk free. From the Islamic economic stand point, this is socially inequitable and economically inefficient. Whereas, trade conforms to the natural phenomenon of uncertainty; it is not only equitable but efficient too. This is the main difference between the two concepts, which according to
Maududi provides the economic rationale for the prohibition of interest and permission of trading.

In the framework of an economic rationale for its prohibition, interest is a contractual increment received by a lender from a borrower over and above the principal\(^{20}\). This implies that interest essentially, though not exclusively, applies to money lending\(^ {21}\); money lending being the predominant source of debt/liability creation. Therefore, the presence of an advance contract on the financial return to capital is considered the distinctive and unique characteristic of interest as compared to trading. Maududi strongly challenges the rationale of charging interest and says: "Which rational principle, which logic, which canon of justice and which sound economic principle can justify that those who spend their time, energy, capacity and resources, and whose efforts and skills make a business thrive, are not guaranteed a profit at any fixed rate, whereas those who merely lend out their funds are fully secured against all risk of loss and are guaranteed a profit at a fixed rate?" (Maududi 1987, p. 214).

It can be seen that the premises provided by the two works referred to above share one common ground. Both compare the characteristics of interest and trading rather than the literal and customary connotation of the two concepts as these prevailed at the time of the prohibition of interest. This approach has two important implications.

First, as far as the difference between sale/trade and interest-based transactions is concerned, the first category of transactions is subject to the natural conditions of uncertainty and risk in relation to time and the second is not. Capital involved in trade may grow or decline through time, whereas, in interest-based transactions, capital automatically increases over time.

---
\(^{20}\)We will notice in chapter three that this is the case in framework of the legal rationale of the prohibition too.

\(^{21}\)Riba, may also be practiced in all quantifiable commodities which are characterized by similarity in exchange such as quality-standardized bean, cotton, grain, etc.
Mudharabah was mainly used for trade financing as compared to interest for money lending, the underlying principle of mudharabah namely, profit-sharing emerges as the only alternative to interest.

Second, in the interpretation of verse II: 281, although Maududi indirectly refers to credit sale, he does not formally discuss the sources of "deferred obligations (debts)" appearing in the same verse, except for loans (qard). Thus the difference between debt created by money lending and debt created by deferred trading was not discussed. Hence the financing potential of deferred trading as compared to interest was not analyzed.

2.2.2 The Alternative to Interest

Following Maududi and Qurishi, charging any guaranteed return on financing was considered illogical, irrational and unjust by both Uzair (1955) and Siddiqi (1967 and subsequent works) who actually have developed the PLS model of Islamic banking. In comparison with fixed and certain nature of interest-based transactions, the Islamic alternative should naturally be based on a principle whereby the rate of return on financial capital should vary in accordance with the variations in the return of the whole enterprise (See, e.g., Maududi and Qurishi op. cit., Uzair 1954, Siddiqi 1983a, 1983b, Chapra 1985 and others). Since interest is prohibited for being a fixed rate of return on capital, it is only logical for the Islamic alternative to base on a variable rate of return or PLS. In our categorization, the PLS covers both mudharabah and musharakah. It is however, useful to identify some minor differences between the two. For a brief time we call mudharabah as pure profit sharing (PPS).

22The most important example being the pre-revelation mudharabah between Mohammad and Lady Khadija.
23In chapter two we discuss that the use of deferred trading as financial mechanism by the Islamic financial institutions is derived from this concept.
24Although new form of Riba-based lending apply in contemporary economics, e.g., variable rate of interest, variation in the rate of return is not the only Islamic characteristic of the PLS.
Under the PPS, profits are shared between the owner of capital and the entrepreneur on pro rata basis, whereas, under normal circumstances losses are written on capital. The first indication of the PPS in the economics literature was provided by Qurishi op.cit in his notion of partnership. But his concept is unclear, as he suggests capital will be provided by one party and work by another and profits or losses will be shared by the two parties. The ambiguity lies in the fact that as far as provision of capital and division of work are concerned, his partnership follows the mudharabah principle, while regarding liabilities, it is closer to the musharakah. Moreover, Qurishi does not formally discuss the problem of financial intermediation.

Uzair (1955) emphasized and focused the PPS by quoting the following from Quduri (circa 428H): "mudharabah is a contract based on the combination of capital from one of the two parties and it means participation in profit. This is feasible with capital from one of the two parties and work from the other party. There is no mudharabah except with this condition. If, however, the whole of profit would go to the owner of capital, it (the mudharabah) becomes simple investment; and if it is agreed that the worker enjoys the whole of it (the profit), the contract is a qard". (Uzair 1978 p 117). Emphasis added.

The above quotation introduces mudharabah in contemporary economic literature for the first time and draws lines between the principles of direct investment, loan (qard) and mudharabah. Uzair also presented a sketch of an Islamic financial intermediation system based on the PPS which he called the "two-fold mudharabah". The first "fold" refers to bank-depositors relationship and the second bank-users of funds relationship.

Other Islamic characteristics of the PLS include non guaranteed principal and a money income and sharing form of contract instead of lending form.

25 In direct investment the capital owner simply takes all decisions or employs a manager. If direct investment takes the form of musharakah decision making becomes collective. Capital owners claim all profits and bear all losses. In qard the lender doesn't share the profit and claims back his principal without any return. While in mudharabah, the owner of funds shares the profits with the working partner but he alone bears all risks of loss.
An elaborate theoretical foundation of the PLS and detailed framework of financial intermediation based on it along with a formal model of financing were however, presented by Siddiqi (1967, 1983). Siddiqi in fact formalized and extended the works of Qurishi, Maududi and in particular, that of Uzair. This formal and extended work also contains two distinctive contributing elements of its own.

Firstly, the axiom of two-fold mudharabah becomes the fundamental principle of an economy-wise credit system. It entitles an entrepreneur who has obtained financial resources on the basis of a profit sharing contract to lend part or whole of these funds to another party on the basis of another profit sharing contract. The question whether a mudharabah profit can be attributed solely to the specific function of generating a second mudharabah, i.e. whether a financial intermediation system based on the two-fold mudharabah is permissible has been raised by Siddiqi himself. He relies on the works of Qurishi, Maududi and Uzair in support of the idea: "It is not clear if the practice of two-tier-mudharabah reflected in these juristic discussions had evolved into pure financial intermediation, where one who obtained profit-sharing funds conducts the sole business of supplying these funds to other (working) parties on the basis of profit-sharing. What is important for us in this chapter is, however, the fact that the permissibility of doing so was made the basis of a new model of banking by a large number of Muslim economists and jurists writing between 1945 and 1975" (reference to Siddiqi 1981, Siddiqi 1988, p. 35).

Secondly, Siddiqi formalized the principle of mixing up personal money of the mudharib (financial institution) with the mudharabah funds. Moreover, in his formal model, Siddiqi envisions to establish the Islamic bank with musharakah capital and suggests to mobilize deposits and manage them on the basis of mudharabah. Thus, the mudharabah and musharakah are formally brought together for the first time giving rise to a complete PLS model of Islamic banking.
In the case of *musharakah*, profits are distributed on pro rata basis and liability of loss becomes proportionate to capital contribution. The principle was first mentioned by Qurishi but formally discussed by Ahmad (1947). According to Ahmad, Islamic financing may take one of two forms: Shares may be floated by ordinary joint stock companies in accordance with the *musharakah* principle, or banking institutions may mobilize resources on the basis of the *mudharabah* principle.

Among other Muslim economists, Chapra (1985) assigns an important role to the *musharakah* principle. He however, does not present any model of a typical financial intermediation system as Siddiqi or Uzair did. Moreover, his emphasis is on institutional arrangements which characterize the Islamic financing institutions more as investment institutions rather than typical financial intermediaries. Ahmad (ibid.) and several other scholars are in line with this approach. The natural outcome of such arrangements is expected to provide a much more fertile ground for *musharakah*. On the other hand due to its nature, the two-tier-*mudharabah* was found suitable as a basis of the intermediation system.

Chapra’s above mentioned contribution makes a potent point regarding the evolution of Islamic business organizations. Although the Islamic economy will have sole proprietors, *mudharabah* and *musharakah* enterprises and joint stock corporations, Chapra suggests that we shall also expect to have hybrid forms of business organizations. Taking some digression from our study of the PLS theory, it is easy to see that the suggestions of Siddiqi, Chapra and others regarding the development of Islamic financial institutions have come true practically.

Most operational Islamic business organizations are neither pure *mudharabas* nor pure *musharakas*. For instance, share-holders own the Islamic banks on the principle of *musharakah*, yet, depositors own it on the principle of *mudharabah*; promoters of the Pakistani Modaraba companies own these companies on the basis of *musharakah* and *mudharabah*
certificate holders own the companies on the basis of mudharabah, the Islamic Development Bank is a mudharib in the Unit Investment Fund and Islamic Banks' Portfolio, yet, the bank has its capital contribution in both schemes. The existence of mixed forms of enterprises has become a rule not an exception for the emerging Islamic economy. This phenomenon has an important implication for the theory of Islamic finance. It implies that provided the prohibition of riba, gharar, etc., are complied with, no new form of an enterprise need to rigidly follow the specific rules of any traditional Islamic contractual arrangements.

Thus, the PLS theory has evolved distinct from the pure mudharabah on a number of counts: a) The classical mudharabah is based on a one to one relationship between the owner of capital and the entrepreneur, whereas in the PLS, numerous capital owners (depositors : investors) face one entrepreneur, financial institution, b) In the classical mudharabah mixing of personal capital of the mudharib with the mudharabah capital is an exception, while in the PLS, this became the fundamental rule as the Islamic financial institution will use its own share capital together with the investors' money, c) Using mudharabah money for making another mudharabah contract is an exception in the classical form, but, in the PLS, this also became a predominant rule and d) In the PLS, investors freely enter and exit the investment pool of financial institution, whereas, in the traditional mudharabah this is not possible.

The departure from the traditional contracts to the PLS has an immense implication for the Islamic financial system as evidenced empirically by the establishment, resource mobilization and allocation practices of Islamic banks, Islamic investment funds and mudharabah and ijara companies.

It can be seen that the PLS does not allow room for debt financing in the Islamic economy. Rather the Islamic economy becomes as a synonym for an all PLS and a debt free economy (see e.g., Khan 1983a, Khan 1983b and Nadiri 1984). Consequently, all debts in the economy would be caused by
benevolent lending which is made on humanitarian and social grounds. This characterizes such debts as "non-economic", although the debt itself may play an important financial role, particularly, in alleviating the need of consumers for credit.

1.2.3 Support for Profit Sharing in Retrospect

It is hard to suggest any conclusive reason for why the otherwise exhaustive work of Maududi overlooked the potential of deferred trading in comparison with interest as a financing mechanism. In retrospect, however, it may be suggested that he might have gauged the flaw of proposing deferred trading as a core mechanism of Islamic financing.

For two decades, the debate on financial Islamization has remained lively in Pakistan. First, an important document in this regard was prepared by the Council of Islamic Ideology Pakistan, CII (1981) on the elimination of interest from the economy. This report is an exhaustive document jointly prepared by economists, bankers and shariah scholars to eliminate interest from a contemporary economy. In preparing this report the Council had the

1 Before the advent of Islamic banking practices, most of the scholarly writings on the subject seem to agree with the fundamental role of the PLS. The only exception may be that of al Sadr, who prefers the principles of ju’ala and ijara as bases of financial intermediation. According to al Sadr, banking services could be rendered on the basis of the ju’ala principle - contract between the client and the bank for specific service against specific fees. Earlier Qurishi had also suggested a similar arrangement whereby a central finance house, in addition to administering zakah, may offer banking services on the basis of service charge e.g., like the provision of health, education and other social services. The idea also got support from Muslihuddin whose understanding of mudharabah made him apprehensive about its capability as a financing principle. al Sadr also downplayed the role of the PLS in managing the bank’s assets and gave preference to the principle of ijara (see, Siddiqi 1976).

In the framework of the literature so far reviewed consumer’s credit can only be financed by qard i.e., benevolent loan (see, particularly Siddiqi 1983 pp 155-61). In an Islamic society consumers’ cooperatives are expected to enhance the provision of this service. In this regard, an important observation is the complimentarity of the operations of the two institutions of Islamic banks and qard funds or cooperatives (see, Ahmad 1947). These institutions promote each other. Therefore, their simultaneous existence becomes important. The cooperatives can keep their cash balances with the Islamic banks and can earn profits. The banks always maintain a certain part of current accounts in cash form. This can be used as a base for the generation of qard.

Irshad (1963) suggested that the Islamic bank shall promote sale on credit for consumption purposes. This will increase demand and the resultant increase in sale could be an incentive
advantage of benefiting from sources of shari’ah, views of Islamic economists and experience of Islamic banks which had already been operating for some time when the report was prepared. Although, in preparing the report the Council aims at providing a blue-print for transforming the banking system in Pakistan yet its general validity is widely acknowledged.

The report provides a comprehensive package of interest-free financing. The authors of the report had several considerations in addition to the primary objective of elimination of interest. These included bank safety, inter-sector resource allocation, suitability of the proposed modes for different users, etc. The report classified the Islamic instruments of financing into PLS, sale and services based modes.

The central recommendation of the report was to rely utmost on the PLS and the least on the mark-up as the later can open a back door for interest. Commenting even on this recommendation, Siddiqi writes, “I would prefer, bai' mua'jjal (deferred trading) is removed from the list of permissible methods altogether....in order to save interest-free banking from being sabotaged from within” (Ahmad et. al., 1983 p. 227).

The weaknesses of the deferred trading mechanism are a source of strength for the PLS theory. Pakistan started introducing Islamic modes of financing in 1981. After a decade long experience, in 1992, the Federal Shariat Court made a judgment on the elimination of interest from the economy. The court has re-produced substantial material as an evidence supporting the judgment. One out of several interesting quotations from a leading shari’ah consultant for Islamic financial institutions, namely Justice Taqi Usmani is re-produced here. "...An important condition of "Bay' mua'jjal (deferred trading)" is that the price of the goods for sale and the period of repayment should precisely be determined at the time of the contract. In the case of default on the part of the buyer any legal action may be taken against

for earning profit. It should be noted that this point is dealt with latter in detail particularly by Homoud but with an entirely new perspective.
him but there is no justification for enhancing the price on account of prolonging the period of repayment which comes in purview of interest. The scheme not only ignores this, but also, in some cases, clearly violates this rule. For example, it is laid down that mark-up rate on import bills for the first 20 days would be 0.78 percent and, if not settled during the period, the rate will be enhanced by 0.58 percent for a further period of fourteen days. If it is still unpaid, the rate will further be enhanced by 0.62 percent. And if not yet paid (within this total of forty-eight days), the rate of enhancement would be a further 0.79 percent for every fifteen days. The above condition is nothing else than the procedure of charging interest. The only difference is that this is now termed as mark-up.” (FSC, 1995, p. 172). As predicted by Siddiqi, in case of Pakistan, mark-up merely opened a back door for interest.

Thus, the court reached the conclusion that “...Mark-up system, as in vogue, is held to be repugnant to the injunctions of Islam and the word ‘mark-up’ be deleted from the provisions of sections 79 and 80 of Negotiable Instruments Act, 1881...the best modes of Islamic (financial) system as alternate to the present system, are Mudharabah and Musharakah...” (ibid. p. 177, emphasis added).

2.3 ECONOMICIS OF PROFIT SHARING

As the PLS mechanism is proposed to replace the interest mechanism (one of the fundamental institutions of the market economy), theoretically, the PLS is a significant proposal. For this reason, it attracted several Ph.D., dissertations and rigorous model building from a number of researchers. These models can be classified thematically such as, contractual models, portfolio models, macro-economic models, models of investment theory and macro-monetary models etc. We refer to these works during the course of our research, but is not possible to review all these contributions thoroughly. However, in the following we discuss selected monetary models of the PLS in
somewhat detail as these models are central to all the other models and refer to other model in relevant places of different chapters.

2.3.1 Monetary Models Of Profit Sharing

The PLS replaces the profit sharing (p/s) ratio which is a real variable for the interest rate which is a monetary variable. In this manner, the p/s ratio renders the functions of a crucial monetary variable. For this reason, we consider the PLS is an important monetary model. In the present section, we review and discuss the evolution of the basic monetary model of the PLS and the development of its various variants.

A. The Fundamental Model of Financial Intermediation

The basic PLS model and its fundamental variables were first formally defined and their inter-relationship discussed by Siddiqi (1983). The model also provides a framework analyzing the effects of monetary policy changes and its transmission mechanism. Most other models of the PLS are refinements and extensions of this basic model. Therefore, a more detailed review of Siddiqi's model of PLS financing is in order.

Definition and Determination of Basic Variables

In our understanding, the most important contribution of the model in question is the definition of a number of fundamental variables. For this reason, we start the discussion of this model by the definition of the basic variables of the model.

The Rate of Profit

For defining profits, the concept of capital growth underlying the mudharabah contract is followed. In the traditional mudharabah, capital growth (profit) is known as the difference between the monetary values of all
tangible inputs (including hired labor and liability financed assets) of a specific economic activity and the monetary value of all tangible outputs of the activity. The opportunity cost of the entrepreneur's services is reflected in his positive share in profits if any. In case of loss, the loss of the entrepreneur is fully reflected in the opportunity cost of his services. For the owner of funds, a profit is capital appreciation, and a loss capital depreciation.

Siddiqi emphasizes that the concept of profit underlying mudharabah is an accounting concept; it includes the reward for capital, some kinds of rent as defined by the economists (rent also covers hired labor) besides the reward of enterprise and does not include interest. Profit is thus seen as a result of the divergence of monetary values of all tangible inputs and tangible outputs. The conventional dichotomy between pure profits and interest as productivity of entrepreneur-ship and financial capital, respectively is rejected.

It is interesting to note that the case of determination of profits is not taken up. The model, assumes the existence of a positive capital growth (profits) and takes the task of its sharing between different parties. Therefore, this initial monetary model as well as its subsequent extensions do not incorporate the possibility of loss. Indeed, the probability of occurrence of loss is accepted. In the models under discussion, the possibility of a positive capital growth is taken as a simplifying assumption. In particular, Siddiqi justifies this on the basis of the fact that the banks as core managers of funds will almost ensure this.

The existence of a positive rate of profit is not crucial for the model either. Instead, the acceptance of a pro rata p/s ratio by parties is crucial. The p/s ratio is based on the expectation of entrepreneurs about future profits (p). So entrepreneurial expectations provides the most crucial framework for the model. This expectation is shared by primary financiers (savers who deposit in banks) and secondary financiers (banks as intermediaries).

27These two elements are not included in the initial model and have been added by us. The concepts are discussed in more detail in chapter three.
Bankers' Ratio of Profit Sharing

Banks are secondary financiers. Their resources (liabilities, but not fixed in the present models) include, their own share capital, PLS deposits and part of demand deposits. These are managed by investing in a variety of ways, chief among them being supply of mudharabah funds to businesses in Fig. 2(a) panel (B). The banks are entitled to an agreed percentage share in the profits accruing to these funds in the business enterprise in which they are invested. This percentage is called the Banker's Ratio of Profit-Sharing, (BRP). The liability of loss in this case is also limited. Banks are involved in a double bargain. Given \( p \), banks bargain with entrepreneurs on behalf of their depositors as well as share-holders. Claim by banks for higher BRP will discourage and lower BRP will encourage investment demand by entrepreneurs \( D_e \) in Fig. 2(a) panel (B). Conversely, entrepreneurs can get more funding by offering higher BRP. Other things given, the supply of mudharabah funds can be treated as a direct function of BRP. Given \( p \), the equilibrium level of BRP is determined by the supply of and demand for mudharabah funds.

Depositor's Ratio of Profit Sharing

As Siddiqi's model of PLS is based on the concept of "two-tier-mudharabah", in the model, the depositor is a primary financier and the bank a secondary financier. In the model, a deposit is a mudharabah contract between the depositor as supplier of deposits \( S_d \) in Fig. 2(a) in panel (C), and the bank as a manager. Thus deposits of the bank comprise of hundreds of thousands of mudharabah contacts. The liability of depositors to bank losses is limited to the extent of their deposits. If expected rate of profits accruing to banks from entrepreneurs, are given as \( p \), the percentage of bank profits given to the depositors is described as the depositor's ratio of profit-sharing (DRP). The DRP is the ratio in which depositors share the profits accruing to deposits as they are employed profitably by the banks. In the model it is determined after the determination of BRP. Given \( p \) and BRP, the supply of mudharabah deposits is treated as a direct function of DRP; the
higher this ratio the more the depositors stand to gain and the more the supply of PLS deposits. Depositors know that given BRP, their claim for DRP is a constraint on the bank's demand for their funds $D_b$ in Fig. 2(a) panel (C), - claim for higher DRP will weaken and lower DRP will support the demand for their deposits by banks. The equilibrium level of DRP is thus determined by the supply of and demand for mudharabah deposits, given $p$ and BRP.

**Determination of Equilibrium Profit Sharing Ratio**

We develop a modified and integrated version of Siddiqi's monetary model of the PLS in Fig. 2(a). The basic purpose of this variant of the model is the determination of the equilibrium $p/s$ ratio for the economy. Given banks' perception of entrepreneurial profits and their own intermediation cost, in panel (A) the banks negotiate (on behalf of depositors) a cost sharing formula with entrepreneurs. If $oo''$ is the total intermediation cost, $o_1$, $o_2$, and $o''3$ replicated as $p_1$, $p_2$ and $p_3$ are three of the many cost sharing possibilities. The $o_1$ possibility shows that all costs will be shifted to the depositors. Conversely, the $o''3$ possibility shows that all costs are shifted away from depositors to entrepreneurs. Banks as prudent institutions know that to clear the market for funds the intermediation cost has to be shared equally by the depositors and users of funds. This is given by the $o'2$ cost sharing possibility line. In this case, the $oo'$ amount of intermediation cost will be shared by depositors and $o'o''$ amount by the entrepreneurs. Whatever the intermediation cost may be, to clear the market for funds, it must be shared in equal proportion by depositors and entrepreneurs. As a result, the BRP is set at point $a$ in panel B given the demand curve by entrepreneurs for PLS funds $D_e$ and $S_b$ supply curve of banks of the same funds. Banks do not retain any funds, there are no excess reserve requirements either; therefore, deposits and advances of funds must match. The equilibrium DRP is determined in panel (C) at point $b$ given the demand of banks for deposits $D_b$ and the supply of deposits $S_d$. With these equilibrium levels of DRP and BRP, in panel D, the optimal level of $p/s$ ratio for the economy is set at point $p^*$.  


Fig. 2(a): Determination of Profit Sharing Ratio under PLS

The monetary models of PLS formally discuss the relative stability of the macro-monetary system under the new regime. Siddiqi’s model provides a formal and necessary input in this regard. However, following Siddiqi, several other researchers have developed models to show the relative stability of the PLS-based monetary system. To start with, the stability of the system can be gauged by introducing changes in the most fundamental variable of the model - the expected profits, p. The determination of DRP and BRP, and demand and supply of funds at both level is based on the assumption that there is a given expected rate of profits, p the information about which is equally available to the entrepreneurs, bank and depositors. What will happen if the expected profit, p changes? Or, if the availability of information changes. The monetary models do not formally consider the significance of unequal access to information; the consequences of this will be discussed under the contracting models. The effects of a change in expected profits are discussed
An increase in expected profits will expand the entrepreneurs' investment demand. This will raise the expectations of banks and depositors about profits proportionately. The primary supply of funds (deposits) will expand, banks will also welcome this. Thus, according to the demand and supply conditions of PLS funds discussed above, an increase in expectations about profits will cause expansion at all levels. Since all parties have equal information about expected profits, given BRP and DRP, the expansion will be proportionate at all levels. A decrease in expected profits and given BRP and DRP, there will be proportionate contraction at all levels. Siddiqi considers various possibilities of equilibrium with expansion and contraction caused by an increase and decrease in p, respectively. Moreover, different possibilities of changes in the BRP are also discussed. As far relative changes in DRP and BRP are concerned, the conclusion is that “Supply of savings into the banks' investment accounts is likely to be sluggish in its response to changes in p, as compared to the response of the bankers' demand for deposits to changes in p, because the latter are better informed and keener to take advantage of the expected changes. Should this be true, changes in p will cause DRP to change in the direction in which p changes. A rise in p will cause DRP to rise and a fall in p will cause DRP to fall. This will not affect our conclusion relating to BRP, which will also change in the direction in which p changes.”

As p* is a ratio of DRP and BRP, and as BRP is determined first, as a contractual phenomenon settled between the owner and user of funds, it is the most important monetary variable in the PLS regime. There are some objections on the use of this contractual phenomenon by the central monetary authorities as an instrumental variable. But, in the monetary models of PLS, the BRP can be used as a core instrument of monetary policy. By manipulating the BRP, credit and resource allocation can be effectively regulated in the economy.
B. A Model Of Monetary Transmission

Mirakhor and Zaidi (1992) extend the monetary model of the PLS to an open Islamic economy. Since this extension is based on Tobin (1969) and Tobin and Brainard (1968), some preliminary remarks on the relevant aspects of these works for the PLS-based economy would be useful. The famous Tobin's "q" (the ratio of the market value of firms to the replacement cost of their physical capital) theory explains the phenomenon that changes in monetary policy effects the economy through changes in the valuation of equities. The relevance of the "q" theory for the Islamic economy is found to be in the fact that the "q" ratio like the p/s ratio is the principal link between the financial and real sectors of the economy.

A monetary policy which causes a relatively higher increase in the market value of firms in relation to an increase in the replacement cost of equipment, makes new equipment and plants cheaper. This will motivate new equity issues by companies for buying new plants and equipment. The effect of such a monetary policy would be expansionary. On the other hand, if monetary policy reduces the "q" ratio by increasing replacement cost or by decreasing market value of equity, companies will have no incentive for expansion and the effect of monetary policy will be contractionary.

A decrease in money supply will lead to lesser purchase of equity by the public causing a decrease in "q". In addition, interest rates will increase as a result of a decrease in money supply and the public will substitute equity holdings with bonds, again leading to a decrease in the value of equity and investment expenditures. Households, firms and financial institutions will adjust their portfolios of different assets accordingly (the assets in these portfolios are assumed to be substitutes in gross terms). The changes in monetary policy will thus effect aggregate expenditure and real income in the economy through an effect on the value of equity.
In the original PLS model of Siddiqi the central monetary authority will regulate the p/s ratio. Thus in PLS-based economy, compared to the interest-based regime, authorities will lose control of monetary policy as the p/s ratio is a looser instrumental variable compared to interest. Mirakhor and Zaidi contend that, according to the general equilibrium approach to monetary theory, the good news is that "a principal way in which monetary policy affects aggregate demand is by changing the valuation of physical assets relative to their replacement costs, and that monetary policy can accomplish such changes even in the presence of uncontrolled financial intermediaries. (ibid p. 401).

Some of the main equations but all notations and assumptions of the model are reproduced here. There are three assumptions. First, there are four assets: bank equity, bank loans, physical capital, and currency. In the model, the set of excess demand equations for these assets determines the rates on the assets, given the values of the various exogenous variables; demand for assets being a function of their respective rate of return. Since assets are gross substitute for each other, change in the rate of return of one asset will bring along change in the composition of the portfolio but only partially. This implies that the partial derivative of the asset demand function with respect to its own rate is positive, while with respect to an alternative rate, it is negative or zero. Second, the demand function of household and firms for bank deposits is related to the fact that the four assets are available as gross substitute. Finally, as far the foreign sector is concerned it holds only two of the four assets: PLS deposits in local banks and equity. The characteristics of important macroeconomics variables are the same as in Siddiqi's model. For example, shocks on the asset side of banks will be automatically transmitted to the liability side. In other word, banks will not be required to liability management as deposits are not guaranteed.

After appropriate mathematical manipulations for excess demand equations, equation (1), with matrix A with elements aij, as a matrix of partial
derivatives of the excess demand functions with respect to the endogenous rates of return, and B defined analogously with respect to the exogenous variables, is derived\(^{28}\).

\[
AdY + BdX = 0 \text{ or } AdY = -BdX \tag{1}
\]

with

\[
dY = \begin{bmatrix}
   drh \\
   dr \\
   drk
\end{bmatrix}
\quad dX = \begin{bmatrix}
dG \\
dc \\
dH \\
dK \\
drf \\
de
\end{bmatrix}
\]

\[
dY = -A^{-1}BdX
\tag{2}
\]

A fundamental assumption of the model is that all assets in each portfolio are gross substitutes for each other. Given these specifications of the model, the objective is to determine the effect of monetary policy change. As central bank holding of equity in commercial banks is the only control variable, for a desired expansionary monetary policy, the central bank will buy and for a contractionary monetary policy will sell commercial bank equities. From equation (2) the entries for changes in government holdings \(dG\), of bank equities on the endogenous rates of return are:

\[
drh/dG = (1/|A|) \left[ -(a_{22} a_{33}) + (a_{23} a_{32}) \right] \tag{3}
\]

\[
dr /dG = (1/|A|) \left[ -(a_{23} a_{31}) + (a_{21} a_{33}) \right] \tag{4}
\]

\[
drk/dG = (1/|A|) \left[ -(a_{21} a_{32}) + (a_{22} a_{31}) \right] \tag{5}
\]

All the three endogenous rates of return decrease as a result of increase in \(G\). An increase in \(G\) increases the supply of funds available to the commercial banks. Given the demand for these funds the rates of return on the finance offered must decline. As capital becomes cheaper, the demand

\(^{28}\text{For derivation of the equation see the original paper.}\)
for investment expenditure will increase. The economy will accumulate physical capital.
<table>
<thead>
<tr>
<th>Symbols</th>
<th>Meaning of Symbols</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>Domestic liabilities to domestic residents (as a fraction of private sector wealth)</td>
<td>D.</td>
</tr>
<tr>
<td>D.</td>
<td>Domestic liabilities to domestic residents (as a fraction of private sector wealth)</td>
<td>D.</td>
</tr>
<tr>
<td>E</td>
<td>Government holdings of bank equities (as a fraction of private sector wealth)</td>
<td>E</td>
</tr>
<tr>
<td>PL-S-based</td>
<td>Holding of wealth generated as a result of changing finance</td>
<td>PL-S-based</td>
</tr>
<tr>
<td>K</td>
<td>Physical capital (as a fraction of private sector wealth)</td>
<td>K</td>
</tr>
<tr>
<td>C</td>
<td>Currency hold in the portfolio of banks</td>
<td>C</td>
</tr>
<tr>
<td>F</td>
<td>Required reserve ratio for banks</td>
<td>F</td>
</tr>
<tr>
<td>e</td>
<td>The rate of change of the exchange rate, where the exchange rate is assumed to be floating exchange rate regime</td>
<td>e</td>
</tr>
<tr>
<td>f</td>
<td>Return on foreign assets</td>
<td>f</td>
</tr>
<tr>
<td>( \pi )</td>
<td>Return on physical capital</td>
<td>( \pi )</td>
</tr>
<tr>
<td>z</td>
<td>Return on bank equities</td>
<td>z</td>
</tr>
<tr>
<td>( \mu )</td>
<td>Return on bank loans</td>
<td>( \mu )</td>
</tr>
<tr>
<td>D.</td>
<td>D.</td>
<td></td>
</tr>
<tr>
<td>D.</td>
<td>D.</td>
<td></td>
</tr>
<tr>
<td>D.</td>
<td>D.</td>
<td></td>
</tr>
<tr>
<td>D.</td>
<td>D.</td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>f</td>
<td></td>
</tr>
</tbody>
</table>

Exhibit 2(a) Definition and Characteristics of Variables of PL-S Models.
C. A Portfolio Model Of Islamic Banking

To show that the probability of bankruptcy of an Islamic bank can be reduced by increasing PLS - based assets in their overall portfolio, Mirakhor (1987) develops a portfolio model of Islamic banking under condition of uncertainty. The model is based on a number of assumptions: a) The probability of a bank to confront bankruptcy depends on its ability or otherwise to absorb shocks of losses, b) As a safeguard against bankruptcy, monetary authorities fix a certain minimum capital asset ratio (k), this constrains the bank's total leverage, c) There are only two assets, mark-up (H) and PLS (M), and d) Bankruptcy is related to the performance the total portfolio of the bank of H and M, rather than either one of the two assets.

For the bank's total leverage, given assumptions b) and c), the model specifies that,

\[ f_H + f_M = \frac{1}{k} \text{ or } f_H = \frac{1}{k} - f_M \] ................................. (1)

\( f_H \) and \( f_M \) are respectively, fraction of mark-up and PLS assets absorbing the bank's funds.

The return on the bank's overall portfolio is,

\[ \pi = f_H \pi_H + f_M \pi_M \] ................................. (2)

\( \pi_H \) and \( \pi_M \) are respectively, net return per unit of mark-up and PLS assets.

The variance of the return on the bank's overall portfolio is therefore,

\[ \delta^2 \pi = f_H^2 \delta^2 H + f_M^2 \delta^2 M + 2 f_H f_M \delta_{HM} \] ................................. (3)

\( \delta^2 \pi \), \( \delta^2 H \), \( \delta^2 M \) and \( \delta_{HM} \) are respectively, variance of overall portfolio return, variance of return on mark-up assets, variance of return on PLS assets and covariance between return on mark-up and PLS assets.

The probability that a bank will face bankruptcy (defined as a situation where total losses of a bank exceed its total capital i.e., \( \pi < -1 \)) is,
\[ P(\pi \leq -1) = \frac{\sigma^2}{(\pi + 1)^2} \] .................................................. (4)

(For reaching at this equation through the process of Chebyshev’s inequality, see the original model).

\[ \pi = f_H \pi_H + f_M \pi_M \] ................................. (5)

Where \( \pi, \pi_H, \) and \( \pi_M \) are respectively, expected mean overall return, expected mean return on mark-up assets and expected mean return on PLS assets.

Substitution of Equations (3) and (5) in Equation (4) gives,

\[ P(\pi < -1) < \frac{f_H^2 \sigma^2_H + f_M^2 \sigma^2_M + 2f_H f_M \sigma_{HM}}{[f_H \pi_H + f_M \pi_M + 1]^2} \] ................................. (6)

Equation (6) provides the most crucial relationships of the model, namely, a) relationship between expected returns and mark-up and PLS funding of the bank, b) the variability and co-variability of those returns, c) the breakdown of assets between mark-up and PLS, d) the capital position of the bank and e) the probability of the bank to go bankrupt given these relationships.

The total variance of return on the bank’s overall portfolio cannot be minimized by merely focusing on either mark-up or PLS funding. Instead, it can be minimized by simultaneously focusing at both. Thus to minimize the variance of return on the overall portfolio we need,

\[ \frac{\partial \sigma^2_\pi}{\partial \pi_H} = 2f_H \delta^2_H + 2f_M \delta_{HM} = 0 \] ................................. (7)

and \[ \frac{\partial \sigma^2_\pi}{\partial \pi_M} = 2f_M \delta^2_M + 2f_H \delta_{HM} = 0 \] ................................. (8)

The optimal mark-up and PLS assets for the bank’s overall portfolio are found from the last two equations,

\[ f_H = \frac{\sigma^2_M - \sigma_{HM}}{k(\sigma^2_H + \sigma^2_M - 2\sigma_{HM})} \] ................................. (9)
The overall portfolio of mark-up and PLS assets which minimizes $\delta^2 \pi$ is given by

$$f^*_M = \frac{\sigma_{HM} - \sigma_H^2}{k(\sigma^2_{HM} + \sigma^2_M - \sigma^2_H)}$$ \hspace{1cm} (10)

The overall portfolio of mark-up and PLS assets which minimizes $\delta^2 \pi$ is given by

$$f^*_H = \frac{\sigma^2_M (\bar{\pi}_H + k) - \sigma_{HM} (\bar{\pi}_M + k)}{k[\sigma^2_H (\bar{\pi}_M + k) + \sigma^2_M (\bar{\pi}_H + k) - 2\sigma_{HM} (\bar{\pi}_H + \bar{\pi}_M + 2k)]}$$ \hspace{1cm} (11)

Equation (11) sets two important functional relationships: a) The optimum level of mark-up assets in the bank's overall portfolio is an increasing function of the mean return on mark-up assets and variance of return on PLS assets and a decreasing function of variance of return on mark-up assets and mean return on PLS assets; the opposite is true for the remaining part of the portfolio, i.e., for the PLS assets, b) The optimal level of mark-up in the overall portfolio is an increasing function of the covariance of return between mark-up and PLS assets, only if: $(\bar{\pi}_H + k) \delta^2_M > (\bar{\pi}_M + k) \delta^2_H$.

Thus, the implication is derived that if expected returns from PLS and mark-up are different, the fraction of PLS and mark-up in the overall portfolio will effect the portfolio's return. If the expected returns on the PLS are higher than that on mark-up, restriction on the use of PLS will increase the probability of bankruptcy. Such would be sub-optimal policy for the bank and for the macro - economy.

We have three main observations on the model. In chapter three we briefly discuss the fact that the model ignores some basic issues, namely, a) diversification leads to an increase in the cost of capital and macroeconomics inefficiency and b) mark-up is a fixed asset not fixed liability for the Islamic banks, hence it may not cause bankruptcy in the form caused by interest based fixed liabilities do. In chapter five we discuss the fact that the mark-up is in fact a fixed return asset of an Islamic investment portfolio which the model in question ignores.
D. Monetary Model Of Price Stability Under PLS

Under Islamic financing in general and the PLS in particular, creation of money without the creation of a corresponding real output or service is limited compared to the interest-based system. Due to this fact, it is argued that in the PLS-based system the level of inflation would be lower compared to the interest-based system. Latif (1985) presents a formal model aiming at comparing monetary causes of inflation under a PLS as compared to an interest-based regime. We find this model more as a critique of the interest-based monetary system rather than offering a model of stability of the PLS as such. Nevertheless, it is useful to discuss the main model in brief. The model is a representative of three monetary scenarios under which credit is created in the interest-based system, namely, no time deposits and only demand deposits ($\gamma_d$), there are no excess reserve requirements except the required reserve ratio and currency notes are not used for transactions, (only demand deposits and cheques are used for this purpose).

Credit Creation With no Excess Reserve

Given all the three assumptions, if one monetary unit, $D_1$, enters the bank network its $\gamma_d$% will be kept in reserve and $1-\gamma_d$ % will be extended as credit. The volume of money created is as follows:

$$\Delta D_1 = 1$$
$$\Delta D_2 = 1 - (\gamma_d) = 1$$
$$\Delta D_3 = k - k \cdot \gamma_d = \gamma_d (1 - \gamma_d) = k^2$$
$$\Delta D_4 = \ldots = k^3$$
$$\ldots$$

$$\Delta D_n = \ldots = k^{n-1}$$

changes in the total deposits are calculated as

$$\Delta D = \sum_{i=1}^{n} \Delta D_i = (1 + k + k^2 + k^3 + \ldots) \quad 0 < k < 1$$
Money multiplier (demand deposit) can be shown as \( m_d = \frac{1}{\gamma_d} \). For example, if 100 monetary units enter the network (in the form of a new deposit) and if \( \gamma_d = 20\% \) the volume of money in circulation is \( \Delta D = \frac{100}{1-(1-\gamma_d)} = \frac{100}{.2} = 500 \).

Under the scenario of no excess reserve, no currency and no time deposits, the newly created 400 units of money is bank profit and \( \gamma_d \) plays a crucial role in this regard. The newly created money has no corresponding output in the real sector of the economy, thus inflation would be explosive.

Credit Creation Under Existence of Excess Reserve

The introduction of excess reserve \( ER \), slows down the credit creation power of banks. If excess reserve ratio is \( \gamma_e \) then \( \gamma_e = ER/D \), where \( D \) is total demand deposits. Given the money multiplier \( m_d = \frac{1}{\gamma_d + \gamma_e} \), if \( \Delta D_1 = 100 \) and \( \gamma_d = 20\% \) and \( \gamma_e = 20\% \), then changes in the volume of money in circulation, would be \( 100/(.20 + .20) = 250 \), changes in the volume of loans \( \Delta L = 150 \).

Credit Creation When Currency is Used in Transactions

The introduction of currency further slows down the process of credit creation and inflation. A credit by bank will lead to the creation of current account as well as currency \( C \) in the hands of people depending their propensity to use currency \( \alpha \). Then \( \alpha = \frac{C}{D} \). In this case, \( \alpha\% \) of \( \Delta D_i = 1 \) will not be deposited in the bank. Therefore,

\[
\begin{align*}
\Delta D_2 &= (1-\gamma_d) (1-\alpha) = \lambda \\
\Delta D_3 &= (\lambda-\lambda \cdot \gamma_d) (1-\alpha) = (1-\gamma_d) (1-\alpha) = \lambda^2 \\
\Delta D_4 &= (\lambda^2-\lambda^2 \cdot \gamma_d) (1-\alpha) = \lambda^2 (1-\alpha_d) (1-\alpha) = \lambda^3
\end{align*}
\]
\[
\Delta D_n = \lambda \cdot \Delta D_n-1
\]

and total change in the demand deposit in circulation would be

\[
\Delta D = \sum_{i=1}^{n} \Delta D_i = 1 + \lambda + \lambda^2 + \lambda^3 + \ldots = \frac{1}{1 - \lambda}
\]

\[
\Delta D = \frac{1}{1 - (1 - \gamma_d)(1 - \alpha)} \cdot \frac{1}{\alpha + \gamma_d - \alpha \gamma_d} = m_d
\]

If preliminary demand deposit is 100, and \( \gamma_d = 20\% \), \( \alpha = 25\% \), the volume of bank drafts (cheques) which is a collection of demand deposits will be:

\[
\Delta D = \Delta D_1 \cdot \frac{1}{\alpha + \gamma_d - (\alpha \gamma_d)} = \frac{100}{25 + (0.20)(0.25)} = \frac{100}{4} = 250
\]

If the total volume of money in circulation is equal to the volume of the bank-notes in circulation, plus total demand deposit (\( M = C + D \)), where \( M \) stands for total volume of money in circulation also, changes in those volumes would be:

\[
\Delta M = \Delta C + \Delta D \quad \text{and} \quad \alpha = \frac{\Delta C}{\Delta D} \implies \Delta C = \alpha(\Delta D)
\]

\[
\Delta D = \frac{1}{\alpha + \gamma_d - \alpha \gamma_d}
\]

(if one unit enters in the beginning as preliminary deposit) As a result :

\[
\Delta M = \Delta D + \alpha \Delta D = \Delta D(1 + \alpha)
\]

\[
\Delta M = \frac{(1 + \alpha)}{\alpha + \gamma_d - \alpha \gamma_d} \quad \text{is the multiplier of the supply of money} \quad m
\]

\[
m_d = \frac{1}{\alpha + \gamma_d - \alpha \gamma_d} \quad \text{is multiplier for Deposit money (demand deposit).}
\]
Credit Creation under the Existence of Currency, Cheques and Excess Reserve.

In this case, where all assumptions have been removed, there are constraints on the multipliers such as

\[
m = \frac{(1 + \alpha)}{\alpha + \gamma_d + \gamma_e - \alpha(\gamma_d + \gamma_e)}
\]

\[
m_d = \frac{1}{\alpha + \gamma_d + \gamma_e - \alpha(\gamma_d + \gamma_e)}
\]

Latif does not present a case of price stability under the PLS due to an excess reserve requirement or higher level of currency use. He rather argues that even if there is no excess reserve requirement and even if the use of currency is lower, due to fundamental nature of the Islamic economy, inflation will be lesser in the Islamic economy. The most distinctive characteristic of the PLS-based system as shown in the basic model of PLS economy is that new credit cannot be created without creating a corresponding creation of new output of goods or services.

E. Monetary Model Of Demand for Investment

Introduction of the PLS is likely to effect the demand for investment. In this respect, a number of scenarios are put forward by different researchers and different models are formulated. One interesting model is presented by Khan (1996). Before presenting his formulation, Khan first discusses two other propositions:

First, Khan refers to Haque and Mirakhor (1986), who contend that the marginal productivity of capital will be lower in a PLS economy, therefore, investment will be high in such an economy. According to Khan this proposition ignores the supply side.

Second, Khan refers to (Nadiri 1987) who assumes that in the PLS system the entrepreneur has nothing to lose in financial terms. Thus, the demand for funds will be infinitely elastic. Khan contends that the abolition of
interest does not mean the abolition of rate of return on capital, therefore, funds cannot be freely available in the PLS system.

Khan's alternative presentation can best be understood in the framework of the offer curves. In Fig. 2(b) we have presented a simplified and modified version of Khan's model. The model implies that the financier offers its funds and the entrepreneur offers a p/s ratio after deciding on the ratio of profits it must apportion for itself. The offer of funds by the financier OF is thus partly a positive function of the p/s ratio offered but partly an inverse function of the risk of "putting all eggs in one basket". For a small amount of funds, the direct relationship works strongly but as more funds are supplied, the inverse relationship becomes stronger. Thus the financier has to limit the supply of its funds to a single entrepreneur.

On the other hand, OE shows the offer of p/s ratio by the entrepreneur. The entrepreneur has to keep a certain level of profits for itself. Knowing that OF has limitations, the entrepreneur will offer its p/s ratio. As more funds are employed, the law of marginal productivity will apply and the p/s ratio is bound to decrease limiting the demand for capital.

![Fig 2(b): Demand for Investment Under PLS](image-url)
At an equilibrium, O-f amount of funds will be offered at O-p/s share in profits. If the p/s ratio offered is reduced, lesser funds would be available. It is obvious that there are limitations on both the demand as well as supply of funds. Thus, the main conclusion of Khan, that in an Islamic economy neither capital would be available free nor it is unlimited.

2.3.2 Some Practical Problems And Prospects

The theory of the PLS presented briefly above envisions some practical problems of implementation. Some important of these problems are briefly discussed here, whereas, in subsequent chapters we discuss these problems more formally and critically.

2.3.2.1 Contractual Models of the PLS and Incentive Considerations

We observed in section 2.3 that the basic model of the PLS is based on availability of full information to the two (all) parties. This is justified on the basis that the MM contracts are trust contracts in which both parties do not hide information from each other. But contractual models of the PLS, e.g., Khan (1983b) challenge that in practice, the PLS contract inherently involves information asymmetry.

According to conventional wisdom, the ideal situation to perform a task, is to do it oneself. But, as it is said in the rationalization of the mudharabah contract, that all fund owners may not also have the ability and time to manage them. Similarly, people having the abilities and time to manage financial resources may not own these resources.

This necessitates a joint venture arrangement among the owner of financial resources (financier) on one hand and human resources (entrepreneur) on the other. The financier and entrepreneur share accrued profits according to agreed ratios. Profits represent the common interest of the two parties. Theoretically, therefore, their incentives under this arrangement are harmonious. However, in practice, when one party extends funds for an enterprise, he would expect the entrepreneur to utilize the funds
the way he would have utilized them (had he the requisite abilities and time!). Whether or not, the owner of funds will realize his expectation, virtually, depends on his relationship with the entrepreneur. The following two situations are most representative of this relationship.

Scale of Operations

Several fund owners viz., depositors and equity holders may contribute their funds to a single entrepreneur such as an Islamic bank or a corporation. The very nature of the organizational structure of an Islamic bank or a corporation is expected to ensure the realization of the fund owners' expectations.

First, the operations of an Islamic bank or a corporation are normally large. This enables them to diversify their portfolios between high yielding risky assets with no covariance of returns on one hand, and less riskier assets, on the other. For this comparative advantage, effort levels of the Islamic banks may be higher compared to those of the individual fund owner and

Second, due to its larger size, and joint ownership, the Islamic bank or a corporation, may be more cost effective in terms of accounting, auditing and performance monitoring. Thus, the supplier of funds, will obviously weigh, the effort levels of the Islamic bank higher, compared to his own or that of an individual entrepreneur.

---

29 However, some points of apprehension must also be mentioned. Firstly, the depositors may confront a hazardous situation in safeguarding their interests. This situation may arise due to the illusion of deposit insurance and that bigger institutions are financially safer (see e.g., IMF 1991). Islamic scholars have also discussed the interests of depositor's under profit and loss sharing modes of deposit mobilization (for a review of this literature, see Kahf and Khan (1992). All these apprehensions are due to the risk of bankruptcy, rather than due to incentive problems. Also see Khan (1986) for comparison of stability of the financial systems under Islamic and conventional deposit mobilization. Secondly, it is argued, that elimination of risk-free financial assets will have an adverse incentive effects on supply of funds. For this, and counter arguments see, Nadeem and Mirakhor (1987).
Observability of Performance

If the scale of operations of the enterprise are limited and does not entail performance monitoring, or joint management, the fund owner cannot realize his expectations without the cooperative behavior of his entrepreneur. The problem with this typical organizational setting is that the entrepreneur controls all the information related to the operational results of the enterprise. He could report the enterprise as inefficient and keep for himself a larger proportion of the project's outcome.

Thus, from the perspective of the fund owner, efficiency of the enterprise can only be reflected from the report of the entrepreneur rather than its actual operation. Consequently, realization of the principal's expectations largely depends on the implicit or explicit incentive mechanisms underlying the contracts.

The problem basically arises due to information asymmetry. In the Islamic literature, the issue of information asymmetry has been discussed in context of exchange. It is concluded, that Islamic jurists recognize the problem of information asymmetry and positive transaction costs. In transactions involving two or more parties, it is natural that some parties may have more information compared to others about certain aspects of the transaction. In an ideal Islamic situation such a comparative advantage should not be exploited to harm the other party.

Islam aims at elimination of the root causes of dishonesty, mistrust and cheating by both moral suasion and regulation of the individual's work environment and motivation. In addition to moral suasion, the fuqaha have recognized the importance of a fool-proof and infallible system which minimizes the room and incentives for dishonesty and maximizes and

---

strengthens the cooperative attitude among parties. Until performance of an agent can be observed free of cost, pure sharing may be a suitable arrangement for pooling financial and human resources. An number of examples can be cited where performance can be monitored without incurring any significant cost.

First, the possibility of performance signaling contributes to the reduction of moral hazard. For instance, Caravan trading automatically signals the performance of its participants. When traders travel and trade in the same markets and merchandise of the same nature, the performance of one trader can signal the performance of the other. This fact may not be of any significance when traders are honest, but its significance for the pure sharing arrangement is immense under lesser favorable moral conditions. Therefore, it can be expected that even if moral conditions are worst, mudharabah can be effectively applied if signaling is possible in general.

Second, even if signaling may not be possible, performance observance may not be costly as markets produce unbiased information in certain cases. For instance, the prices of precious metals, major stocks and currencies are objectively revealed by the market. Under these conditions too, the principle of pure sharing could be generally applicable.

Third, in certain other cases, the two parties could have equal and definite pre-contractual information regarding the expected outcome of their joint enterprise. These will depend on the degree of certainty with regard to factors effecting the outcome of the enterprise. For example, assuming particular climatic conditions, the output of a particular crop on a farm can be estimated. The climate can then be observed without incurring any cost. Such cases could also facilitate the application of the pure sharing arrangement.
2.3.2.2 Limitations Imposed by Real World Situation

The PLS theory suggests that the deposits, and equities of the Islamic banks, Islamic financial instruments, and shares traded in stock exchanges offer channels of financial transactions within and across countries. Moreover, short-term trading particularly, in precious metals and management of foreign exchange risks etc., also offer chances for the use of the pure sharing arrangements of finance. Liquidity, security and high return are the major factors effecting such financial transactions. The socio-economic conditions, prevailing in most of the developing countries, work as dis-incentives. In addition, there are a number of institutional restrictions on a wider scale utilization of the PLS for promoting financial transactions among Muslim countries and among them and the rest of the world.

Non-existence of R&D Intensive Services

The main stream PLS is an equity financing regime. In addition to PLS funds, Research and Development (R&D) intensive services such as a project appraisal study and equipment are important in establishing investment enterprises. In terms of their technological activities, enterprises are classified into five basic categories - enterprises aggressively pursuing R & D activities in order to achieve technical and market leadership; defensive innovator enterprises, which may be R & D intensive but avoid heavy risks of being the first to innovate and seek the benefits of learning from and often capitalizing on mistakes made by early innovators; imitative follower enterprises, which are equipped with a technological capacity sufficient to conduct product engineering and design work, normally seeking licenses from successful innovators; dependent follower enterprises, which accept an essentially satellite or subordinate role, often as a sub-contractor for innovators and imitative followers; and a traditional firm which survives on traditional skills.
In this classification, firms in Muslim countries can best be placed in the range from the third to the last. With a common sense judgment it can safely be concluded that, major concentration of the enterprises in Muslim countries is expected to be in the traditional category. These conditions restrict the preparation of project feasibility studies to be financed by the PLS. In such circumstances, the inflow of foreign capital is inevitable for undertaking new investments in the Muslim countries. A capital inflow will take the form of a package - having particularly a technology component. In most cases multinational corporations introduce their technology as well. Given the present state of Muslim countries, capital transactions among them cannot be expected to guarantee automatic transfer of technology. The capital surplus economies are net technology importers. Consequently, other Muslim countries or external sources of technology are required. Most of the Muslim countries in the reasonably developed category with the degree of industrial specialization above average may, however, be expected to provide technological inputs. In the majority of cases, however, the inclusion of a multinational corporation as supplier of technology may be inevitable in an Intra-MC context of financial transactions.

State of Entrepreneur-ship

Risk taking is basically an entrepreneurial function. The importance of the role of entrepreneur in capital formation has long been recognized. The function of an entrepreneur is central to the basic PLS model as discussed above as profits are crucial in the model. Depending on the organizations, economic systems and economic conditions in question, the general entrepreneurial functions are performed by people of different professional categories - termed as entrepreneurs, managers, and bureaucrats. It is interesting to note therefore, that depending on circumstances, the entrepreneurial functions can be performed by these different organizational agents. The function of an entrepreneur and to some extent also of the managers depends on many factors viz. availability of capital, infrastructural
facilities, market environment, supply of professional experts, marketing specialists etc.

The supply of all such activities differs from country to country. In the least developed Muslim countries, therefore, we cannot expect better supply of entrepreneurs and managers to pursue PLS activities convincingly acceptable to financiers. This shortage could only be filled by the supply of "bureaucratic" industrial organizations. As the economies will develop, institutions are created, trained industrial manpower could be transformed into an organizational form, where managers can take over. Further improvements in the overall infrastructural base could facilitate the entrepreneurial type of organizational activities.

It may therefore, be generalized that a new comer economy to industrialization (majority of Muslim countries) mostly rely on bureaucratic organizations for capital formation. In other words, in the initial stages the public sector has to play a dominant role in the overall process of the industrial organization. Such activities depending on their orientation and government strategies will develop infrastructural facilities. The intermediate economy with such an infrastructural base can be organized by the managers of different corporations. Only an advanced economy can efficiently be organized by the typical entrepreneurs.

The above discussion leads us to conclude that the supply of the entrepreneurial services depend on the structure of the economy in question. In such economies where the degree of industrial specialization is considerably high, one may expect managers to forth-come and organize investment projects. In some cases even the entrepreneurs may also be available. However, in general, a proper institutional support to supply either entrepreneurs, managers or efficient bureaucrats is highly needed in the Muslim countries.

In this regard the PLS has the potential promotive role as it spreads the risks of projects between the financier and the entrepreneur. A financial
system committed to promote the entrepreneurial class can effectively use the PLS. We critically discuss the lack of an initiative among Islamic financial institutions in the area of promotion.

Long-term Nature of Investment

Almost all investments involving new projects are long-term by their nature. Compared to short-term investments e.g., in trading, longer-term investments are exposed to unforeseen risk factors. This increases the uncertainty of these investments, adding a risk premium to them and thus ensuring a higher rate of return. In capital scare countries, the return to capital on such investments are considerably higher compared to the return on the same investments in the developed countries. But unfortunately economic laws do not work under the prevailing socio-economic and political conditions of many developing countries. Political instability, non-commercial risks, sovereign dominance, non-existence of infrastructural facilities, transfer risks etc., are some of the factors which aggravate the climate for long-term investment in these countries. Given the above conditions, unless appropriate institutional arrangements are made, both in terms of redefining contracts as well as structural reforms, appropriate atmosphere for the PLS cannot be ensured.
3.1 INTRODUCTION

In chapter one we set the background and basic issue to be discussed in the present research. We explained that PLS and mark-up are the two parent principles of Islamic financing. The theory relies on the PLS and the practice on the mark-up. In chapter two we discussed the evolution and economics of the PLS.

Like interest, mark-up is a fixed return mechanism and unlike interest, it is permitted in Islamic law. The basic principle of two sided transactions - demand-supply, sale-purchase, offer-acceptance, etc., is central to mark-up as to any other financial transaction. Price deferred sale (PDS) and object deferred (ODS) of goods and services, provide the basis for several commerce-based arrangements of Islamic financing. Islamic financial institutions manage their assets mainly by a variant of the PDS, namely, bai' al murabahah lil amir bil shira (mark-up sale to the orderer). The use of the mark-up mechanism underlying the ODS arrangement can also enhance availability of resources, but the Islamic financial institutions do not utilize it for this purpose.

This chapter aims at tracing the origins of deferred-trade, in particular its underlying pricing mechanism - the mark-up as an Islamic alternative to the interest mechanism. Deferred trade in goods and services generates various types of financial contracts. The mark-up mechanism also underlies all these contracts whenever these are used as modes of finance. We will also discuss these arrangements in brief and offer an economic comparison of these with interest. In addition, the chapter aims to put forward the proposal that for resource mobilization, the potential of the PDS arrangement need to be
exploited by the Islamic financial institutions. Formal discussion of this proposal is however deferred to latter chapters.

3.2 FOUNDATIONS OF TRADE-BASED ISLAMIC FINANCING

The Islamic law makes an apt distinction between *bai'* (sale, including the PDS and ODS) and *riba* (interest). Sale is permitted and encouraged and interest is prohibited and condemned. This guideline is fundamental to the Islamic financial system. In addition, the Islamic regulations for managing the direct result of *riba* and *bai'*, namely, *dayin* (debt), has a crucial bearing on financial contracts.

It should be noted that it is the creation of debt, for which both interest and commerce-based credit are needed. At the time of revelation of the Qur'an, the debt creation through *bai'* and *riba* were a common practice in the commercial region of the Arabian peninsula. The Qur'an regulates these transactions (see, e.g., verse, II: 275). On the basis of the interpretation of these verses by three prominent ancient commentators of the Qur'an - Ibn al Arabi, al Qurtubi, and al Jassas, it can be concluded that as sale can be spot or deferred, the term *bai'* used in this specific verse must specifically be referring to credit sale (PDS and ODS), as it is being used in contrast to another source of credit - *riba*. Ibn al Arabi and al Qurtubi, specifically mention that in this verse, the term *bai'* covers *all permissible deferred sales*.

---

1 This subsection is based on the author's contribution to Kahf and Khan (1992).
2 This refers to the Quranic verse, II-275, See, next footnote. *Riba* is considered to cover all forms of interest. See, OIC Fiqh Academy Resolutions. Appendix-1, of Chapra (1985) provides an English rendering of all Quranic verses and important sayings of Prophet Mohammed and his learned companions about *riba*. A detailed analysis of sale and *riba* can be found in Homoud (1986).
3 It must be noted that debt also results from *qard* (interest free loans).
4 *That is because they say: Trade (bai') is only like interest (riba), but God has permitted trade and forbidden interest...* All translations are taken from Arabic are by Ali (undated).
5 For more details, see Ismail (1989).
Permissible deferred sales are usually of four forms, namely, salam sale (price is paid at the time of contract but object of sale, whether goods or services, becomes due as an in-kind debt), mua'jual sale (object of sale is delivered at the contract time but price becomes due as debt), istisna' sale (price is paid at the time of contract or deferred for a future date and object of sale to be manufactured and delivered later), ijara (sale of use rights of assets where assets are delivered to the user, who in turn pays periodic rentals in advance or on deferred basis). During the early Seventies, another form of credit sale - the deferred form of murabahah (mark-up based financing) was re-discovered from the traditional fiqh (Islamic legal) literature.

The above deferred sales create debts (dayin). The term dayin appears in verse (11:282) of the Holly Qur'an. The three commentators agree that dayin, in this verse includes the result of deferred sales which have been mentioned in the verse discussed before. The debt created by interest-based transactions being prohibited is certainly out of place and not in consideration. In context of differentiating riba from bai', it needs to be noted that riba applies to the transaction of debts whether they result from lending or deferred trade. According to the three commentators, riba is an increment taken over and above the principal of a debt (whether caused by lending or deferred trade) against granting time for repayment.

---

1 Some difference exists in different laws as far the payment of price (the principal of salam) is concerned. The economics of these differences are discussed in more detail in subsequent chapters of this research.
2 O Ye who believe! When ye deal with each other in transactions involving dayin (debt) in a fixed period of time put them in writing...
3 For more critical views, see, Ismail (1989).
4 However, we should also note that another cause of future obligations is direct borrowing (qard) which dominates the contemporary financial system. Borrowing existed among Arabs and Jews at the time of the Prophet (pbuh) as showed by the commentaries of Ibn al Arabi, al Jassas, al Razi and others.
3.2.1 Relationship Between Sale and Finance

Consumption and commerce in few commodities (such as alcoholic beverages and pork) and services (such as prostitution and gambling) and deferred trading in quasi services (such as money and debts) are absolutely prohibited by the Islamic law. Except for these few prohibitions, in general, Islam encourages the free operation of the demand and supply forces.

In all market economies the availability of finance plays an important role in enhancing demand and supply. In conventional economies although credit sale also serves the purpose of finance, yet, the role of interest-based markets is crucial in the provision of finance. In the Islamic economy, since interest-based finance could not exist, the financial constraint on demand and supply is removed by creating a liability through deferred sale.

However, in the Islamic economy, the existence of deferred sale depends on the simultaneous fulfillment of three essential conditions: i) The object of deferred sale can only be goods or services; the Islamic law does not recognize money and debt as the object of deferred sale, ii) price can either be money or goods and services and iii) at a time, either the delivery of the object of sale is delayed or the payment of its price; to generate finance, one should essentially be delayed, but as regulated by law, simultaneously, both cannot be delayed. As a result of the deferred sale, a creditor-debtor relationship is established between the suppliers and users of capital, goods and services. Credit sale (purchase) can be utilized to finance both the demand as well as supply sides of the market.

---

1. This section is taken from the author's earlier work, see, Khan (1991).
2. These sales are prohibited by Prophet Mohammad. For, translation of original text, see, Chapra (1986), appendix-1. For more detailed analysis see, Homoud ibid.
3. The concept of dayin (future obligations) is given in the Quranic verse 11-282 translated by Yousuf Ali as: O Ye who believe! When ye deal with each other in transactions involving dayin (debt) in a fixed period of time put them in writing....
Financing the Demand Side

In case, there is a financial constraint on demand - the buyers are in deficit, credit will be created by the market in question through postponement of the payment of price for the future, while giving delivery of the object of sale at the time of the contract. This is known as *bai' al mua'jal* (price deferred sale). Like the spot price, the deferred price, too, is determined by the mutual understanding of the two parties. Thus, the deferred price of an object could be equal to or higher/lower than the spot price\(^1\).

To explain this phenomenon, we may turn to the basics of the individual demand and supply schedules. Let us assume that all available means can support an individual demand shown as DD in Fig. 3 (a). Let us also assume that the actual needs of this individual are reflected by the \(D^*D^*\) schedule. In the conventional sense, the individual in this case will come to this market with interest-based borrowed money. Thus the dichotomy between the DD and \(D^*D^*\) schedules is not relevant in the conventional markets due to availability of interest-based finance.

Since interest-based borrowing is not available, our problem is therefore, to seek alternative means of credit. Without credit, the demand schedule would remain as DD. Given this demand schedule, it is in the interest of the suppliers to offer credit sale (finance) corresponding to \(s^*s^*\) supply schedule, so that the demand schedule \(D^*D^*\) would become effective. The quantity \(qq^*\) sold corresponds to the amount of finance created, and \(oq^*\) is the total sales. The price will rise to \(op^*\) reflecting the mark-up. Similar would be the case with services.

\(^1\) Since, the availability of finance will increase the effective demand for the goods and services in question, it can generally be expected that the deferred price will be higher than the spot price (under the financially constrained demand). Nevertheless, due to several reasons, e.g., the promise in Islam for a non-material reward for offering the extension of time in the payment of
Financing the Supply Side

Often, production is constrained by the non-availability of finance and simultaneously, households and firms may be in surplus. If the non-existence of the stock is due to a financial constraint on supply, buyers (households and firms) will offer advance payment to secure the acquisition of supply in the future. Thus, the supplier's future income is transformed into his present income and he benefits from the finance. In such a case, the financier is the ultimate buyer of the product. The user of finance is the supplier of the goods/services and the debt will be in-kind\(^1\).

Thus, if the seller is in deficit, finance will be provided by delaying the delivery of the object of sale for a future date while getting payment of price at the time of the contract. This is known as *bai' al salam*, (delayed delivery sale).

---

\(^1\)The monetary value of this debt could either be equal to the prevailing market price or could be different.
3.2.2 Composition of Sale-Based Finance

Based on the general rule of delaying the payment of price (mua’jjal sale) or delaying the delivery of the object of sale (salam sale), deferred transactions, may give rise to several combinations of sales which create deferred obligations as summarized in Exhibit 3 (a). Each of istisna, and ju’ala can provide two different variants of financing, whereas ijara can provide three different variants with respect to the payment of price.

In cases of istisna’ and ju’ala, payment may accompany order, or payment may be deferred even after the accomplishment of the order. In ijara, rent may be paid in advance of using the services of the asset or at some specified intervals or may be accumulated for payment at a later date. The obvious advantage of the last variant in each of the three cases is that payments can be made from the revenues of the project in question.

3.2.3 Evolution Of Mark-Up

The Islamic banks evolved in two phases. The first and practically unsuccessful but historically, a significant experience started in Egypt in 1963. During this phase of Islamic banking, the concept of the mark-up remained undiscovered. The second and present successful phase of Islamic banking started in 1974 with the establishment of the Dubai Islamic Bank, United Arab Emirates, and the Islamic Development Bank (IDB) Jeddah, in 1975.

With the establishment of these and several other specialized banks, the practice of Islamic financing principles were initiated. To start their operations, it was natural for these banks to face tough challenges in innovating financial instruments. Data of early operations undertaken under the Islamic financing principles are available in case of the IDB. Sale-based financing, i.e.,

---

1 In cases of istisna’ and ju’ala where payments are delayed, initially no finance is created. But as soon as orders are accomplished and payments are deferred, finance is created and the buyer benefits from it.

2 By their nature, services are a continuous flow, but rent cannot be paid except at specified times. Therefore, unlike istisna’ and ju’ala, three cases of ijara create finance.

3 This sub-section is based on the author’s contribution to Kahf and Khan (1992).
Murabahah is shown for the first time in IDB operations in the year 1397H (1976). The Quantitative value of this operation was US $ 50.52 million, substantially high compared to other modes of operations then undertaken by the bank. Since its first known use in 1975, by the IDB, the mark-up has achieved an overwhelming position as a mode of asset management by the Islamic banks. In this research we have also discussed potential of the mark-up mode for resource mobilization by the Islamic banks. In the present section we discuss the evolution of the mark-up and related issues.

Definition of Murabahah

Although deferred trade and its various variants were known to provide credit, the mark-up as such was not known in the traditional literature. Rather it evolved only during the early seventies. The use of the mark-up by the Islamic banks has received its highest academic support from Homoud (1975). In his analysis of the murabahah, Homoud quotes Ibn Qudamah who, according to Homoud defines murabahah as: “selling for the cost price plus a specified profit, provided that both the seller and the buyer know the cost price. The seller says, ‘my capital, or the cost price, is a hundred, and I sell it to you for a profit of ten.’ This is permitted and there is no doubt about its legitimacy. No scholar is reported to have regarded it with legal ‘dislike’ (karahah).” (Homoud, 1987, p. 7).

Deferment of Price

It is noticeable that the above definition is representative of a situation where the seller owns some assets and declares his purchase price as well as his selling price which contains a declared rate of profit. So far, this arrangement is related to spot sale and does not generate finance. Nevertheless, it is agreed that the declared price can be deferred and it can contain an additional profit margin for consideration of the deferment. The prominent Hanbali scholar Ibn Qudama has reportedly said that, “It is permissible if the seller of a commodity says that he sells it by such (excess) amount if the payment is after a certain time” (FSC: IRTI, 1995 p 173).
this deferment of price (with higher profit margin), the sale arrangement creates finance.

Putting An Order

To suite the financing requirements of user of funds and those of financiers, the arrangement must contain a possibility for the user of funds to place orders whenever needed. To incorporate a purchase order in the above mentioned deferred murabahah transaction, Homoud turns to Imam Shafi'i who says, "If a man shows, certain goods to another and says, 'buy this for me and I will give you so much profit', and the second man buys it; then the transaction is permitted. However, the one who has made the promise has the right of withdrawal. If he buys, it makes no difference whether he pays immediately or at a later date. So, the first sale is valid but there is no commitment as to the other; they are at liberty (ibid).

This example of Imam Shafi'i has led Homoud to evolve the financing mode called bai' al murabahah li al 'amir bil shira which replaces interest with mark-up in financial advances. As can be seen, the mark-up principle of finance results from incorporating deferred payment in murabahah. In the mark-up, the financier benefits from the difference between the immediate and deferred prices of the goods.

Making the Order Binding

The last part of the above quotation from Imam Shafi'i makes the orderer non-committal to the purchase. The fine-tuning of mark-up to suite to operational needs of modern financial transaction has effected the incorporation of further conditions to the contract. Unless, a secure demand does not exist, the purchase of assets by the financier could be a risky enterprise. Thus, when the order was incorporated in the original murabahah, the question whether the orderer should finally be bound to purchase or not, came up for heated discussion among scholars. As the business of Islamic
banks goes, predominantly, the orderer is bound to purchase the asset provided it meets the full specifications mentioned in the order.1

The Buyer Can Act As An Agent

Meeting the full specifications of the orderer exposes the financier to certain level of unwanted risks. At the time of taking ownership of the acquired assets, the orderer may go on interpreting its specifications. This will delay the acquisition of the asset by the orderer, prolong the active ownership of the asset by the bank, increase the bank's storage costs and other liabilities, thus, exposing the bank to risks which it must avoid. To avoid such risks, the bank appoints the finance user to act as an agent on its behalf. The client than selects the asset of its choice, purchases it on behalf of the bank for the bank. As a second step the ownership is transferred to the client. In most cases thus, the asset does not remain in the ownership of the financier for any meaningful period.2 Thus, in most cases, for creating the initial debt, mark-up based financing is as risk-free as interest-based financing.

3.2.4 The Limits Of Mark-Up Based Finance Creation

The sale of goods and services on deferred basis creates debt to be repaid in a specific time period. However, if the debt is not paid during the specified time, the owner of the debts cannot claim any increment in his principal amount of debt. If he claims an increment, it implies that he is involving in a sale transaction in which the object of sale is debt and its price is interest known at the time of the revelation of the Holy Qur'an as riba.

The features of bai' and riba in terms of the limitations in creating finance are compared in Fig. 3 (b). On the vertical axis of panel (A) we keep ODS and PIDS price p, and of panel (B) deferred price p, as well as interest i; in

---

1 A prominent shariah consultant to many Islamic banks favors to make the purchase binding on the orderer, see Adu Guddah (1992)
2 Supply of electricity on the mark-up basis is an important example of a situation where physical control of the asset by the financier is not possible.
in the horizontal axis of panel (A) we keep the amount of deferred trade $Q$, and in panel (B) time $t$.

In Panel (A), if the total deferred trade is indicated by the $O'q$ distance, subject to the DD demand for ODS, the total deferred price (finance) would be $Op$. Each point on the $O'S$ line will indicate a level of debt created by a given amount of trade. Given $Oq$ amount of a good or service to be traded, $OO'$ spot trade, $O'q$ deferred trade must be available, for the market to clear. This will create $Op$ amount of debt (finance). Given the amount of the good or service which cannot clear without credit sale, the amount of total debt created will be determined by the slope of the $O'S$ line. This slope in turn depends on the mark-up; if the mark-up is low, given the $O'q$, deferred trade, debt would be less than $Op$ and vice-versa.

![Diagram](image)

Fig. 3 (b): Limitations Of Credit Creation by Deferred Sale
<table>
<thead>
<tr>
<th>Risks of Services</th>
<th>Risks of AP, DD</th>
<th>Benefits, AS, FIN</th>
<th>Benefits, FIN</th>
<th>Description</th>
<th>Contract Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>None.</td>
<td>AR, DD</td>
<td>BENEFITS, MAR</td>
<td></td>
<td></td>
<td>Variant-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BENEFITS, AS, FIN</td>
<td></td>
<td></td>
<td>Variant-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BENEFITS, MAR</td>
<td>Price</td>
<td></td>
<td>Variant-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BENEFITS, AS, FIN</td>
<td></td>
<td></td>
<td>Variant-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BENEFITS, MAR</td>
<td>Services of Assets</td>
<td></td>
<td>Variant-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BENEFITS, AS, FIN</td>
<td></td>
<td></td>
<td>Variant-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BENEFITS, MAR</td>
<td>Order</td>
<td></td>
<td>Variant-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BENEFITS, AS, FIN</td>
<td></td>
<td></td>
<td>Variant-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BENEFITS, MAR</td>
<td>Price</td>
<td></td>
<td>Variant-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BENEFITS, AS, FIN</td>
<td></td>
<td></td>
<td>Variant-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BENEFITS, MAR</td>
<td>Object of Sale</td>
<td></td>
<td>Variant-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BENEFITS, AS, FIN</td>
<td></td>
<td></td>
<td>Variant-1</td>
</tr>
</tbody>
</table>
The amount of debt created by deferred sale is put on the vertical axis of panel (B). This debt is independent of the time and cannot be rescheduled on the basis of buying time for a material consideration. Suppose, time \( t_0 \) indicates the time of the repayment of this debt as contractually agreed by the two parties. If the debtor fails to pay at this time, the financier cannot claim any reward for a further delay in payments. If such a reward is claimed, e.g., given by the distance \( ab \), corresponding to time \( t_1 \), \( a'b' \) corresponding to time \( t_2 \) and so on, the \( ab, a'b' \) and so on, is what is known as the prohibited *riba* (interest), in this particular case. Referring back to points \( p' \) and \( p'' \) in panel (A), it is easy to conclude that these prices are fictitious and do not correspond to any demand and mutual agreement. These prices therefore, do not correspond to any real counter values. Acceptance of such a fictitious price is in fact tantamount to abrogating the basic market mechanism.

From the above discussion, the following differences can be derived between conventional concept of debt financing and the Islamic concept of financing through deferred sale. First, in the Islamic economy, debt creation depends on trading in real goods and services. Debt creation is basically a phenomenon of the goods and services market, whereas, in the conventional economy it is essentially a monetary phenomenon. Second, though the creation of debt serves a financial purpose, yet it cannot be treated similar to debt financing in which debt default is penalized by an automatic increase in interest.

We can compare panels (A) and (B) quickly. Let us assume that in panel (A), a client orders an Islamic bank to buy for it an equipment \( q \) on the horizontal line, the market price of which is 1000 US dollars to be repaid in 4

---

1. In the Holly Qur’an trade is characterized to be through mutual agreement.
2. In context of financial intermediation it may also be noted that, in contrast to interest based lending, the final return to the seller is not fixed in these transactions. In fact the final return could be lower than the deferred price because of the element of risk carried by the seller while the object of sale is in his possession. See, Khan (1991) and Kahf and Khan (1989).
years. The bank agrees and buys the asset for the client at 10% mark-up. The following fundamental formula will be used to calculate the future value of the $1000. This formula is the most representative of the simple annuities created by mark-up financing. The future value in this specific case is: \( FV = PV(1 + \text{mark-up})^n \). \( FV = 1000(1 + 0.10)^4 = 1000(1.10)^4 = 1610.51 \) denoted by \( p \) on the vertical line. The client will then pay $402.63 yearly for 4 years. The time line of this annuity can be shown as bellow.

<table>
<thead>
<tr>
<th>Year</th>
<th>Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>$402.63</td>
</tr>
<tr>
<td>1</td>
<td>$402.63</td>
</tr>
<tr>
<td>2</td>
<td>$402.63</td>
</tr>
<tr>
<td>3</td>
<td>$402.63</td>
</tr>
<tr>
<td>4</td>
<td>$402.63</td>
</tr>
</tbody>
</table>

Fig. 3 (c): Time line of cash-flow sequence of a mark-up based annuity

This time line is reflected by the line \( p_t \) in the lower part of panel (B) showing the fact that as yearly re-payments are made, the amount of outstanding debt declines proportionately. It is noteworthy that the amount of outstanding debt does not increase in the zero interest Islamic scenario due to time factor. The upper part of panel (B) is representative of the interest case where the amount of outstanding debt increases due to time factor. This is the most and in the final analysis perhaps the only difference between the interest and mark-up based debt financing.

Throughout this research we treat mark-up as a mechanism rather than a mode of finance. As a mechanism it underlies all other deferred sale contracts, namely, installment sale, leasing (finance lease or hire-purchase) and \textit{istisna}'. In each of these deferred sale contracts, once the deferred price is settled on the basis of the mark-up, the resultant debt becomes an annuity and subject to the same amortization procedure. We partially re-produce in Table 3 an amortization schedule of such annuities used in the Pakistani banks when
Islamization was in its peak level. As it can be observed, this amortization procedure is the same in any conventional bank.

### Table 3 (a) Amortization of Mark-up Based Debts:
Present Value Of 1 Received Per Period

<table>
<thead>
<tr>
<th>PERIOD</th>
<th>0.91667 (11)</th>
<th>1.00000 (12)</th>
<th>1.08333 (13)</th>
<th>1.16667 (14)</th>
<th>1.25000 (15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.99092</td>
<td>0.99010</td>
<td>0.98928</td>
<td>0.98847</td>
<td>0.98765</td>
</tr>
<tr>
<td>2</td>
<td>1.97283</td>
<td>1.97040</td>
<td>1.96796</td>
<td>1.96554</td>
<td>1.96312</td>
</tr>
<tr>
<td>3</td>
<td>2.94583</td>
<td>2.94099</td>
<td>2.93616</td>
<td>2.93134</td>
<td>2.92653</td>
</tr>
<tr>
<td>4</td>
<td>3.90999</td>
<td>3.90197</td>
<td>3.89397</td>
<td>3.88600</td>
<td>3.87806</td>
</tr>
<tr>
<td>5</td>
<td>4.86539</td>
<td>4.85343</td>
<td>4.84152</td>
<td>4.82966</td>
<td>4.81784</td>
</tr>
<tr>
<td>6</td>
<td>5.81212</td>
<td>5.79548</td>
<td>5.77892</td>
<td>5.76243</td>
<td>5.74601</td>
</tr>
<tr>
<td>8</td>
<td>7.67984</td>
<td>7.65168</td>
<td>7.62368</td>
<td>7.59583</td>
<td>7.56813</td>
</tr>
<tr>
<td>9</td>
<td>8.60100</td>
<td>8.56602</td>
<td>8.53126</td>
<td>8.49670</td>
<td>8.46235</td>
</tr>
<tr>
<td>11</td>
<td>10.41829</td>
<td>10.36763</td>
<td>10.31734</td>
<td>10.26740</td>
<td>10.21781</td>
</tr>
<tr>
<td>12</td>
<td>11.31458</td>
<td>11.25508</td>
<td>11.19605</td>
<td>11.13746</td>
<td>11.07932</td>
</tr>
<tr>
<td>13</td>
<td>12.20272</td>
<td>12.13375</td>
<td>12.06534</td>
<td>11.99749</td>
<td>11.93019</td>
</tr>
<tr>
<td>17</td>
<td>15.67535</td>
<td>15.56226</td>
<td>15.45035</td>
<td>15.33957</td>
<td>15.22992</td>
</tr>
<tr>
<td>19</td>
<td>17.36470</td>
<td>17.22602</td>
<td>17.08891</td>
<td>16.95335</td>
<td>16.81931</td>
</tr>
<tr>
<td>20</td>
<td>18.19789</td>
<td>18.04556</td>
<td>17.89505</td>
<td>17.74631</td>
<td>17.59932</td>
</tr>
<tr>
<td>21</td>
<td>19.02351</td>
<td>18.85699</td>
<td>18.69255</td>
<td>18.53013</td>
<td>18.36970</td>
</tr>
<tr>
<td>23</td>
<td>20.65231</td>
<td>20.45583</td>
<td>20.26200</td>
<td>20.07074</td>
<td>19.88205</td>
</tr>
</tbody>
</table>

Source: Taken from Islamic Banking Procedural Instructions, United Bank Ltd., Pakistan, Karachi: August 14, 1984

The mark-up rate is the rate of internal rate of return (IRR) in Islamic banks' investments in their financial operations. So determination of the mark-up of an operation is in fact finding its IRR. By definition the IRR is that discount rate which equalizes the present and future values of a project's cash flows i.e., puts its NPV to zero.
3.2.6 Time Value Of Money

From what has been discussed above, it is clear that only for consideration of deferment, a deferred price can be higher than a spot price. Moreover, debt as such created is amortized in the same form as it is done in the conventional sense. These points are related to time value of money in Islamic economics. The subject has recently been discussed by a number of writers. The point is that since, a higher deferred price of an object of sale, compared to its spot price is legitimate, it implies a recognition of the time value of money in Islam. This value may be determined ex-ante. However, arguing that fixed rent, or fixed price in deferred sale doesn't mean fixed return on capital because of uncertainty and risk incorporated in these transactions (Khan 1992) rejects the above proposition and suggests that time value of money can only be ex-post.

Therefore, the value of time is related to its being needed for the completion of a real transaction, not by itself. Under riba-based transactions, postponement of liability justifies a return to capital. Whereas in real transactions, return to capital is linked to owning real goods which are subject to uncertainty by virtue of their nature. Time is one of several factors that effect profit and loss because it is required to complete real transactions.

The mark-up is justified on the basis of a generally accepted axiom that time may be valued provided it is incorporated in a sale transaction. As such, financier's claim for return derives its fiqhi legitimacy from the fact that the financier owns the subject of sale, for at least some period of time. Such an ownership implies carrying risk and uncertainty. Thus a return is justified on the ground of ownership and responsibility of its risk.

---

1 Adapted from Kahf and Khan (1992).
2 However, Khan discussed this point in the context of discounting and he pre-assumed that money is always invested in accordance with Shari'ah i.e. lending at a variable rate of interest is excluded.
The mark-up creates a fixed, pre-determined and secure indebtedness. This has made it attractive for the Islamic banks as an alternative to the interest based transactions. It should however, be noted that in contrast to interest based lending, the final return to the financier is not fixed in the mark-up based financing. In fact the final return to the financier is lower than the mark-up price because of the element of risk carried by the financier while the merchandise are in his possession. By the same token the mark-up saves the user of funds the risks which he would have otherwise borne, had he owned the goods for the same period of time. Thus the final cost of the finance for the finance user may be less than the mark-up price (see, Khan 1992).

This is particularly so due to inflation, in some Muslim countries, at times, inflation is as high as 130%. Inflation hits hard the value of the principal of loans as well as debts both under PDS and ODS. In case of debts whether created due to PDS or loans, the future value of the amount of debt is eroded away by inflation. In case of ODS, the price is normally paid in advance of six months. During the six months' period, in many countries, prices increase substantially. Thus at the time of delivery, the objects become more valuable compared to the time when the contract was actually signed. The financier can use this as a hedge to neutralize the impact of inflation on its debt assets. For instance, if it has sold assets of $ 100's worth on the PDS basis for six months, it can fully hedge against inflation by buying $ 100's worth on the ODS basis for six months and vice versa. If for example, 10% of the value of PDS assets is wiped out by inflation, its ODS assets can become valuable by the same percentage. But common users of funds cannot always hedge against inflation effectively.

The effect of inflation on the future value of assets involving deferred transactions has recently attracted substantial attention from the Islamic scholars. Whereas, a group of Muslim economists calls for indexation of
debts\textsuperscript{1}, compensation rates\textsuperscript{2} etc., a large majority of \textit{shari'ah} scholars as well as Muslim economists does not accept these either on Islamic or economic grounds. In general, once a debt is created by PIDS or ODS, the amount of debt is considered as \textit{qard} (benevolent loan) and a rate of return cannot be imposed on such debt. However, in Sudan, to overcome the effect of inflation on ODS contracts, financiers and clients agree on a condition (\textit{band al ihsan}) in the contract which is meant to relieve the effects of inflation at the time of final settlement\textsuperscript{3}.

\textbf{3.2.6 Issues In Mark-Up Based Resource Mobilization}

The mark-up mechanism has so far been utilized by the Islamic financial institutions for asset management. The use of the mark-up principle in resource mobilization is not common. Initially, the Islamic banks had an excess liquidity problem. Therefore, the need for mobilizing additional resources was not an urging matter. But, financial as well as non-financial enterprises always require additional funds for expanding their operations.

The mark-up is irrelevant for deposit mobilization, because, the Islamic law does not recognize money as an object of sale. Individuals, households and firms need money not for its own sake, but for the fact that money enables its holder to have a command on goods and services. In this way money plays a crucial role in the market economy. To play this role efficiently, money has to be neutral between goods and services and not compete with them as an object of sale. If money changes its neutral role and starts to play the role of an

\textsuperscript{1}See, Kahf (1995).

\textsuperscript{2}Shirazi and Kamalzadeh (1995) argue that, "We can compute a compensation rate which while taking into account bank services, maintains the purchasing power of money for a period of time. Such rate can be defined as: \( R_c = R_p - B_s \). \( R_p \) is the rate of inflation and \( B_s \) the rate of bank services offered. For example, if inflation rate is 0.10 (\( R_p = 0.10 \)) and bank services rate offered is 0.04 (\( B_s = 0.04 \)), the compensation rate, \(( R_c) \) would be 0.06. By relating \( B_s \) to the inflation rate, we can adjust the fluctuations in the compensation rate. In fact with rising inflation rate, the offered rate of bank services will also increase" p 117.

\textsuperscript{3}See, Babikir (1996).
object of sale like goods and services, markets will lose their efficiency and consequently the society will suffer.

Deferred trading in money for money, is thus prohibited in Islam. Interest-based deposit mobilization, in fact implies that the depositor sells his current amount of money on deferred basis to receive a higher amount in the future - with 10% annual rate of interest, a dollar deposit is sold now, for 1.10 dollars a year from now! This constitutes *riba*. For this reason (for the prohibition of sale of money for money), the mark-up is entirely irrelevant for deposit mobilization.

However, deposit mobilization is not the only source of resource mobilization. As mark-up based financiers, Islamic banks acquire ownership of assets and then lease or sell these on installment basis to their clients. In all cases, the Islamic banks pay up-front to the sellers of these assets in lump sum, but they receive from their clients on installments. This must causes a mismatch in the two sides of the balance sheet as well as imposes a cash flow constraint on operations of the banks.

The liabilities of Islamic banks comprise only of permanent equity (share-holders' capital) and temporary equity (deposits)\(^1\). In this way Islamic banks are 100% equity-based. Similar is the case with non-banking Islamic financial institutions. As a matter of fact, the conceptual foundations for resource mobilization through deferred purchase are yet to be developed.

Even if Islamic financial institutions can adopt a policy of 20% mark-up based leverage, by avoiding up-front and lump-sum payments and resorting to installment purchase, they can mobilize substantial resources. The case of Islamic banks is different compared to conventional banks. Islamic banks are involved in deferred trading. The assets financed by them make their clients

---

\(^1\) For the classification of Islamic financial instruments in terms of the IMF's System of National Accounts, see, pages 4-84, 4-86 of IMF (forthcoming).
more solvent compared the clients of conventional banks where the use of funds is often not possible to monitor. Hence, Islamic banks asset side is comparatively more stable. Moreover, Islamic banks do not have any fixed obligations on the liability side of their balance sheet at the present. Thus, they have a better potential to take the burden of a suitable amount of leverage.

3.3 THE PLACE OF L.I.B.O.R

Islamic banks having international transactions, use the London Inter-Bank Borrowing Rate (LIBOR) as a bench-mark for the calculation of mark-up. For a typical operation, e.g., the mark-up would be: LIBOR minus two percentage points plus mark-up plus actual service charge. In most cases, the rebate on LIBOR will cancel out the amount of service charge so that the actual cost of financing would turn out to be LIBOR plus agreed mark-up rate.

The use of LIBOR as a bench mark for calculating the mark-up is not objected by the shari'ah scholars. However, some Muslim economist have put up a challenge to this practice and attempt at evolving newer methods which can be more consistent with the ethos of Islamic financing.

We need to take some digression to discuss important related issues. Zarqa (1983) suggests that discounting future cash flows to arrive at present values of competing projects’ outlays is equally important for investment decision making in an Islamic economy. However, it is not an imperative that discounting should be based on the rate of interest. Even in the conventional economies, the time preference of different individuals could be positive, negative or neutral. Therefore, with regard to time preference, even in the conventional sense, nothing can be conclusively said a-priori. Khan (1992d) re-affirms the non-existence of time value of money in an Islamic economy but in general he refutes the importance of discounting in conditions where rates of
return of projects are different. For him, discounting would be needed only if the rates of return of competing projects happened to be equal.

Both Zarqa and Khan suggest that the discount factor of an all equity firm should be the rate of return of its risk class. For public projects such rates should be adjusted to achieve social optimality. The theoretical essence of Zarqa's message on both counts is upheld by a number of other Islamic economists.

However, the situation on the practical ground is different. The decision of the Islamic banks to finance given sets of operations is an investment decision. Broadly speaking, Islamic banks arrange finance on the basis of the price mechanism (as in renting and installment sale) and profit sharing as in participatory arrangements. The pricing mechanism is overwhelming and also guides the Islamic financial institutions to imagine the implicit cost of capital in the meager amount of funds they extend under participation. This is reflected in the relative sharing ratios for the bank and the client determined in any specific contract.

In determining the deferred price of goods and services, the Islamic banks have to consider, spot prices, transaction and insurance costs for the bank as a trader and a rate of return comparable to alternative investment opportunities in similar risk class.

The present legitimacy of taking Islamic investment decisions on the basis of the market bench-mark is likely to continue irrespective of the feelings of Muslim economists! This shall not mean that the academic works to de-link Islamic investment decisions from the market bench-mark should not continue. The central issue of such works would be to suggest a project evaluation criteria which can be used by managers of firms for making long-term capital expenditure decisions in the absence of an ax-ante implicit time value of money.
If LIBOR or interest has to be avoided in the process of investment decision making, its natural contender, would be some form of profit index. One recent unpublished research at the Islamic Research and Training Institute, for example, is daringly captioned as, "Profit-Index: As a Substitute to LIBOR in Islamic Banks’ Mark-up based Operations". The weakness of such an index lies in the fact that too high or too low an index compared to the bench-mark of LIBOR is bound to adjust to it in a few years time. Moreover, conceptually, the case for the index has not yet been presented convincingly.

Nevertheless, in their attack on the conventional-NPV wisdom in finance, the Islamic economists are not alone. Recently, there has been a rigorous criticism of the NPV method by Dixit and Pindyck1. This contribution is being termed as most influential for decades to come in the area of investment and finance. Two points of the central theme of this work are relevant in our present context. First, the authors challenge the rationale of the significance assigned to interest rates in the theory of corporate finance, in particular in the NPV-led investment decision process. The authors contend that “Econometric tests of the orthodox theory generally find that interest rates are only a weak or insignificant determinant of investment demand”1. Secondly, the authors treat investment opportunities valuable options, not non-waiting take-it or leave-it opportunities as treated by the NPV method. Since investment decisions are irreversible, waiting for additional information to arrive to utilize the option is in fact valuable contrary to the NPV “take-it or leave-it” approach.

The point is that it is not only Islamic scholars who question the foundations of the conventional theory of finance but there are also influential conventional economists who find objective reasons for doing so. Having said that we must not neglect the need for a rigorous approach to long term investment decision making. Empirical research on the use of capital budgeting criteria by 189 companies shows that almost all companies use more than one

1See, Dixit, A. K. and Pindyck, (1994).
criteria with different degree of reliance on different methods. As for the popularity of the individual methods are concerned, these were found to be: pay-back method 74%, internal rate of return method 65%, return on investment method 59% and net present value method 57%. It is therefore, in the interest of Islamic banks and their clients to cross check the feasibility of projects by applying different methods.

3.4 A BROADER CASE FOR SALE-BASED FINANCIAL TRANSACTIONS

The exact nature of a variant of the sale-oriented financing is based on whether demand or supply needs to be financed and on the nature of the object of sale involved in the transaction. One of the crucial determinants of demand financing through deferred sale is the condition that demand should strictly be related to a specific object of sale, which must already exist. In other words, the notion of demand financing through deferred sale could be realized, only, if a specific object and its demand simultaneously exist.

3.4.1 Some Issues in A Cross-country Scenario

In the context of financial transactions between countries, demand financing implies import financing. For the capital importing countries, demand i.e., import financing takes precedence over export financing. Moreover, production of exportable commodities depends on an initial minimum requisite amount of imports. Imports could be financed in different ways.

Import Substitution by Deferred Sale

Import substitution is often seen as an effective substitute of import financing. Import substituting projects could be established on the basis of price deferred 'istisna'. Accordingly, foreign investors will install industrial or

\[1\] Ibid p 13.
infrastructural projects in the host country according to specifications and the mark-up price will be settled with a deferred payment arrangement. This method contains an obvious incentive for the host party. It ensures the transfer of ownership of an industrial facility, which was otherwise, impossible. But simultaneously, it may also have adverse incentives. For instance, ensuring quality of plants imported as such, often involves high risks, particularly, when the importer is a developing country.

For the supplier, sales expansion of R&D intensive resources ensures an increase in revenues. Moreover, it may also avoid any ownership related problems with the host country. This ascertains a future market share for more products. However, a financial institution is not expected to have any R&D intensive comparative advantages. As such, it does not trade in such resources. Thus, the incentive of increasing sales revenues, or, securing share in future product markets, is irrelevant for a financial institution. Consequently, it is not surprising to observe that Islamic financial institutions lack incentive in supplying industrial projects on the basis of deferred sale.

Import Substitution by Renting

An import substituting plant may be established and rented out to the host parties. In this case, ownership is retained by the financier. Consequently, substantial amount of resources will remain engaged in a single project and that too, in a single country. This will increase the financier's exposure to risks. Perpetuation of foreign ownership, is not welcome by the host parties, either. The interests of the lessee in the life of the leased project may also be weak, causing an increase in the maintenance cost.

\[1\text{See, Shal, L. D. et., al., (1978).}\]

78
Equipment Financing

Equipment financing through leasing and installment sale, offers another form of import financing. It can be expected, that by supporting investment activities directly, such financing will improve the recipient country's capabilities to meet future debt services obligations. However, a number of risks associated with equipment financing through leasing and installment sale cannot be singled out. The financier has to carry additional costs of selective procurement, obsolescence of the equipment and its maintenance.

These factors may create conflicts among suppliers of equipment, financiers and recipients. As for the obsolescence of the equipment is concerned, it will often force the financial institution to liquidate the equipment. But, only equipment in successful ventures can be liquidated easily. In the longer-run, this will imply, that profitable projects will be liquidated and capital will remain stuck with unprofitable projects. This will also aggravate the risk exposure for the financier. However, by increasing the interests of the buyer in the equipment, installment sale may substantially decrease the maintenance costs compared to pure leasing. Keeping these considerations in view, from the point of view of the financier an installment sale may be superior compared to pure leasing. However, from the point of view of the user of finance this may not be the case. Therefore, most Islamic international leases are finance leases¹.

General Purpose Import Financing

Consumers' goods can be imported through the mark-up principle of financing. This principle improves the short-run financial transactions of the financier, as well as reduces his risk exposure, compared to all the previous cases. But the investment content of such financing may be insignificant.

¹This is despite the fact that such the OIC Fiqh Academy has strong reservations against such leases.
Consequently, in the longer-run, it could not improve the recipient's debt servicing capabilities.

*Salam Sale and Export Financing*

If competitive supply exists, certain firms and households as well as Islamic financial institutions may always prefer to acquire ownership by making advance payments. In this case, the supplier of goods and services will benefit from the finance (advance payments). Some agricultural commodities are in fact purchased by the Islamic banks. An example is the advance purchase of Pakistani rice by some Islamic banks on the basis of *salam*. But the application of this principle to the manufacturing sector in the Muslim countries is highly limited as manufacturing exports from these countries are either non-existent or less competitive.

3.4.2 Brief Comparison With Traditional Transactions

Mark-up based financial, investment and leasing transactions are similar to interest-based finance due to the fact that these also create debt. Due to debt creation, finance does not cause any undesirable control of projects by the foreign financiers-cum-investors.

However, at the same time, sale-based financial arrangements are similar to direct investment in that, they transfer physical assets, R&D intensive services and technology to the host countries. Sale-based finance, like grants (unlike debt finance) ensures the transfer of resources at the initial period of the contract. Logically, the so-called "urgencies" which divert debt finance to consumption and more often to capital flight, could not influence resource allocation under sale-based finance.

Moreover, completion of the sale contract of the equipment, consumption goods and R&D intensive services, also completes the transfer process of ownership. This could be expected to work as an added incentive
for the efficient operation of projects. The bias of sale-based finance towards investment is also expected to positively contribute to the overall performance of an economy. As a result, the issue of debt-default, which serves as an adverse incentive under debt-finance, could not matter much in this case.

Management of debts created through debt finance and sale-based finance, gives rise to a number of considerations. Under sale-based financial arrangements, a greater part of foreign liabilities constitute projects, equipment or other physical assets. If need may arise, ownership of these projects can be sold to amortize the debt. Such is not the case under pure debt. However, if sale-based finance is used for consumption purposes, debt management problems, under the alternative arrangements, may be similar. Probably, the problem may be more severe under the sale-based arrangement as debts cannot be rescheduled at higher rates.

3.4.3 Adverse Incentives

While the mark-up modes of finance, namely installment sale, short-term murabahah, and leasing has dominated the IDB operations (which are a form of resource flows among the Muslim countries), in the longer-run some problems caused by negative incentive factors can be foreseen. The following can be mentioned as an example.

Lack of Mutuality of Interest

If investment oriented financing is adopted (viz., installment sale/purchase of equipment, sale of plants, projects, R&D intensive services and technology), a serious incentive problem may arise from the supply side. It is true that the repayment of installments will depend, at least indirectly, on the contribution of the supplied plants to production. Also, that in providing the

1 Payment of installments, is not necessarily a function of the operation of the projects. Yet, for an incentive advantage such an arrangement could be superior.
plants and projects, suppliers stake their reputation and future market share. These factors may work as checks on the quality of the plants. Nevertheless, the sale arrangement transfers the ownership of the projects. In this manner, suppliers do not directly share the risk of the project's outcome. They only claim a fixed liability. Therefore, they may save on the quality of the resources supplied. This situation may aggravate, if the suppliers are different from the financiers and the recipients are developing countries; who are initially unable to gauge the exact nature of technological components of the transaction.

Structure of Existing Imports

Trade promotion among the Muslim countries is widely cherished. Given the level of the industrial sector and manufacturing exports of these countries, it is natural, that trade among them will be biased in favor of primary commodities and consumption goods and against investment. Investment content of import from the developing countries is often lower compared to the investment content of imports from the developed countries. A trade-off between trade promotion between these countries and investment, need to be established. Thus, the objective of trade promotion among the Muslim countries should be consistent with the objective of financing investment rather than consumption.

Implications for Elimination of Interest

For its longer-run viability, the Islamic financial system need to develop its own production processes. Mark-up-based trade financing of commodities produced under the interest-based financial system, in the final analysis, supports and stimulates the interest-based system. This runs counter to the objective of elimination of interest, thus unambiguously, detrimental to the establishment of an Islamic financial system. It is, therefore, imperative that the Islamic financial transactions should primarily target the development of
production facilities which may support the purpose of financial Islamization and abolishing interest.
CHAPTER 4
ISLAMIC FINANCE IN PRACTICE:
RELATIVE SIGNIFICANCE OF PROFIT-LOSS SHARING
AND MARK-UP IN ISLAMIC BANKING
Chapter 4

ISLAMIC FINANCE IN PRACTICE:
RELATIVE SIGNIFICANCE OF PROFIT - LOSS - SHARING
AND MARK-UP IN ISLAMIC BANKING

4.1 INTRODUCTION

As discussed in the preceding chapters, the PLS and mark-up are the two parent principles of Islamic financing\(^1\). Most research undertaken by the Islamic economists emphasize the benefits of the PLS compared to the mark-up\(^2\). In the initial stages of their operations, some Islamic banks were also enthusiastic about the PLS arrangements. However, the present chapter aims to show that very soon, the mark-up became the basis of an overwhelming proportion of the Islamic banks' operations. Islamic banks seem to be satisfied with their present use of the mark-up compared to the PLS. But a general consensus exists among Islamic scholars that the present use of the mark-up by the Islamic banks is disproportionate. It is desirable to reduce the reliance on the mark-up and increase the use of other Islamic modes particularly, the PLS. This requires an understanding of the factors which are responsible for the observed phenomenon of the subdued PLS.

The present chapter also aims at putting forward some explanations for the overwhelming use of the mark-up and subdued nature of the PLS in the operations of the Islamic banks. The objective is to seek ways and means to enhance the flow of PLS funds from the Islamic banks.

\(^1\)The participatory modes of Islamic financing include muzara', musaqa' diminishing musharakah (DM), durable asset participation (DAP), musharakah and mudhabarah. However, the first two modes are specific to agriculture. DM and DAP being only recent innovations are not known in the market. Whereas, musharakah and mudhabarah are not only famous but also relevant to the financial structures. In the present study, therefore, PLS is treated as a synonym for only the mudhabarah and musharakah modes of Islamic financing. Rent is a price of the usufructs rights. As such, in an exchange relationship, it necessarily functions as a price. Thus organically, rent and mark-up are not much different. Both create fixed liabilities. In both cases the financier does not participate in the risk of the enterprise. Narrowing down the small differences facilitates a sharp comparison between the extreme cases of the participatory PLS and debt creating deferred sale principles of Islamic financing.

Section Two overviews the diverse nature of the Islamic modes of financing, the concentration of Islamic banks' operations in the mark-up and the consequences of the dichotomy in the theory and practice. Section Three deals with the preferences of firms for forms of finance and its implications for the PLS and mark-up. Section Four looks at the suitability of PLS and mark-up for acquisition of assets. Considerations for issuance of bonds and taxes are discussed, respectively, in Sections Five and Six. The supply side considerations such as the moral hazard proposition, collateral, adverse selection and a number of other considerations are covered in Section Seven. Some institutional aspects are discussed in Section Nine.

4.2 DICHOTOMY IN THEORY AND PRACTICE OF ISLAMIC BANKING: AN OVERVIEW OF CONSEQUENCES

Contractual relationships and trusts between parties are the two fundamental building blocks of an Islamic economic system. The Almighty God, while characterizing the believers says: The believers must (eventually) win through [verse i]... Those who faithfully observe their trusts and their covenants [verse viii] Sura al Mominoon (translation by Yousuf Ali). The Holly Qura'n provides basic guidelines for establishing just and efficient contractual relations and their preservation (see, e.g., verse 282 of Surah al Baqarah). The Prophet (peace be upon him) was a perfect trustworthy (Amin) person in his transactions with followers and foes alike.

4.2.1 Diversity of Islamic Modes of Financing

As discussed, the fiqh has provided detailed schemes for preparing just and efficient contracts and their administration. Contracts of exchange (uqud al mua'wadat) and contracts of partnership (uqud al sharikat) are the two parent Islamic contracts for administering the economic, financial and commercial transactions in a Muslim society. The former contracts are based on (deferred) price. Whereas, the latter contracts are based on sharing the outcome of a transaction or enterprise. Moreover, leasing and ju'ala can be characterized as uqud al manafi' (contracts based on the utilization of benefits of assets). By
combining the basic principles, several modes of financing can be innovated to meet the requirements of an Islamic economy under various economic conditions (see e.g., Hassan 1992). Some of these arrangements as summarized in the following chart ensure the diversity of the Islamic modes of finance.

Chart 4(a). Diversity of Islamic Modes of Financing
Table 4 (a) Concentration Of Islamic Banks' Assets

<table>
<thead>
<tr>
<th>Banks</th>
<th>PLS</th>
<th>Mark-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banks in Islamic Republic of Pakistan(^1)</td>
<td>13</td>
<td>87</td>
</tr>
<tr>
<td>Banks in Islamic Republic of Iran(^1)</td>
<td>37</td>
<td>52</td>
</tr>
<tr>
<td>Islamic Development Bank(^2)</td>
<td>04</td>
<td>81</td>
</tr>
<tr>
<td>Faisal Islamic Bank, Egypt(^3)</td>
<td>03</td>
<td>52</td>
</tr>
<tr>
<td>Islamic Bank for Investment and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development, Egypt(^3)</td>
<td>02</td>
<td>75</td>
</tr>
<tr>
<td>al Barakah Turk Finance House, Turkey(^4)</td>
<td>05</td>
<td>94</td>
</tr>
<tr>
<td>Jordan Islamic Bank, Jordan(^4)</td>
<td>05</td>
<td>65</td>
</tr>
<tr>
<td>Bangladesh Islamic Bank(^5)</td>
<td>NA</td>
<td>65</td>
</tr>
<tr>
<td>Sudanese Islamic Bank(^5)</td>
<td>NA</td>
<td>54</td>
</tr>
<tr>
<td>Tadamon Islamic Bank(^5)</td>
<td>NA</td>
<td>61</td>
</tr>
<tr>
<td>Qatar Islamic Bank(^5)</td>
<td>NA</td>
<td>98</td>
</tr>
<tr>
<td>Bank Islam Malaysia Berhad(^6)</td>
<td>NA</td>
<td>94</td>
</tr>
</tbody>
</table>

NOTES
NA implies not available.
1. IMF (1985); for Pakistan and Iran data relates to 1984 and 1985 respectively and covers the entire commercial banking sector.
2. Annual Reports of IDB; average of all operations till end of 1991.
3. Elias (1990); data for FIBE averages for 1980-88, for IBID averages for 1981-88. Most of the remaining IBID assets for the period were absorbed in foreign exchange markets and FIBE funds in the Central Bank of Egypt.
4. Gul (1991); data for BTFH represent annual averages for 1986-89, for JIB only one year i.e., 1988.
5. Ahmad (1987), data for all banks is for 1984.

4.2.2 Concentration of Islamic Banks' short-term Assets

As far the use of PLS and mark-up are concerned, Table 4 (a) provides information for some Islamic banks. Mark-up is predominant in general. The little use of PLS reported for some banks also concentrates on short-term trade financing.

4.2.3 Overview of Consequences

The phenomenon of concentration of the Islamic banks' assets in the mark-up mode which is short-term in nature and does not require risk sharing has certain consequences seen in different perspectives differently.
4.2.3.1 Islamic Economic Preferences

Different attitudes regarding the preference for PLS and mark-up modes of Islamic financing can be cited. First, the Council of Islamic Ideology (1981), Siddiqi (1988), Khan (1992) and other researchers recognize PLS as most distinct from interest-based financing. This comparison is based on the fixed nature of mark-up and interest as a rate of return and consequently similarity in risk concentrating qualities of finance. Following this pattern, many studies (see, e.g. Khan, 1983a, Khan 1983b, Nadir 1987) treat PLS as a synonym for Islamic financing.

Second, Homoud (1974) views that mark-up is the most important Islamic substitute to interest. For its sharing nature, he sees the PLS as irrelevant for many financing needs where no outcome could accrue to share. Moreover, in his understanding, the traditional PLS modes of finance imply one to one correspondence between suppliers and users of funds which falls short to meet the modern needs of financial inter mediation. In line with Homoud, Ismail (1989) also takes a serious critical note of the first attitude. In his understanding the most important Islamic alternative to interest-based debt creation (financing) is deferred trading-based dayin (debt) creation. He argues that mark-up is a price. It is not a rate of return on financing. As a price it has to be fixed. Further, according to him, it is incorrect to say that interest is eliminated for its fixed nature. He cites the variable rates of interest which are more common than fixed rates of interest. Moreover, in his view the Islamic banks' reliance on the mark-up mode is approved by the sharia'h consultants of these banks.

Third, Chapra (1985), and while surveying the principles of financing in Islamic economics, Kahf and Khan (1992) adopt a middle course by integrating the above two views. The essence of this approach is to accept the sharia'h permissibility of both PLS and mark-up and then to concentrate on the suitability of one or the other to a particular economic environment. Although the mark-up is more prone to violate the sharia'h requirements compared to the
PLS, the last approach is widely considered useful in view of the need for designing financial policies in the Muslim countries.

4.2.3.2 Stability of the Banking System

The consequences of the use of mark-up and PLS are also compared by researchers in terms of their implications for the stability of the banking system. Several studies have discussed the stability of the Islamic PLS banking system and have compared it with the traditional system. Khan (1986) compares the implications of the balance sheet characteristics of Islamic PLS banks with the traditional banks. No fixed liabilities are involved in the Islamic PLS banks' balance sheets. Thus deposits are considered as shares. Therefore, any shock on the assets' side (suppose losses reported by enterprises using PLS funds) would automatically be absorbed and adjusted on the liability side (losses will be absorbed by PLS deposit holders). By its nature, the PLS banking system is thus stable. In the absence of this automatic stabilization mechanism in conventional banking, when a crisis arises on the assets' side, banks turn to liability management. This makes the banking system highly unstable.

Mirakhor (1987) develops the above argument further to compare the effects of PLS and mark-up on bankruptcy of the banking system. It is suggested that to avoid bankruptcy, Islamic banks should also use PLS modes of financing. This argument is valid in general. But in context of the present practices of Islamic banks, some more considerations need to be added. First, in any manner there is no fixed liability in the Islamic banks' balance sheet. Deposits of Islamic banks are in fact PLS deposits and are not treated as fixed liabilities. Second, the type of credit risk and the resultant bankruptcy confronted by the conventional banks is not relevant for Islamic banks. Mark-up is a very short-term operation. Therefore, it does not involve any significant

---

1Khan provides several examples that somewhat similar to the Islamic banking system is proposed in the United State for reforming the US banking system.
2On the liability side of Islamic banks the PLS is fully being utilized.
credit risk. Moreover, mark-up inevitably results in the transfer of ownership of assets to the borrower. Therefore, the borrower in Islamic banking is in general more solvent compared to his counterpart in the traditional banking system. Due to these facts bankruptcy in Islamic banking is less likely to happen as a result of concentration of their assets on the mark-up, compared to conventional banks due to interest-based financing.

4.2.3.3 Diversification and Macro-economic Competitiveness

Diversification eliminates the risk of individual assets. Thus, it is argued that, even if individual PLS operations may be risky, by diversification this risk can always be eliminated. Islamic banks are thus advised to use more PLS by way of diversification. From the point of view of an individual investor or financial institution, the benefits of diversification are obvious.

Economy wide diversification may however, lead to an increase in the cost of capital, consequently to an over-all economic inefficiency. This argument is based on the fact that with diversification only high return assets with negative covariance of returns will attract the attention of portfolio managers. Risk aversion which causes the acceptance of lower return investments will be eliminated. There would be a continuous search for higher return bearing investments. Highest return investments would be undertaken, implying that low return projects would be given up. There would be a constant diversion of investment to high return projects pushing up the cost of capital in the macro economy. When the cost of capital increases, the competitiveness of the economy compared to other economies decreases thus creating a general inefficiency. Therefore, it is not always justifiable to urge the Islamic banks to diversify in order to enhance the flow of their PLS funds.

4.2.3.4 Efficiency of Bank and Stock Oriented Firms

The cost of capital raised from the stock markets includes risk adjustments for agency costs, pressure by speculators, transaction costs, the cost of short-run disputes (takeovers, mergers) etc. These costs can be
avoided by direct equity linkages between financiers and firms. Thus the total cost of finance raised from stock markets is supposed to be higher compared to the finance provided by direct equity stakes.

Direct equity stakes by banks in industrial projects enforces more effective monitoring control on the managers of industrial projects. This type of control is simply not possible for individual owners of common stock. Moreover, it also puts the stakes of the banks in focus and increases their monitoring concerns and leads to overall efficiency. Therefore, a longer-term interest of the Islamic banks in projects could improve the performance of the projects and contribute to macro-economic efficiency.

4.2.3.5 Development of New Interest-Free Enterprises

For its longer-run viability, the Islamic financial system needs to develop its own production processes. This requires undertaking such new investment enterprises (by an appropriate mix of the mark-up and PLS modes of Islamic financing) which do not contain any capital involving interest. This argument was taken up more forcefully during the seminar on Problems of Islamic Banks, organized jointly by the Islamic Research and Training Institute and the Fiqh Academy of the Organization of Islamic Conference, held in Jeddah during April 1993. In conclusion of the seminar it was recommended that Islamic banks should consider to reduce their reliance on the mark-up mode and search ways and means to participate in productive activities by using the PLS principle.

It is with the last two objectives that the Islamic banks may be urged to enhance their PLS operations for the benefit of the society as well as for their own longer-term benefits.

4.3 PREFERENCES OF FIRMS FOR FORMS OF FINANCE

Individuals' attitude towards risk has crucial implications for their preferences for different forms of funds. Individuals differ in their feelings
towards risk and return. This, in turn, determines their preferences for the choice of alternative sources and uses of funds. Since, there would be as many preferences as individuals, a generalization regarding peoples' approach about risk is impossible. In this section, it is assumed that individuals' liking for risk changes over time depending on their exposure to risk and experience with entrepreneur-ship. In other words, in the initial stages of their entrepreneurial functions, individuals will, in general, avoid risk. But as experience is accumulated, entrepreneurs, would gradually develop risk bearing qualities.

4.3.1 Attitude towards Risk as Viewed by Islamic Economists

Except for the prohibition of gambling, separation of risk of an asset from its ownership (as in interest-based transactions), and gross uncertainties related to contractual relations (as in gharar), no hard and fast rules are mentioned by Islamic economists regarding the Islamic temperament towards risk. This implies that Islam recognizes the natural attitude of people towards risk, namely, some people may have natural inclination for avoiding risk, some may be risk neutral and others may have an affection for risky activities.

4.3.2 The Basis of Preference for the PLS

It may be noted that in Islamic economics, the owner of an asset is required to be responsible for all risks underlying the asset. Resorting to risk-sharing is however, accepted as a necessity. For instance, people need mudharabah, because the owners of funds lack time and entrepreneurial skills; and those possessing time and entrepreneurial skills lack financial resources. These limitations of the two parties are overcome by the risk-sharing arrangement through mudharabah.

For growth, all economies depend on the fulfillment of certain minimum entrepreneurial functions. In one way or another, these functions are related to risk taking. The risk taking functions of entrepreneurs in turn, promote investments, induce innovations and technological progress and ultimately economic efficiency Nevertheless, the entrepreneurial class is weaker in the
developing countries. Only an insufficient number of people are capable to take entrepreneurial risks. Inculcation of the entrepreneurial qualities in the population should therefore, be an integral part of an Islamic economic policy. In this regard, the PLS can be greatly instrumental, because: i) the PLS spreads the risk of projects between the entrepreneur and the financier, thus encourages entrepreneurial activities, ii) it does not require collateral; hence ensures access to funds only on the basis of financial merit of projects and iii) it ties-up the interests of the financier with the project and ensures technical support and efficiency.

The mark-up concentrates all risks on the entrepreneur and lacks these fundamental risk spreading characteristics of the PLS. Thus, it is obvious that the infant firms should have stronger preferences for the PLS arrangements compared to the mark-up.

4.3.3 The Role of Islamic Banks

As the infant entrepreneurs lack risk taking qualities, the mere existence of the preferable PLS option is insufficient. The Islamic banks need to come forward to share the risk of projects through the PLS arrangements and enable such individuals to undertake new projects. Once a project is undertaken and operated on the basis of the PLS, the entrepreneur would get acquaintance with the entrepreneurial functions. After certain aspects of the project's operation becoming clearer to the entrepreneur, his confidence would improve. His risk profile will undergo favorable changes and he is expected to be in a position to assume greater entrepreneurial risks.

4.3.4 The Nature of the PLS Contracts

Some observations about the nature of the PLS contracts and the utilization of the entrepreneurs' improved risk profile are useful. The traditional

---

1Khan (1992C) argues that if appropriate policies are adopted, the PLS system has the in-built incentive mechanism to overcome the fear of starvation as a result of any investment decision and its subsequent
forms of the PLS (both mudharabah and musharakah) are perpetual and permanent contracts (see, e.g., Hassan, 1992). Once formulated and agreed, these contracts could not be terminated before the conclusion of the enterprise. This implies that even though the risk profile of the entrepreneur may have improved, this improvement will not be effectively utilized for the whole period of the PLS contract. Because, risk and ownership shares are defined in the contract once for all, and the entrepreneur is not left with any opportunity to re-invest his savings in the project.

4.3.5 Utilization of the Improved Risk-Profile

It is in the interest of the financial and economic system that the improvement in the risk profile of the entrepreneur should be positively utilized. In other words, the entrepreneur should gradually take more and more share of the project’s risks, i.e., the project’s ownership. After the entrepreneur stands on its own feet, the bank can be relieved from the risk-sharing arrangement with this growing firm. Thus, the bank can undertake risk-sharing arrangements with other infant firms more effectively. Using the PLS, banks would thus play effective role in the promotion of entrepreneurs in the society.

4.3.6 The Need for Redeeming PLS Contracts

On the basis of the above arguments, it can be suggested that diminishing PLS contracts (diminishing musharakah) would be an improvement on the non-redeeming, perpetual and pure PLS contracts. Accordingly, a bank will undertake a musharakah contract with an infant entrepreneur. The contract will ensure that the project will be wholly transferred to the entrepreneur within a specified time period, e.g., 5 years. Payments for the purchase of the bank’s ownership will be made from the profit share of the entrepreneur. Thus as the entrepreneur will mature, he would be able to take the ownership risk. The more the entrepreneur acquires the risk taking qualification, the better it would be for the efficiency of the contract, the shorter would be the time for the
transfer of ownership, the more would be the bank capable of undertaking diminishing PLS contracts with other infant enterprises\(^1\).

With some digression, the above point can be further clarified. Several instances can be provided, where gradual termination of financier's ownership in the PLS contract is in the interest of both parties. Hence, it can improve the efficiency of the contract itself. For instance,

i) the above logic also applies to social role of the Islamic banks e.g., in poverty alleviation. It is well-known that poverty can be alleviated effectively by enabling the poor to participate in the market by making them owners of real assets. Keeping in view the extent of poverty in the Muslim Umah, under the perpetual PLS contracts, this again requires the banks to engage in infinite number of projects. By terminating PLS contracts, banks can generate more projects as ownership of projects will continuously roll-over to the entrepreneurs.

ii) similarly, terminating PLS contracts can reduce the foreign control of local projects, enhance the understanding between host societies and foreign investors, minimize no-commercial risks and promote foreign investment through the diminishing PLS.

iii) in a number of activities, if the financiers' ownership is not terminable, despite a need for funds, demand for PLS cannot be generated. Examples are, development of owner-operated agricultural farms, or mobilization of finance for the construction of houses.

For these considerations, and from policy perspective, it may be useful to consider that while in general entrepreneurs are expected to be risk-neutral, certain group of new investors are extremely risk-averse. The last and most dominant group of new investors, should prefer PLS as it spreads risk. The banks could therefore, play crucial role in the promotion of investment by

\(^1\)For a detailed profile of the diminishing PLS contract, see Khan and Boulem (1993).
offering PLS funds. On the other hand, when these investors become familiar with risk, they build up confidence. This opportunity can be better utilized if banks are relieved from maturing projects and use their resources for generating newer infant projects.

In the framework of the above analysis, the demand for the PLS funds is to be generated by the investment promotion policies of the Islamic banks. It is the expressed view of a number of senior Islamic bankers that Islamic banks rarely deal with infant firms - firms who have high preferences for the risk spreading characteristics of the PLS. Rather, the Islamic banks prefer to deal with established companies. Some observations about the preferences of growing firms for sources of funds are presented in the next section.

4.3.7 Preferences of Growing Firms for Self-Financing

For growth, a firm meets its capital needs from three main sources, i) internal funds, ii) external funds - debt and iii) external funds - equity. Until recently, the first source of funds was considered to be of lesser significance. About the relative significance of debt and equity as external sources of funds, in the existing literature we find two opposing opinions. Some scholars argue that interest-based debt has no significant role in the capital structure of firms. Others argue that debt has dominant role. However, the mainstream economic thinking is that as too much debt will make the bankruptcy cost significant and too much equity will raise tax liabilities as well as put a downward pressure on the price of equity (value of the firm), there is the possibility of an optimum debt equity ratio. Most Islamic scholars however, hold the view that the role of interest-based debt in the economy is usually over exaggerated (see, e.g., Ahmad 1985, Siddiqi 1983, and Zarqa 1986). However, until recently little empirical evidence was available to verify the validity of these arguments.
4.3.8 Some Empirical Evidence

When two prominent economists found that, in 1983, for growth, most US firms relied on their internal funds, they felt astonished. Their finding has however, become an established fact now. A comprehensive evidence on this is provided in a recent study of the International Finance Corporation (see IFC 1992). Some useful insights are available in this study about the actual significance of alternative sources of funds of growing firms.

From the data for US, European and Japanese firms, presented in appendix charts 4(a) and 4(b), we derive the following conclusions:

i) in all cases, firms mostly relied on internal funds,

ii) in all cases, in general, reliance on debt is substantially lower than what was usually believed. This debt is however, generated by asset based mortgages, and bond issues and to a lesser extent owned by banks,

iii) in all cases, stocks constituted insignificant part of total funds of firms, and

iv) Thus, these firms retained generally a very significant proportion of their profits. In some cases, for example in the UK, it appears that firms even bought their own stocks - over 100% of profits were retained for the period reported.

In the developing countries, the structure of companies' capital is strikingly different from the developed countries. Appendix chart 4(c) provides information about firms' capital structure in four Muslim countries. Retention is a major source of funds only in the Pakistani companies but still lesser compared to the developed countries. Jordanian and Turkish companies greatly rely on stock market for funds. The Malaysian companies also do not rely much on bank funds. Similar discrepancies are found among other
developing countries. Owning to various factors, discrepancies are found among the developing countries and among the developing and developed countries in this regard.

However, this information is helpful to conclude that:

i) in the developed countries overwhelmingly, and in the developing countries to a certain extent (Pakistan and Malaysia in a sample of four countries), growing firms rely on internal sources of funds,

ii) it may be noted that these figures reflect only retention and do not contain information about depreciation allowance, which is another significant internal source of funds. Adding the two sources of internal funds, the reliance of firms in both developing and developed countries on external sources will be much lower and

iii) This also supports the argument that the role of interest-based debt in the economy is over exaggerated.

It is very difficult to provide an exact explanation for the overwhelming reliance of these firms on internal sources. However, some observations in this regard may be useful.

i) the observed reality is a historical phenomenon, at least in the case of the US firms, for which such data is available. Therefore, it cannot be considered as a recent concern of firms due to some new structural changes,

ii) Retention is the most efficient form of capital. Compared to debt and equity, it is free of transaction costs. Thus it increases the value of the company. When companies have to save, it may be rational for them to acquire more assets of their own companies rather than selling their own assets and acquiring outside assets,

iii) Moreover, resorting to outside capital also increases the cost of takeovers, mergers, bankruptcies, taxes etc., as well as decreases the companies' privacy,

iv) Furthermore, the prices of stocks increase overtime due to capital gains. In such cases, it is in the interest of the enterprises not to sell their stocks and resort to alternative means of financing if available.

4.3.9 Implications for Form of Funds

The case of these established and growing firms is therefore different compared to the infant firms. These growing firms have become familiar with risk, they need to absorb their savings in their growth by acquiring assets. Those firms which struggle for their birth not only need capital but also need risk spreading characteristics of funds. Thus the two cases are strikingly different. Such growing firms which need to acquire assets will not be attracted by the PLS. As these firms are building assets from their own funds, they will prefer mark-up. Moreover, the PLS does not allow retention of profits and their investment in the growth of the firm.

However, a word of warning is in order. The information presented above is related to only incorporated firms. It cannot be considered a representative of the thousands of non-incorporated firms particularly in the developing countries. A considerable number of such growing firms may need risk spreading characteristics of the PLS and external funds simultaneously.

Nevertheless, retention, and re-investment of profits in the growth of the firm can be considered as a sign of sound policy. It is consistent with the motivation for acquiring ownership thus has an in-built incentive mechanism for efficiency. Therefore, enlarging the retention of firms may be considered one of the ultimate policy objectives of a PLS contract.
4.4 ASSET ACQUISITION

The users of Islamic bank's funds may have two objectives for the acquisition of assets, namely, end-use purposes and re-sale purposes. In the former case, only mark-up is relevant whereas, in the latter case both mark-up and PLS are relevant. Some observations on this comparison are in order.

To explain the relevance of mark-up and PLS under this case, we may again refer to the basic demand and supply schedules of Fig. 3 (a) reproduced in Fig. 4 (a). Let us assume that all available means can support an individual demand shown as DD in the Fig. 4 (a). Let us also assume that the actual needs of this individual are reflected by the D*D* schedule. In the conventional sense, the individual in this case will come to the market with interest-based borrowed money. Thus the dichotomy between the DD and D*D* schedules is not relevant in the conventional markets due to availability of interest-based finance.

Since interest-based borrowing is not available, our problem is therefore, to seek alternative means of credit. Without credit, the demand schedule would remain as DD. Price rather than profit is relevant to this phenomenon of the market. Therefore, the PLS cannot be incorporated in this fundamental case of the demand curve. Since mark-up is a price, it can more conveniently fit into the mechanism. As mark-up is a price inherent in the same (commodity) market, it may not carry transaction costs compared to interest being a price in the money market.

Given the DD demand schedule, it is in the interest of the suppliers to offer credit sale corresponding to s*s* supply schedule so that the demand schedule D*D* would become effective - the quantity qq* would reflect credit sale and oq* total sales. The price will rise to op* reflecting the mark-up.
This fundamental pricing mechanism as compared to the profit sharing mechanism is relevant to all such activities where the purpose of acquisition of merchandise is not re-sale, such as supplying an equipment to a project, or purchase of a car by a household.

We do not have any empirical support to claim that this is the nature of demand for most bank funds. However, from the data of IDB operations as reported in various documents of the bank, it is easy to observe that a substantial demand for funds is effected for end-use purposes.

Most government procurement demand is also effected for end-use rather than re-sale purposes. However, oil and a few other exceptions can be cited in which governments buy and sell to their public. But these sales are often subsidized and do not involve profit to any significant extent. In such cases the basic concept of profit and loss-sharing is again not relevant. If the public sector is large, we can expect this type of demand also to be large proportionately. This again limits the horizon of the application of the PLS arrangements.
4.5 Issuance of Bonds

Bonds are an important source of mobilizing external funds for a firm. Different financial contracts must have different implications for the mobilization of funds by issuing bonds. These characteristics cannot be ignored while comparing the preferences of firms for financial contracts. In this subsection, we briefly compare the implications of PLS vis-à-vis mark-up for the issuance of bonds.

4.5.1 Issuance of Bonds under the PLS and Mark-up

Under certain restrictive conditions, the Fiqh allows the issuance of Muqarada bonds for the mobilization of funds (see IFA 1989). An important condition is that, the bonds can only be issued against real assets owned by the issuing authority. In the PLS contracts, most funds are not owned by the firm. Thus a firm will only opt for the PLS, if it is willing to forego its rights of issuing bonds. It is understandable that in a particular given condition a firm may not need to issue bonds. But it is hard to imagine a firm which can willingly accept a permanent restriction on its financial policy.

On the other hand, mark-up ensures the transfer of ownership of assets to the firm. Thus, the mark-up is consistent with the Fiqh pre-requisite for the issuance of Muqarada bonds. Since, firms must be sensitive to the provisions of a financial contract for raising additional funds, in this regard, the PLS is at an obvious disadvantage.

4.5.2 The Problems of Implementing a Bond Contract

Fiqh provisions may be discovered for the issuance of bonds under the PLS contracts. As a result, the PLS contract may allow issuance of bonds. Even then, due to lack of retention of profits in the PLS compared to the mark-up, the PLS will always be at a disadvantage. To consider this point, let us assume that the firm can equally resort to the issuance of bonds under the PLS and mark-up. As soon as a bond is issued, the ownership of the firm is divided
between the bondholders and managers of the firm. The welfare of the bondholders and managers of the firm may diverge over time.

For the sharia’h validity of the bond contract, it is crucial that the welfare of the managers of the firm and the Muqarada bondholders must move together overtime. It may be argued that due to a direct relationship between the bondholders’ expected returns and the market value of the firm, the welfare of the two groups will always move together. But for a number of reasons such a relationship cannot be taken for granted. The danger of divergence in the welfare of the manager of the firm and the Muqarada bondholders may exist unless proper protective clauses are incorporated in the bond contract.

4.5.3 Some Common Causes of Conflicts

The most important cause of a conflict between the welfare of the firm’s manager and its bondholders is the difference between before and after bond issuance policies of the firm. For instance, at the time of the issuance of bonds, the company was observed by the bondholders to practice a particular wage, dividend, and other expenses’ policies. But after raising funds through bond issuance, the company may change these policies - increase wages, dividends, operating expenses such a beautification of offices etc. As a result, the welfare of the firm managers will increase. But, as these factors will decrease the value of the firm, welfare of the bondholders will decrease.

Moreover, at the time of issuing the bonds, the observed risk exposure of the company was attractive for the bondholders. But as soon as the bond funds are collected, the company may review its investment policy and change its risk exposure. The new risk exposure of the company may not be consistent with the risk profile of the initial bondholders. Managers’ welfare will improve at the cost of the bondholders. In addition, at the time of the initial bond issuance, the company's observed value was attractive for the bondholders. But after sometime, the company issues new bonds, the value of each bond issued previously will decrease. The welfare of the initial buyers will decrease.
4.5.4 The Cost of Resolving the Conflict

In conclusion, many factors may contribute to a conflict between the interests of bondholders and managers of a firm - often managers tending to maximize their welfare at the cost of the bondholders. As a result, a net wealth transfer will take place by-passing the contract. To avoid such a situation, certain restrictive clauses need to incorporated in the bond contract. The following costs may thus emerge. For instance, the bond contract may have a clause to restrict the company's investment policy to certain areas and direction. In terms of management interference, this may be considered as a high cost. Also, restricting the company's investment decision will restrict its investment opportunities, causing a welfare loss for both parties.

Moreover, in the bond contract restrictions can be put on the sale, lease, transfer etc., of the assets of the company after the issuance of the bonds. There may be several factors which will cause a welfare loss to the company and to both parties. For instance, the assets of the company may be more valuable to another company than the company in question during the passage of time. Therefore, the transfer of assets may have been profitable and hence improved welfare; its absence a welfare loss. In addition, the bond contract may require maintenance of the company's assets which will certainly improve the value of the company thus improve global welfare. Furthermore, structural changes such as merging firms, or splitting them between different owners may be restricted in the bond contract. This again may adversely effect the dynamic nature of the firm.

4.5.5 Profit Retention: Minimizing the Costs of a Bond Contract

In addition to the above, other restrictive clauses may be included in the bond contract. But in each case the company will incur additional costs. Is there any way to minimize the costly restrictions of the bond contract at the same time ensuring the welfare of the two parties to move together? Longer-run value of the firm is a crucial variable in this regard. The welfare of both the
managers and bondholders of the firm depends on whether the value of the firm increases or decreases over time. An effective indicator to gauge the long-run value of the firm is to see how much profits are retained and re-invested in the firm. Retained profits are cost free form of funds, because these do not involve additional contract and transaction costs. Retained profits also reflect the management confidence on the state of the enterprise, which in turn reveals internal information about the company. Retained profits strengthen the equity base of the company. Thus the higher retained profits the more would be the longer-run expected value of the company, and the more consistent would be the welfare of the bondholders and managers of the firm.

Retention of profits is normally seen as a management decision. However, the choice of a financial contract can force on the management a particular dividend policy. For example, under the mark-up and diminishing PLS, the management is forced to retain profits. Whereas, under the PLS even if the management desires to retain profits, due to the nature of the PLS contract, retention is not possible. Thus, in the choice for a financial contract, mark-up and diminishing PLS will dominate the PLS contracts.

4.6 THE TAX CONTROVERSY

The implication of taxes for the company's choice between forms of external finance (i.e., debt and equity) is a debatable issue. The traditional view is that, as the cost of debt is tax exempted, but the cost of equity i.e., dividends are subject to taxes, equity increases tax liabilities and increases the cost of capital. Hence, the tax system enhances the demand for debt and suppresses the demand for equity.

This is a controversial argument, because, tax liabilities are related to dividends not equity itself and dividends are not the sole reward for equity. Consider capital gains. A company has the option to pay dividends or retain its profits and enjoy capital gains. Reinvested profits proportionately minimize or
even eliminate debt and tax liabilities, thus increase the value of the company resulting to an increase in capital gains. So, equity can be raised without increasing tax liabilities, even if taxation system is discouraging dividend payments. But it is certain that if dividends and capital gains are both taxed, the tax liabilities of raising equity would be serious and taxes would be unambiguously biased against equity.

The last point is particularly relevant in the developing countries. Many individual studies as well as Islamization reports indicate that the taxation system in the developing countries is biased against the application of the PLS system. The essence of these arguments is that: As the cost of debt is tax exempted, by opting for debt, companies can minimize the interference of tax officers. On the other hand, as corporate incomes are tax deductible, payment of dividends implies declaration of taxable income. As in the developing countries tax evasion is common, the preference for the PLS is naturally less.

Thus Khan (1991) argues that the prevailing corporate income tax system need to be replaced by a net-worth taxation system. With this arrangement, he ultimately expects that dividends would be tax exempted. Hence, in his view even tax evading companies will not hesitate to demand for the PLS funds.

However, this argument misses a crucial point: That if a net-worth tax is introduced, to evade the tax, companies will have the incentive to suppress their net-worth by paying high dividends. The corporate income tax system is biased against dividends. The incentive implication of this is to retain profits which is favorable for the growth of the company. But, if the proposal of a net

\[1\] However, the possibility of raising equity without dividend payments may be viewed questionable. Dividends signal a company’s credibility. If investors see companies paying high dividends, they will buy more shares of such companies. The value of the company will increase. In the absence of such a dividend, investors cannot be attracted and the company’s value will decrease. So, dividends are considered important to issue equity. Nevertheless, this argument is also challenged on the basis of empirical evidence. An initial increase in the value of the company due to an increase in dividends is acceptable. But in fact such an increase is very short and unsustainable in nature. These arguments are controversial. Retention is likely to increase the company’s value and its capital gains. Should investors prefer this to dividends is however, a controversial phenomenon.
worth taxation system is adopted, it will shorten the life of companies as they will try to suppress their net worth in order to evade taxes.

4.7 PREFERENCES OF BANKS FOR FORMS OF FUND FLOWS

Banks are the suppliers of funds. As discussed in Section One, most Islamic economists assign an important responsibility to the Islamic banks for the overwhelming use of the mark-up. The present Section aims to discuss considerations which are expected to effect the decisions of the Islamic banks in determining the form of funds supplied to their clients.

4.7.1 Moral Hazard: The Case of Ongoing Enterprises

At present, the moral hazard hypotheses is the dominant explanation of the problems which are being faced and could be faced in the practical application of the PLS. In context of the application of PLS modes of Islamic financing, it was first proposed by Khan (1983b). He concluded that due to the existence of an economic incentive for a dishonest attitude, the application of the PLS banking principles would require additional costs of monitoring the activities of user of funds. Thus, he concluded that without efficiency loss, the introduction of the PLS modes of financing is not possible. Tag Eldin (1991), while commenting on this proposition and expressing his concern with the overwhelming concentration of Islamic banks' assets in the mark-up mode, observed that "it is essentially the moral hazard problem which explains the general unwillingness of the management of Islamic banks to supply individual investment clients with funds on profit sharing basis". Most Islamic scholars interested in the promotion of the application of the PLS are also pre-occupied with this problem (see, e.g., Siddiqi 1988, 1993, al Gari 1993 etc.).

1The most important and useful policy implication of Khan's work is its appeal for designing incentive mechanisms for the application of the PLS. This suggestion provides a crucial premises for the implementation of the PLS principles in some forms.

2Khan (1983) also treats mudharabah as a synonym of Islamic financing.
4.7.1.1 Brief Overview of the Agency Theory

The moral hazard hypotheses uses the framework of agency theory developed by Jensen and Meckling (J-M) (1976). The J-M theory explains several aspects of the principal (financier, sleeping partner, employer) - agent (manager, working partner, employee) relationships. More generally, in all activities where work is not directly and independently undertaken, a principal-agent relationship exists - a relationship in which the principal delegates to the agent some authority to make decisions on his behalf. Where ever there is a principal-agent relationship, there is an agency cost. However, this cost will differ in different activities, environments and organizations. The agency cost includes monitoring costs, probable failure of the monitoring and the resultant divergent utility maximization by the agent, the cost of auditing, guarantees etc. If the principal-agent relationship is inevitable, these costs must be met to induce the agent to act to maximize the welfare of the principal. The theory therefore, suggests that, on efficiency grounds, a direct and independent activity where ever feasible, is preferable to an activity involving a principal-agent relationship.

This simple but strong conclusion of the theory rests on the fact that from the principal's point of view, the agent-manager is a divergent utility maximizer. The principal's utility depends only on the value of the firm. But the manager's utility depends on the value of the firm on one hand and his non-pecuniary benefits derived from the firm on the other. The value of the firm is shared by the principal, but the non-pecuniary benefits are exclusively derivable by the manager. Hence, the manager will maximize his utility by deriving maximum non-pecuniary benefits. But the value of the firm is inversely related to the non-pecuniary benefits - one dollar non-pecuniary benefit derived will lead to a reduction in the value of the firm by one dollar. As the manager maximizes his utility (by deriving maximum non-pecuniary benefits), the determinant of the utility of the principal (value of the firm) declines. The

principal's problem is to check this tendency by monitoring. Thus, the conclusion: the PLS will be associated by monitoring costs and banks acting as owners of funds will not offer PLS funds.

4.7.1.2 Critical Evaluation of the Proposition

In our understanding the moral hazard hypothesis offers a misleading explanation for the subdued nature of PLS. Because, in the framework of the same theory it can be argued that efficient PLS contracts may not always require any monitoring.

Table 4(b), provides a simplified hypothetical example of the fundamental logic underlying the theory. It shows that given non-pecuniary benefits derived by the manager, the cost of this borne by him declines along with his ownership, so that at 100% external ownership all non-pecuniary benefits become free of cost. Where at 100% internal ownership, all cost of the non-pecuniary benefits are borne by the manager himself.

Table 4 (b) Efficiency Implications of Ownership Structure

<table>
<thead>
<tr>
<th>Contracts</th>
<th>Manager's ownership as % of total ownership</th>
<th>Out-side ownership as % of total ownership</th>
<th>Dollar value per unit of non-pecuniary benefits derived by the manager</th>
<th>Dollar value of the firm per share</th>
<th>Cost per unit of non-pecuniary benefits for the manager</th>
<th>Cost per unit of non-pecuniary benefits for the out-side owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>B</td>
<td>100</td>
<td>0</td>
<td>.10</td>
<td>1.90</td>
<td>0.10</td>
<td>-</td>
</tr>
<tr>
<td>C</td>
<td>90</td>
<td>10</td>
<td>.10</td>
<td>1.90</td>
<td>0.09</td>
<td>0.01</td>
</tr>
<tr>
<td>D</td>
<td>80</td>
<td>20</td>
<td>.10</td>
<td>1.90</td>
<td>0.08</td>
<td>0.02</td>
</tr>
<tr>
<td>E</td>
<td>70</td>
<td>30</td>
<td>.10</td>
<td>1.90</td>
<td>0.07</td>
<td>0.03</td>
</tr>
<tr>
<td>F</td>
<td>60</td>
<td>40</td>
<td>.10</td>
<td>1.90</td>
<td>0.06</td>
<td>0.04</td>
</tr>
<tr>
<td>N</td>
<td>0</td>
<td>100</td>
<td>.10</td>
<td>1.90</td>
<td>0</td>
<td>0.10</td>
</tr>
</tbody>
</table>
Assuming that the manager himself keeps 100% ownership and does not derive any non-pecuniary benefits, and at the maximum efficient operational level of the firm, the value of 1 share is 2 dollars. If the manager decides to derive 0.10 dollar non-pecuniary benefits, he has to forego same amount in the value of the firm - the value of one share of the firm would be 1.90 dollars. He can maximize his utility by issuing equities - enjoy the same amount of non-pecuniary benefits, but forego lesser and lesser costs as a reduction in the value of the firm. If he sells 100% ownership, the entire cost of the non-pecuniary benefits derived by him will be borne by the outsiders. As we can see, this is only one side of the coin, which the moral hazard hypothesis utilizes.

The other side of the coin is however, more positive in its implications. We may consider an upward movement from the bottom of Table 4 (b), starting with 100% external ownership, and increasing the ownership stake of the manager. It can be seen that internal ownership enhances efficiency. As his stake in the firm increases, the manager has to pay more and more costs for the same level of non-pecuniary benefits. Thus PLS contracts which can enhance internal ownership can also enhance efficiency without causing additional monitoring costs. The original J-M model itself explains this conclusion as evident from the simplified version of the model presented below.

Wealth of the firm depends on the firm's market value as well as the growth of its investment. The manager of the firm is indifferent about maximizing its wealth and non-pecuniary benefits. If his investment is at the level \( z \) with all internal sources, \( w_1 \) and \( f_1 \) are the corresponding wealth and non-pecuniary benefits. If the firm has growth plans with all internal funds (no agency cost), its expansion will take the \( z_c \) path with optimum investment at \( c \), (i.e., the normal optimum investment under diminishing returns), wealth level \( w_3 \) and non-pecuniary benefits \( f_2 \). But if it decides to issue equity to finance growth, it will be put on the \( z_d \) expansion path with the corresponding optimum investment at \( d \) (tangency point of his indifference between \( w \) and \( f \).
with his fractional ownership of the firm), wealth $w_2$ and non-pecuniary benefits $f_3$.

Using equity, can an expansion path higher than $zdh$ be ensured? There are two possibilities. One of these is explained in detail in the original J-M model. Accordingly, monitoring will push the expansion path up. But since it involves cost, the expansion path of investment with monitoring will remain between $zc$ and $zdh$. This framework is utilized by Khan (1983b) to suggest that elimination of interest and its replacement with equity financing would put the economy at a lower growth path.

![Efficiency of a Declining PLS](image)

**Fig. 4(b)** Efficiency of a Declining PLS

However, it may be argued that efficient PLS contracts can be designed without monitoring and therefore take the $zc$ expansion path. The difference between the $zc$ and $zdh$ expansion paths is effected by the logic underlying
Table 4 (b). If the firm is risk neutral, and it is seeking external funds for expansion, it would prefer an arrangement for financing which could ultimately lead to greater internal ownership (100% at the extreme). Hence, it may be suggested that the zc investment expansion path is possible with equity participation but with a declining characteristic.

Specifically, suppose a diminishing PLS contract is arranged. According to the contract, overtime, the entrepreneur will buy the ownership shares of the financier out of the profits generated by the project. The ownership incentive will force the entrepreneur not only to work efficiently, but also to report profits honestly. Thus there would be no needs for monitoring costs and the zc investment expansion path could be attainable. It may therefore, be concluded that if the concentration of mark-up in the operations of Islamic banks was only due to moral hazard problems, this problem would have been solved by designing contracts which enhance the incentive of the manager. This would have been done by offering them ownership of the projects. As a result, diminishing *musharakah* would have been significant among Islamic banks.

4.7.2 Moral Hazard: Case of Non-ongoing Enterptises

Other important arguments for the overwhelming use of mark-up by the Islamic banks are liquidity, cash flow and considerations for matching assets with liabilities. Commercial banks' liabilities are predominantly short-term in nature, therefore, the assets should also be short-term in nature. The trading activity involves short-term investments. For that matter the PLS in the trading activity may equally be liquid as the mark-up. It is also consistent with the term-structure of deposits. The PLS is traditionally a trade financing device. Ironically, why then the mark-up also dominates trade financing operations of the Islamic banks?

Some observations related to this issue were discussed in Section 3.3 under the demand side considerations. As those considerations dealt with the nature of the PLS contract, they are equally valid in context of the supply of
credit. However, the phenomenon of domination of trade financing by the mark-
up needs further explanations from the supply side.

The trading operation generally comes to an end in a short period of
time. If this activity is financed by external sources, with the conclusion of the
activity, the contractual relationship between the financier and user of funds
would also conclude. Therefore, the issue of moral hazard may seem to be a
major determinant factor for the lack of PLS-based trade financing activities.
Nevertheless, keeping in view the special nature of trade financing, (as well as
other such ownership structures), a number of considerations help us again to
understand the actual significance of the moral hazard phenomenon.

First, in consideration for a reward for efficiency, it is possible to agree
on different profit or crop sharing ratios. For instance, the two parties may
agree that if the manager of funds makes a certain level of profit, he will enjoy
a more favorable profit sharing ratio (e.g., if the realized profits are 15%, the
profit sharing ratio would be 50:50, and if realized profits are 20% the profit
sharing ratio would be 60:40 in favor of the manager of funds). Second, the
possibility of performance signaling contributes to the reduction of moral
hazard. For instance, Caravan trading automatically signals the performance of
its participants. When traders travel and trade in the same markets and
merchandise of the same nature, the performance of one trader can signal the
performance of the other. This fact may not be of any significance when traders
are honest, but its significance for the pure sharing arrangement is immense
under lesser favorable moral conditions. Therefore, it can be expected that
even if moral conditions are worst, mudharabah can be effectively applied as
signaling is possible in general. Third, even if signaling may not be possible,
performance observance may not be costly as markets produce unbiased
information in certain cases. For instance, the prices of precious metals, major
stocks and currencies are objectively revealed by the market. Under these
conditions too, the PLS principle could be generally applicable. Fourth, in
certain other cases, the two parties could have equal and definite pre-
contractual information regarding the expected outcome of their joint enterprise. These will depend on the degree of certainty with regard to factors effecting the outcome of the enterprise. For example, assuming particular climatic conditions, the output of a particular crop on a farm can be estimated. The climate can then be observed without incurring any cost. Such cases could also facilitate the application of PLS.

On the basis of the above considerations we may not be able to refute the moral hazard factor in the non-existence of PLS in trade financing. But these arguments are certainly helpful to suggest that moral hazard may not be the only factor responsible for the phenomenon.

4.7.3 Acquisition of Assets for Re-sale

If a significant portion of the trading transactions are effected for re-sale in addition to the end-use purposes discussed before, these activities could have generated substantial demand for the PLS funds. Why then PLS is not being used?

A closer scrutiny of the trading transaction would reveal that a large part of finance for the trading enterprise is provided by the multinational producers in various forms (such as advance deliveries, credit lines etc.)\(^1\). For capturing markets, expansion of sale, and maximization of revenues on their research and development intensive investments, the goods sold must be competitive. As the objective of credit is to facilitate sale, it must be very cheap.

Islamic banks as suppliers are not only competing with other suppliers on this premises but are also competing with the traditional banks. In these circumstances if the Islamic banks opted for the PLS in trade financing, will not the cost of their funds be higher? Will they ask for more profit share in order to adjust the risk? Will they loose their markets to other channels of trade? At least theoretically, the Islamic banks are not pure financiers. In mark-up

\(^1\)Some useful information, in this regard is provided in an OECD publication, Japan's General Trading Companies, Paris. OECD, 1985.)
financing too, the banks are supposed to be responsible for the risk of the commodities while in their ownership. Nevertheless, this risk is minimized under mark-up by practically securing the credit sale through irreversible orders by clients for assets (credit) - a weakness of the mark-up compared to the PLS judged in the criterion of risk-sharing.

Although, the demand for funds to finance acquisition of assets for end-use purposes cannot be financed by the PLS, a large part of import trade financing which is effected for re-sale purposes is a good candidate for the PLS. However, the probability of commodities not being sold will remain to continue, as an excuse for the banks to refrain from contracting the PLS, particularly when mark-up is available as an Islamic substitute. The PLS can be brought at par with the mark-up in this regard, by institutional arrangements, such as a commodity clearing house (CCH) to be jointly implemented by the PLS financiers. The CCH will work towards ensuring market for PLS-financed assets whenever, the anticipated demand happened to be weak.

Research works in the direction of similar institutional arrangements should be conducted. Nevertheless, in financing trade transactions, more work on protecting the mark-up from possible abuses is equally important. For, the distinct risk sharing attributes of the PLS are relatively more significant in ongoing concerns where enterprises grow similar to biological organisms. Thus we must distinguish between a single trade transaction and an ongoing trading enterprise such as the Pakistani mudharabah companies, the Trading Corporation of Pakistan, an Islamic bank as user of funds or an industrial enterprise. In an Islamic framework, all such institutions needing funds can resort only to the profit sharing as PLS deposits of Islamic banks and mudharabah certificates of the Pakistani companies. In all ongoing enterprises, the re-payment of the mudharabah funds is however, a major problem. In the existing conceptual framework, all funds of a mudharabah contract retire together leading to lump sum payments after adjusting for losses. For the cash transactions of a fund user or a fund supplier enterprise, gradual re-payment of
funds is of vital significance. Some form of gradually redeeming PLS (after accounting for losses) will meet this vital requirement in the same form as the mark-up does due to its installment payment. It is ironical that this important consideration has been neglected in the otherwise well advanced literature on the PLS.

4.7.4 Collateral Conditions and Adverse Selection

Collateral requirements play important functions in the supply and allocation of credit in the interest-based credit markets. Collateral may be internal - a firm offering its own assets as a pledge to secure credit or can be external - a firm mobilizing such a pledge from third sources. In both cases, the quality of assets pledged will determine the quality of the collateral. Thus, in the bank-firm contractual relationship, collateral plays an important role. The relationship can be seen from two perspectives - the firm's perspective and the bank's perspective. Since, through the collateral, the firm aims to secure credit and through collateral the bank aims to assess the firm's risk position, the perspectives of the two parties are inter-related.

4.7.4.1 Firm's Perspective

From the perspective of the firm, a collateral offer gives a lender a claim on its own assets without of course rendering bank's own credit claims. Stiglitz and Weiss (1981) used this framework to suggest that only safer firms - firms which are certain about their expected payoff would offer high collateral and firms which are bad would not risk the pledge of their assets. As the title of Stiglitz - Weiss paper suggests, in situations where information about the risk-return profile of firms is kept private and not shared publicly with the banks, collateral conditions may be manipulated by the banks to screen-out bad projects and dishonest firms.

1A more detailed and formal analysis of this point is undertaken in a forthcoming IRTI research. It is very encouraging that some prominent shariah scholars have confirmed the permissibility of the proposals raised in relation to the re-payment of PLS funds in the paper.
If collateral have to play such an important role, credit markets will not clear without their existence and effective operation. We may cite two such situations: Collateral are required only for securing debt finance. If the bank have to participate in the risks of firms, they by-pass collateral requirements. What would be the source to extract the internal private information of the firm with respect to its risks? In the absence of any such cost-free mechanism the banks are opened to the danger of selecting bad projects - adverse selection. Adverse selection may however, also happen in the debt market. If borrowers understood that it is a common norm for banks to believe the proposition that high collateral offerings are made only by good firms, bad firms will also start to offer high collateral pledges. If all borrowers have to pledge high collateral, the screening effect would match each other out with the effect that banks may select bad projects.

4.7.4.2 The Banks' Perspective

Thus there is no reason for the banks to formulate credit policies on the basis of theoretical propositions built around the privately held information of firms about their risk and return situation. Alternatively, the banks rely on observed facts about the risk-return situation of a borrower. If a borrower is found to be riskier more than average, its collateral pledge has to be more than average and vice-versa. This option dominates commercial banks credit policies. Berger and Udelle (1990) report on three empirical studies including their own work on the relationship of risk and collateral pledges. The studies test three hypothesis: one each representing the risk of the borrower, the lender and the credit. They report that they and the previous two works used different methodologies and different data, but surprisingly the results of the three studies all indicate that contrary to the Stiglitz-Weiss proposition, to secure credit, riskier firms offered higher collateral pledges.

These studies suggest that collateral pledges have important but confusing signals for the credit market clearance. There are good reasons to believe that genuine borrowers will offer good pledges but the likelihood of exploiting this situation by dishonest borrowers is also high. Thus banks would prefer to secure genuine collateral pledges rather than having non. The empirical studies largely depend on ex-post information about collateral requirements of various firms, it is therefore natural that all these reflect banks' lending behavior - if riskier firms have to secure credit, they have to offer higher collateral pledges.

4.7.4.3 Attitude of Islamic Scholars to the Role of Collateral

A reference to the works of Islamic scholars on certain aspects of the Islamic financial system, refers also to the basic references used in these works. In relation to deferred trading transactions, where debt (finance) is created and debt default is possible, the concept of a material pledge is given in the Holy Qur'an: *If you are in journey, and cannot find a scribe, a pledge with possession* (may serve the purpose). S. II. 283. This verse clearly permits the pledge of an asset to secure a credit purchase (finance) for the sake of ease and justice to both parties. Operations of Islamic banks which come under the umbrella of deferred sale contracts, may also come under the umbrella of this concept. In fact, in all such domestic transactions an internal pledge is provided by the respective borrowing firms and in transactions involving international payments, an external pledge in the form of third party (government) guarantee is provided.

However, as for the theoretical argument in favor of PLS banking is concerned, the concept of a pledge or any type of guarantee was not viewed possible until recently. As the PLS arrangement, like equity financing implies risk-sharing, it also by-passes the collateral requirement. Chapra (1985) and several other scholars considered that this would improve the efficiency of credit markets. The existence of collateral requirements makes the banks indifferent to the efficiency of firms. Many inefficient firms may secure credit by
virtue of collateral. Conversely many efficient firms would not find finance due to not being able to pledge collateral. Once the collateral requirement is removed, banks are bound to screen projects on the basis of their feasibility.

Kahf (1989, 1992) upholds a more concerned position with respect to the need for a third party guarantee in an Islamic financial system. However, in general, the major concern of Kahf falls in the framework of the deferred sale arrangements. Some of these can best be characterized as quasi equities rather than pure PLS arrangements. The OIC Fiqh Academy, in its Resolution on the muqarada bonds justifies a third party guarantee of the principal of a sharing financing. Siddiqi (1988, 1993) suggests to take such proposals more seriously. The essence of Siddiqi's view is that the principal capital of a PLS fund may be considered to be guaranteed against properly defined uncertainties which may be identified with unfavorable moral behavior or contract failure due to avoidable factors. The proposal may result in attaching more importance to guarantees, e.g., similar to those provided by the Multilateral Investment Guarantee Agency (MIGA). This would certainly be a support for the PLS.

Nevertheless, it may be argued that the cost of managing such an additional institution will ultimately reflect in the cost of capital. As a counter argument one may suggest that a part of the capital of such an institution may come from free contributions. In the zakah system indebted people are defined as al gharimin. As a suggestion, it may be considered to channel the zakah expenditure under this head to the new institution. Another source of such a fund may be the penalties collected from defaulters of contracts. The institution may also raise funds by selling services such as insurance or undertaking profitable enterprises.

On the more critical side however, a number of observations may be made. Even under ex-post circumstances, the definition and identification of uncertainties which can be clearly associated with lack of care and blemish moral attitudes are difficult. This by itself may cause disputes. Moreover, under
the proposed arrangement, the PLS model of banking will loose some of its
distinct characteristics. The non-guaranteed nature of deposits ensures an in-
built mechanism of stability. Some sort of guarantee will have an adverse
impact on this characteristic. The PLS - based proposal is a striking alternative
of the fixed return banking mechanism. Some sort of guarantee will also
mitigate this characteristic. As collateral does not provide any protection to the
banks against adverse selection, any other guarantee mechanism will share
the same weaknesses. In addition, such an arrangement may increase the
influence of the government or the institution on the credit policies of the banks.
This may cause an inefficiency.

However, the banks can minimize the problem of adverse selection by
investing in their own research and development facilities related to project
appraisal, implementation and follow-up. This will no doubt increase the cost of
capital initially. But in the longer-run, it will enhance efficiency and expansion of
the banks' investment activities. In the absence of these capabilities, the
phobia of selecting bad projects will always restrict the use of the PLS.

4.8 INSTITUTIONAL CONSIDERATIONS

A number of institutional factors also put the PLS at a weaker position
compared to the mark-up. Some of these factors are discussed here.

4.8.1 Size and Management of Public Sector

The size and management of the public sector is another important
problem confronted by the financial inter-mediation mechanism in the
developing countries. The problems posed by this phenomenon for the
application of PLS are numerous. To mobilize funds, developing country
governments often issue various bonds and certificates at a very high rate of
return. For example, in Pakistan, most government securities are issued at a
guaranteed and tax free rate of return of over 14% per annum. As a result, we can expect that:

First, public savings of longer-term maturity are kept in these securities. This implies that only short-term savings will be kept in bank deposits. Therefore, the balance-sheet structure of these institutions will be dominated by short-term liabilities. With short-term liability structure, it is not prudent for the banks to involve in longer-term investments. Even if they manage to undertake such longer-term investments, their risk adjusted rate of return could not match the risk and tax free rate of return on the government securities. On the other hand, if lending to the government was not so (unnaturally) attractive, longer-term savings of the public would have been kept in the banks. Thus the banks would have been in a better position to undertake longer-term investments. In the absence of high and guaranteed rate of return, the public would have an option of higher rate of return only after taking the required risk. Consequently, the PLS could have found fertile soil for its nourishment.

Second, as discussed in Section 3, the mark-up can be used to finance government procurements. The PLS is again at a disadvantage. Naturally therefore, the institutional implications of the above and similar other considerations related to the size and management of the public sector is biased against the PLS. The size of the public sector has remained a controversial issue. However, reforms in the management of the public sector is lesser controversial. It may be observed that alternative ways to manage public sector on the basis of profit sharing may be considered which would naturally enhance the efficiency of the public sector and welfare of the society.

4.8.2 Behavioral Considerations

PLS contracts establish a longer-term contractual relationship between the two parties. This characteristic of the PLS puts it at disadvantage compared to the mark-up which does not establish any such relationship between the parties. A number of examples may clarify this point.

122
First, a conflict between the values of the contracting parties may cause problems later in the implementation and follow-up of the projects. Thus banks while providing funds to their clients have to consider these factors in addition to the feasibility of the projects in question. In other words, a technically good project may be presented by a party, where a conflict of cultural and behavioral values may be present. In such cases, despite the feasibility of the project, it may not be considered suitable for a PLS financing.

Second, the urge for privacy is a recognized natural phenomenon. Privacy may be needed for keeping the actual operations of the enterprise confidential, for protecting the bases of comparative advantages of the enterprise or for avoiding certain government regulations etc. Unless contracting parties are willing to share such privacy, PLS contracts would be difficult to implement.

Therefore, unless, a consistent behavioral relationship exists, PLS contracts would be a source of inconvenience for the financiers and user of funds. The existence of unfavorable institutional factors such as completion of various legal formalities in day to day operations of the enterprise, etc., are expected to further aggravate this situation against the PLS.

4.8.3 Other Considerations

There are numerous other institutional considerations which are biased against a large scale application of the PLS contracts. These include: similarity of the mark-up with the established commercial banking traditions and conventions, the orientation and familiarity of the banking personnel with these traditions, the convenience of the mark-up for the banks, the general notion of risk-return trade-off in the banking arena, the government and central banking regulations, the non-availability of complete financial inter mediation framework consistent with the PLS, the competition for banking services, the limited sources of income of the Islamic banks, short-term nature of deposits, the effect of inflation and so on. There is a long list of these factors which can be
put in the general framework of the "culture" of commercial banking. The mark-up is more familiar to this culture.
APPENDIX

Chart 4 (a): Sources of Funds of US Corporations (1900-1979)

Source: Derived from IFC (1992)

Chart 4 (b): Retention as % of Funds for Financing Growth of Firms (1970-85)

Source: Derived from IFC (1992)
Chart 4 (c): Sources of Company Funds in Some Muslim Countries (1980-88)

Source: Derived from IFC (1992)
CHAPTER 5

ISLAMIC FINANCE IN PRACTICE:
MARKET PERFORMANCE OF PROFIT-LOSS-SHARING WITH SPECIAL REFERENCE TO THE PAKISTANI MODARABA COMPANIES
5.1. INTRODUCTION

In chapter four we presented and analyzed alternative explanations for the subdued nature of PLS and overwhelming use of mark-up by the Islamic banks. Non-banking financial institutions are also playing increasingly important role in the efficient functioning of modern capital markets. The evolution and development of Islamic banks as depository institutions has also encouraged the development of non-banking Islamic financial institutions including investment funds and insurance companies managed by various Islamic banks. In addition, since 1984, there has been an evolution and significant increase in the activities of Modaraba companies (MCos) in Pakistan treated as non-banking Islamic financial institutions by the State Bank of Pakistan (SBP).

These companies constitute an important segment of the Islamic financial system. Useful lessons can be drawn from their experiences and challenges. Since the companies are participants of an emerging dynamic stock market, namely, the Karachi Stock Exchange (KSE), for attracting investments, these companies face tough competition from other market participants. The competitors range from leasing companies (LCos) which are new entrants to the market too, to the relatively experienced and mature market participants, such as, chemical and pharmaceutical firms which are listed in the KSE for many years. Although, the LCos., do not claim to offer an agenda of Islamic financing, these companies however, have emerged in the scene to compete with the MCos., in the renting and trading business, in addition to competing for mobilization of resources as all other firms do.
As direct participants of financial markets, the MCos., are thus, confronted with more serious challenges compared to the Islamic banks. First, the Islamic banks offer a contrasting alternative to interest-based banks - the lines between Islamic and conventional banking are thinly defined. The MCos., do not have this comparative advantage. Since investments in stocks, in general, are permitted from the religious perspective, the MCos., do not offer to their investors, much different investment opportunities compared to common stocks. Second, unlike deposit mobilization by the Islamic banks, the resource mobilization requirements of the MCos., compel them to participate in the capital markets. Third, while contributing to economic development by resource mobilization and allocation, these institutions, compared to Islamic banks are directly and more actively involved in the development of Islamic financial instruments and capital markets. Fourth, the MCos., are providing finance to industry more directly and have been able to establish longer-run relationship between finance and industry, in comparison to Islamic banks. Nevertheless, the activities and functions of the MCos., and Islamic banks are inter-related and supplement each other in spreading the application of Islamic principles of financing. Whereas, in the existing research on Islamic banking and finance, much attention has been accorded to Islamic banks, investment funds and Islamic insurance companies, MCos., are relatively ignored.

The objective of the present chapter is to study the evolution, practices and performance of the MCos., as operating under Islamic Republic of Pakistan's Modaraba law. Since this exercise can be better undertaken in comparison with similar other institutions, the study also deals with the practices of other non-banking financial institutions, particularly, the LCos., and investment banks.

Section Two deals with the institutional framework, evolution, development and profile of the MCos. Section Three, provides an overall assessment of the KSE, which provides the market environment for the MCos. This Section also reports the recent position of the MCos., as a separate sector in the KSE. Section Four provides comparisons between sectors and individual
companies with respect to their acquisition of value overtime. Section Five is an attempt to identify the challenges of the *Modaraba* as a sector as opposed to other market participants. Section Six deals with the relevance of Islamic warrants as financial instruments for the MCos.

### 5.2 INSTITUTIONAL SETUP, EVOLUTION AND PROFILE

*Mudharabah* is an important Islamic financial contract. During the past three decades interests in the contract have renewed. The deposit side of the Islamic banks is largely based on this concept. This experience of the Islamic banks has been instrumental in expanding the scope of *mudharabah*.\(^1\) The experience of the MCos., is yet another important example of the application of *mudharabah* in the contemporary complex market economies. This experience can be expected to encourage the development of sophisticated Islamic financial instruments. The present section and remaining part of the chapter deal with the challenges and opportunities of this expectation.

#### 5.2.1 The Law And Regulation Of Modaraba Companies

The Law

The establishment and operations of the MCos., are governed by the *Modaraba Companies and Modaraba Floatation and Control Ordinance 1980*\(^2\), and rules, regulations and guidelines issued as follow-up (referred to in the

---

\(^1\) See, Kahf and Khan (1992) on how the deposit side of Islamic banks has actually expanded the concept.

\(^2\) This law was introduced on June 26, 1980. Evolution of an alternative system to interest has remained under consideration of policy makers in Pakistan for a long time. The 1973 constitution calls for a complete elimination of *riba* from the economy. However, paradoxically, pronounced efforts in this regard were made only during 1977-85, the period, when the constitution remained suspended. The extreme attitude of presenting Islam and the constitution as competing goals has unfortunately cost the country her political and constitutional stability and socio-economic welfare. Even Pakistan’s experience with conversion of its banking and financial system during the 1977-85 period into an Islamic one may well be seen skeptically. As for the operations of commercial banks, national development financing institutions, and public sector resource mobilization is concerned, such a skepticism is not unfounded (one may refer to IPS 1994, for a general evaluation of this exercise). However, there are also some examples of positive institutional changes for the operation of an interest-free Islamic financing system. Scholars and policy makers agree that the approach to be pursued to replace *riba* with some Islamic alternatives, has to be gradualist and two pronged. First, an attempt is needed to familiarize the public with the broader Islamic alternatives. Secondly, a legal framework needs to be ensured to smoothen the process of the supply of the Islamic alternatives to forth come. With respect to both these policy objectives some successes have been achieved in Pakistan.
chapter as *Modaraba law*. Salient features of the *Modaraba law* are given below.

1. *Modaraba* is defined in the Ordinance as, "a business in which a person participates with his money and another with his efforts or skill or both his efforts and skill and shall include Unit Trusts and Mutual Funds by whatever name called".

2. Under the *Modaraba* law, two different legal entities are established. A) *Modaraba Companies (MCos)*. MCos., can be formed by any company which is registered under Companies Ordinance 1984 or a private company or public corporate body (established under any law in force and owned or controlled whether directly or through a company or corporation, by the Federal or a Provincial Government) by fulfilling other conditions under the law. MCos., are registered under the Companies Ordinance 1984 as private or public limited companies for multi-purpose or specific-purpose operations. Private MCos., are not registered with the stock exchange and B) *Modarabas* are perpetual or temporary Funds floated by the MCos., under the *Modaraba Companies and Modaraba Floatation and Control Ordinance 1980*. Unlike each MCo., each *Modaraba* must be registered with a stock exchange.

3. All *Modarabas* are registered with the Registrar of *Modarabas* by fulfilling certain *shari'ah* and operational requirements.

4. The *Modaraba* funds are mobilized by issuing *Modaraba* certificates (MCs). The MCs., are *non-voting* shares of common stock in the *Modaraba*.

5. The minimum capital requirement for a multi-propose *Modaraba* is Rs. 7.5 million, and for a single-purpose *Modaraba* it is Rs. 5 million.

6. In both cases, the MCo., has to contribute the initial 10% of the subscribed capital.
7. The MCo., as a manager (*mudharib*), will charge not more than 10% of total annual profits as its remuneration, besides the returns on its capital contribution to the *Modaraba*.

8. The MCo., can issue rights, stock dividends and distribute cash dividends.

9. The MCo., cannot involve in any activity prohibited by the *shari'ah*.

10. Moreover, 75% of the *Modaraba*’s operations must be kept in the main line of its business.

**The Registrar and Registration of *Modarabas***

As a follow-up on the *Modaraba Companies and Modaraba Floatation and Control Ordinance 1980*, institutional arrangements were made for the establishment of enterprises, floatation of *Modarabas*, religious supervision of the companies' activities, regulation of issuance of certificates, tax coverage and incentives, accounting procedures, arbitration of disputes etc. The above law makes it incumbent for the Federal Government to appoint through separate notification, an office called the Registrar of *Modarabas*. The Registrar of *Modarabas* is appointed by the Corporate Law Authority (CLA), Government of Pakistan (an official body responsible for implementation of the corporate and allied laws) to regulate and administer the establishment and operation of these enterprise as limited liability companies.¹

For establishing a MCo., a party applies to the CLA for registration. For granting registration, the CLA evaluates the application in the framework of the above-mentioned law. When a MCo., registered with the CLA, it submits another application for initiating operations - floatation of *Modarabas*. This application is accompanied by a *Prospectus* related to the nature and conduct of business, *Modaraba* certificate indentures etc. To ensure the *shari'ah* conformity of the operations, the entire documents are evaluated by a

¹ Since 1990, the Corporate Law Authority has started publishing annual reports on the companies. So far, two reports have been released (1990-91 and 1991-92). Some information in this chapter has been drawn from these reports.
standing Religious Supervisory Board (RSB). After clearance from this board, the company applies to the Controller of Capital Issues and Stock Exchange for floatation of the Modarabas. Once operational, periodic inspections are undertaken by the RSB, and chartered cost and management accountants appointed by the CLA.

No company can become operational without a registration with the Registrar of Modarabas. An applicant for registration as a MCo., must itself be a registered company under various concerned laws of the Islamic Republic of Pakistan. The company, must have at least 5-7 million Rs. paid-up capital for the purpose of the Modaraba business. Before granting registration, the Registrar has also to make sure about the integrity of the promoters of the Modaraba, the nature of business to be undertaken in relation to the shari’ah, and compliance with other relevant laws. All the required details have to be presented in the Prospectus of the applicant. Following are the salient features of the guidelines of Registrar Modarabas.

1. Sponsors must have a certified net worth (and declared to the tax officials), not less than the amount subscribed by them personally.
2. The sponsors must have clean record with tax departments, banks and other regulatory organizations.
3. The proposed Chief Executive Officer (CEO) of a MCo., must be of clean background. Once appointed, a CEO cannot be removed without the consent of the Registrar Modarabas.
4. No more than 50% of sponsoring Directors can be from the same family.
5. Experienced sponsors are preferred for the allotment of registration.
6. A sponsorship shall not be transferred at least for two years.
7. All companies will appoint Chartered Accountants.

---

1 The Board consists of three members, one of them nominated as chairman must be a person to be qualified as a Judge of the Supreme Court of the country. The two other members should be prominent religious scholars.
8. Registration for subsequent *Modaraba* floatation can only be granted upon receiving reports of previous operations. If reports of three years are not available, registration will not be granted.

9. No business activities will be repugnant to the *shari’ah*. This will be verified by the RSB.

10. The MCo., will agree to the regular administrative, financial and religious inspections and audits of the Registrar *Modarabas* and

11. Once the Prospectus is approved by the Registrar *Modarabas*, only then the registered MCo., shall approach the Controller of Capital Issues and the stock exchange for floatation of the *Modaraba* certificates.

**Tax Rates**

Initially, those *Modarabas*, which were distributing 90% of their profits as dividends were exempted from corporate income tax. At the present, for initial three years all companies are tax exempt. For the subsequent two years each company is subject to 12.5% tax on corporate income. Thereafter, each company is subject to 25% corporate income tax like all other companies. Since June 1995, the government has also imposed a 15% tax on stock dividends.

**State Bank Regulations**

The SBP has no specific regulations for the MCos. These companies are treated by the SBP as non-banking financial institutions. The instructions of the SBP for floatation of *Modarabas* by such institutions are given in the *Prudential Regulations for Non-banking Financial Institutions*. Following are the salient features of these regulations which also affect the MCos.

1. Each *Modaraba* will establish with the SBP a reserve fund equivalent to its own paid up capital. This reserve fund will be established by annual contribution of at least 20% of the after tax profits of each *Modaraba* floated. Once the reserve fund equals the paid-up capital, the annual contribution will be decreased to
5% of after tax profits. Stock dividend is considered as an appropriation for this purpose.

2. At least 15% of the liabilities of the Modaraba must be invested in the National Investment Trust Certificates (NIT Units) or in securities of public corporations.

3. At least 70% of the Modaraba’s assets to be kept in its principal line of business.

4. For initial two years, the debt/equity proportion of the Modaraba will be 1:7, thereafter, it can be 1:10 and may be further changed with the consent of the concerned regulatory authorities.

5. A Modaraba will not be entitled for any financial assistance if its debt/equity ratio remains below 60:40 on long-term basis. This level of debt/equity ratio must be maintained by all energy sector Modarabas.

6. Current assets/current liabilities ratio will have to be maintained at 1:1 of the Modaraba’s equity.

7. A single business group cannot be financed by more than 20% of the Modaraba’s equity, and

8. The instructions also regulate the Modarabas’ business practices with its Directors and principal share holders.

During 1991-92, Pakistan experienced large scale financial scandal involving cooperative banks and finance companies. These institutions were classified by the SBP as non-banking financial institutions. It is widely believed that the negative image of these cases of failures has been large as far the confidence of investors in the Modaraba sector is concerned. After this scam, the SBP, CLA and Registrar of Modarabas have also increased their regulatory supervision. These regulations are often alleged to be too restrictive by the Modarabas.
5.2.2 Profile Of Companies

The Modaraba legislation was complete by 1984. The first MCo., was authorized in 1984 and the Modaraba was floated in 1985. Charts 5 (a-d), provide the yearly increase in the number of MCos., and their paid-up capital. From charts - 5(a) and (b), it can be seen that the real increase in the number of listed companies came during 1990-93, highest number, 15 companies listed during 1991. By the end of June 1994, there were 52 Modarabas listed in the stock markets of the country, with a total paid-up capital of about Rs. 8 billions.

Chart 5(a). Yearly Listing of Modaraba Companies

1 All charts included in this section are based on table-5(e).
Chart 5(b). Cumulative Yearly Listing of Modaraba Companies
Similarly, from charts 5(c) and (d), it can be seen that by 1989, the total paid-up capital of about Rs. 1.2 billion was listed in the Modaraba sector. Another Rs. 1.2 billion was added during 1990, a record level of Rs. 1.8 billion was added during 1991. By the end of June 1994, the total cumulative paid-up capital listed in the Modaraba sector reached to about Rs. 8 billion, which was 9.4% of total paid-up capital listed in the KSE. For the 1985-95 period, the
average annual growth rate of the listed capital in the Modaraba sector has remained about 50%.

Ownership Structure

The companies are registered as limited liabilities. Most Modarabas are floated by sponsors in the group of 4-8 persons. This is one of the important differences of the MCos., from the traditional concept of a mudharabah enterprise in which the mudharib is a single person. However, considering the mudharib as a legal entity, this difference ceases to exist. The 5-6 group of sponsors is most common.

Table 5(a): Modaraba Certificate Holders by Category in % by end of June 1992

<table>
<thead>
<tr>
<th>Category</th>
<th>Individuals</th>
<th>Investment companies</th>
<th>Insurance companies</th>
<th>Joint stock companies</th>
<th>Financial institutions</th>
<th>Modaraba companies</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average of 9 companies for 1990</td>
<td>61.22</td>
<td>4.96</td>
<td>3.52</td>
<td>10.35</td>
<td>11.52</td>
<td>8.21</td>
<td>.22</td>
</tr>
<tr>
<td>Average of same 9 companies for 1991</td>
<td>53.91</td>
<td>7.15</td>
<td>4.09</td>
<td>9.74</td>
<td>16.15</td>
<td>8.80</td>
<td>.16</td>
</tr>
<tr>
<td>Average of 8 new companies for 1991</td>
<td>55.15</td>
<td>4.09</td>
<td>2.23</td>
<td>4.67</td>
<td>18.54</td>
<td>4.32</td>
<td>10.99</td>
</tr>
</tbody>
</table>

Source: Derived from CLA (1992)

The companies raise funds from the market by issuing the tradable MCs. Table-5(a), provides information about the holders of the certificates of some companies. An important conclusion to be derived from this table is that the companies have been able to reach the individual investors, as a large part of the certificates are held by individuals. The second largest group of the certificate holders are the financial institutions.

Size

The legislation allows Modarabas to be as small as worth Rs. 5 million; a Modaraba can be floated with a Rs. 5 million paid-up capital. However, MCos., are not necessarily small companies compared to the size of an average company in the KSE. Frequency distribution of the Modarabas in terms of the size of their paid-up capital is provided in chart 5(e). Out of the 52 companies, 35 companies have a total paid-up capital of less than 150 million Rs. In fact,
25 companies are listed with a paid-up capital less than 100 million Rs. (about 3 million US dollars). Ten companies have paid-up capital less than 50 million Rs. (about 1.5 million US dollars). Two companies are listed with capital as small as 25 million Rs. Only 16 companies have paid-up capital above the KSE average. The largest two companies have a paid-up capital of Rs. 400 million each.

Chart 5(e)

<table>
<thead>
<tr>
<th>Paid up capital (million Rs.)</th>
<th>No. of Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.8</td>
<td>10</td>
</tr>
<tr>
<td>55.4</td>
<td>8</td>
</tr>
<tr>
<td>83.9</td>
<td>10</td>
</tr>
<tr>
<td>112.5</td>
<td>6</td>
</tr>
<tr>
<td>141.1</td>
<td>4</td>
</tr>
<tr>
<td>169.6</td>
<td>2</td>
</tr>
<tr>
<td>198.2</td>
<td>2</td>
</tr>
<tr>
<td>226.8</td>
<td>1</td>
</tr>
<tr>
<td>255.4</td>
<td>1</td>
</tr>
<tr>
<td>283.9</td>
<td>1</td>
</tr>
<tr>
<td>312.5</td>
<td>1</td>
</tr>
<tr>
<td>341.1</td>
<td>1</td>
</tr>
<tr>
<td>369.6</td>
<td>1</td>
</tr>
<tr>
<td>398.2</td>
<td>2</td>
</tr>
</tbody>
</table>

Sources of Funds

Information on the debt-equity position of 20 MCos., is available for 1993 and 1994 and is given in table-5(e). Out of these, 12 companies are 100% equity-based. Only one company has over 50% debt in its capital (this company happens to be the oldest one), but it reduced its debt/equity ratio from 1.17:1 in 1993 to 1.13:1 in 1994. The remaining MCos., have very little debt in their capital structure.

The sources of debt in the capital are installment purchase, lease contract deposits, customer security deposits and long-term lease finance. The sources of equity include musharakah funds of the sponsors and Modaraba
funds of the certificate holders, capital reserve, general reserve and unappropriated profits.¹

Source of Income

Table 5(b): Source of Current Income

<table>
<thead>
<tr>
<th>Sources</th>
<th>1990 Average for 9 companies</th>
<th>1991 Average for the same 9 companies</th>
<th>1991 Average for 8 new companies</th>
<th>1991 Average for 17 companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leasing</td>
<td>75.92</td>
<td>80.65</td>
<td>.79</td>
<td>70.09</td>
</tr>
<tr>
<td>Investment</td>
<td>.57</td>
<td>.25</td>
<td>.79</td>
<td>.31</td>
</tr>
<tr>
<td>Trade Credit</td>
<td>18.72</td>
<td>14.04</td>
<td>51.31</td>
<td>18.97</td>
</tr>
<tr>
<td>PLS A/C</td>
<td>.34</td>
<td>.33</td>
<td>.88</td>
<td>.40</td>
</tr>
<tr>
<td>Others</td>
<td>2.03</td>
<td>3.13</td>
<td>18.63</td>
<td>3.18</td>
</tr>
</tbody>
</table>

Source: Derived from CLA (1992).

Some information about the sources of current income for some companies is given in table-5(b). Rentals are the dominant source of the operating income of the companies. This implies that most funds are engaged in equipment and assets. Trade finance in the form of mark-up is also significant source of the operating income of the companies.

Dividends

According to the Modaraba law, dividends can be paid either in cash, or in the form of stocks. Table-5(e), contains information about the number of companies which paid cash and stock dividends during 1993. This information is summarized in charts 5(f) and (g), respectively, for stock and cash dividends. As can be seen from these charts, 33 companies paid stock dividends at an average rate of 14%, the highest being 40% and the lowest 4%, 27 companies paid more than 10% stock bonus and 8 companies paid 20% stock bonus.

¹ See CLA (1992).
As compared to 33 companies which paid stock dividends, only 15 companies paid cash dividends, the average dividend being 13%, the highest 32% and lowest 3%. Discrepancies in tax benefits are important reasons for such an over reliance on stock dividends. Since, fiscal year 1995, a 15% tax has been imposed on stock dividends, this is expected to change the composition of total dividends paid. The over-reliance on stock dividends may also be due to shortage of cash. With the evolution of financial instruments compatible with the shari'ah, and resultant improvement in the liquidity position of the companies, it can be expected that in the future the reliance on stock dividends will be reduced.
Ten companies paid both stock dividends as well as cash dividends. The highest cash dividend (32.5%) paying company also paid 10% bonus shares, paying highest total dividends. The highest stock dividend paying company did not pay cash dividend.

Rate of Return on Equity (ROE)

Information about ROE is available for 20 companies for 1993 and 1994 (see, table-5(c). The average ROE for the 20 companies in 1993 was 17.44% which reduced to 13.6% during 1994. Compared to 2 companies ROE below 10% during 1993, in 1994, the ROE of 8 companies fell below 10%. In 1993, the ROE of 12 companies was above 15%, in 1994, 6 companies registered an ROE above 15%. Compared to these, the average ROE for most of the 20 mutual funds of the Investment Corporation of Pakistan, for 1992 was over 25%.
Table 5(c): Frequency Distribution of 20 Modaraba Companies and ICP Mutual Funds in Terms of ROE

<table>
<thead>
<tr>
<th>% ROE</th>
<th>Modaraba Companies in 1993</th>
<th>Modaraba Companies in 1994</th>
<th>20 Mutual Funds in 1992 randomly selected out of 28</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 10</td>
<td>2</td>
<td>8</td>
<td>nil</td>
</tr>
<tr>
<td>10-15</td>
<td>6</td>
<td>5</td>
<td>nil</td>
</tr>
<tr>
<td>15-20</td>
<td>6</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20-25</td>
<td>4</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>greater than 25</td>
<td>2</td>
<td>2</td>
<td>13</td>
</tr>
</tbody>
</table>

Source: Derived from: a) Table 5 (e) and b) KSE, Company Analysis

Earning Per Share (EPS)

The EPS, calculated as total net income of the company divided by the number of its shares of common stock outstanding, gives a measurement of how investors are benefiting in terms of their earning per each share held by them. If a company has 10 million outstanding shares and earns Rs. 20 million net profit, its EPS is Rs. 2. Table-5(d) shows that during 1992, per share, investors in the ICP Mutual Funds earned in average over Rs. 40, while investors in the 20 Modarabas earned an average EPS of Rs. 1.93, which jumped to Rs. 6.38, in 1994. This jump is due to an unusual, Rs. 93 EPS, realized by one company, but the number of MCos., whose EPS declined increased in 1994.
Table 5(d): Frequency Distribution of 20 Modaraba Companies and ICP Mutual Funds in Terms of EPS Rs.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 1</td>
<td>3</td>
<td>3</td>
<td>nil</td>
</tr>
<tr>
<td>1 to 1.50</td>
<td>2</td>
<td>9</td>
<td>nil</td>
</tr>
<tr>
<td>1.50 to 2</td>
<td>7</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2 to 2.50</td>
<td>6</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>greater than 2.5</td>
<td>2</td>
<td>6</td>
<td>15</td>
</tr>
</tbody>
</table>

Source: Derived from: Table 5(e) and KSE. Company Analysis

The EPS is a crucial indicator of changes in the stock-holders' wealth over time. Given other considerations, higher EPS is better compared to a lower one, but a number of factors must be watched over a period of time to have a meaningful comparison between the EPS of various companies. Many factors, including time value of money for investors, relative risk-return-trade-off, leverage and the changes in stock prices, capital gains effect the meaningfulness of EPS overtime. EPS also changes the distribution of wealth between old and new stock-holders as the proportionate growth in the net profits may be lesser compared to the proportionate new issues which could finance the growth opportunities.

Chart 5(i)

Earning per share 1993 Rs.
Market Valuation Ratio (MVR)

MVR, market capitalization/paid-up capital, is another crucial indicator of the performance of a listed company. MVR depends on the volume of trade in a particular stock. Given capitalization/paid-up capital data of table-5(e), MVR for 20 MCos., during April 1995, is calculated and is given in chart 5(k). It can be seen that the mean MVR for the MCos., is even lesser than one point. This information may be compared with the mean value of MVR for the KSE, which was 5 points on June 30, 1994. The MVR for the Modarabas has declined further during the rest of 1995.
Chart-5(k)

Market Valuation Ratio

No. of MIs

Std. Dev = .43
Mean = .95
N = 20.00
## Table 5(e) - Profile of Modaraba Companies

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Al-Ata Lease</td>
<td>1992</td>
<td>50.00</td>
<td>10.50</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Al-Azeem Lease</td>
<td>1992</td>
<td>110.00</td>
<td>.</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Al-Noor-I</td>
<td>1992</td>
<td>210.00</td>
<td>152.00</td>
<td>5.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Allied Bank I</td>
<td>1993</td>
<td>350.00</td>
<td>245.00</td>
<td>1.60</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Asset Lease</td>
<td>1993</td>
<td>39.69</td>
<td>.</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BRR Capital I</td>
<td>1985</td>
<td>202.82</td>
<td>294.00</td>
<td>1.17</td>
<td>1.13</td>
<td></td>
</tr>
<tr>
<td>BRR II</td>
<td>1990</td>
<td>150.00</td>
<td>109.00</td>
<td>.00</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Confidence I</td>
<td>1991</td>
<td>55.00</td>
<td>10.00</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constellation I</td>
<td>1991</td>
<td>64.63</td>
<td>17.50</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crescent I</td>
<td>1991</td>
<td>158.03</td>
<td>158.00</td>
<td>7.50</td>
<td>.15</td>
<td>.18</td>
</tr>
<tr>
<td>Custodian I</td>
<td>1994</td>
<td>30.00</td>
<td>.</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DGM I</td>
<td>1992</td>
<td>50.00</td>
<td>.</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DR Asset</td>
<td>1993</td>
<td>39.69</td>
<td>.</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elite Capital</td>
<td>1992</td>
<td>113.40</td>
<td>5.00</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity Int</td>
<td>1993</td>
<td>150.00</td>
<td>96.00</td>
<td>.00</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Equity M I</td>
<td>1992</td>
<td>262.20</td>
<td>197.00</td>
<td>.00</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>F.B Modaraba</td>
<td>1989</td>
<td>45.70</td>
<td>.00</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fidelity M I</td>
<td>1992</td>
<td>208.80</td>
<td>193.00</td>
<td>20.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Financial link</td>
<td>1994</td>
<td>100.00</td>
<td>.</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guardian Lease</td>
<td>1994</td>
<td>100.00</td>
<td>.</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Lease I</td>
<td>1993</td>
<td>56.25</td>
<td>12.50</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grindalas M</td>
<td>1987</td>
<td>346.50</td>
<td>820.00</td>
<td>10.00</td>
<td>.67</td>
<td>.49</td>
</tr>
<tr>
<td>Habib Bank I</td>
<td>1991</td>
<td>397.07</td>
<td>258.00</td>
<td>15.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Habib M I</td>
<td>1985</td>
<td>252.00</td>
<td>242.00</td>
<td>20.00</td>
<td>.12</td>
<td>.09</td>
</tr>
<tr>
<td>Hajvery M I</td>
<td>1991</td>
<td>205.32</td>
<td>123.00</td>
<td>18.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Ibrahim M I</td>
<td>1993</td>
<td>116.00</td>
<td>104.00</td>
<td>16.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Imroz M I</td>
<td>1994</td>
<td>30.00</td>
<td>.</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial C M</td>
<td>1991</td>
<td>66.25</td>
<td>.</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inter Fund M I</td>
<td>1991</td>
<td>67.85</td>
<td>20.00</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LTV Capital</td>
<td>1989</td>
<td>400.00</td>
<td>548.00</td>
<td>.47</td>
<td>.18</td>
<td></td>
</tr>
<tr>
<td>M Al Mal</td>
<td>1987</td>
<td>182.57</td>
<td>173.00</td>
<td>28.00</td>
<td>.27</td>
<td>.20</td>
</tr>
<tr>
<td>M Al Tijara</td>
<td>1991</td>
<td>66.00</td>
<td>10.00</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mehran M I</td>
<td>1990</td>
<td>83.16</td>
<td>20.00</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National M I</td>
<td>1989</td>
<td>52.99</td>
<td>.</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pak M I</td>
<td>1991</td>
<td>110.00</td>
<td>10.00</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Premier M I</td>
<td>1991</td>
<td>27.50</td>
<td>.</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional M I</td>
<td>1991</td>
<td>77.67</td>
<td>15.30</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Providence M I</td>
<td>1991</td>
<td>63.13</td>
<td>18.00</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prudential M I</td>
<td>1990</td>
<td>293.31</td>
<td>12.00</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prudential M II</td>
<td>1990</td>
<td>193.05</td>
<td>10.00</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prudential M III</td>
<td>1991</td>
<td>222.60</td>
<td>5.00</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Punjab M I</td>
<td>1993</td>
<td>270.00</td>
<td>284.00</td>
<td>35.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Sanaullah M I</td>
<td>1990</td>
<td>116.88</td>
<td>.</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schon M</td>
<td>1992</td>
<td>234.00</td>
<td>103.00</td>
<td>17.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Tawakal M I</td>
<td>1990</td>
<td>258.75</td>
<td>20.00</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tri Star M I</td>
<td>1990</td>
<td>96.80</td>
<td>10.00</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tri Star M II</td>
<td>1993</td>
<td>110.00</td>
<td>.</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust M</td>
<td>1992</td>
<td>273.00</td>
<td>369.00</td>
<td>40.00</td>
<td>.67</td>
<td>.02</td>
</tr>
<tr>
<td>UDL M</td>
<td>1991</td>
<td>249.38</td>
<td>212.00</td>
<td>11.00</td>
<td>.11</td>
<td>.15</td>
</tr>
<tr>
<td>Unicap M</td>
<td>1991</td>
<td>136.40</td>
<td>89.00</td>
<td>10.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Unity M</td>
<td>1993</td>
<td>300.00</td>
<td>.</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>1994</td>
<td>7864.39</td>
<td>4769.00</td>
<td>459.90</td>
<td>3.63</td>
<td>2.44</td>
</tr>
<tr>
<td>Mean</td>
<td>1994</td>
<td>154.20</td>
<td>238.45</td>
<td>13.94</td>
<td>.18</td>
<td>.12</td>
</tr>
<tr>
<td>Name of MCo</td>
<td>Year of Listing</td>
<td>% Cash Dividend 1993</td>
<td>% ROE 1993</td>
<td>% ROE 1994</td>
<td>EPS Rs. 1993</td>
<td>EPS Rs. 1994</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------</td>
<td>----------------------</td>
<td>------------</td>
<td>------------</td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Al-Noor-I</td>
<td>1992</td>
<td>15.00</td>
<td>20.70</td>
<td>8.80</td>
<td>2.22</td>
<td>0.92</td>
</tr>
<tr>
<td>Allied Bank I</td>
<td>1993</td>
<td>14.30</td>
<td>9.50</td>
<td>1.67</td>
<td>1.04</td>
<td>0.30</td>
</tr>
<tr>
<td>Asset Lease</td>
<td>1993</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>BRR Capital I</td>
<td>1985</td>
<td>17.50</td>
<td>22.00</td>
<td>11.20</td>
<td>2.6</td>
<td>1.46</td>
</tr>
<tr>
<td>BRR II</td>
<td>1990</td>
<td>15.00</td>
<td>18.50</td>
<td>1.61</td>
<td>2.04</td>
<td>2.05</td>
</tr>
<tr>
<td>Confidence I</td>
<td>1991</td>
<td>32.50</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Crescent I</td>
<td>1991</td>
<td>15.00</td>
<td>21.10</td>
<td>21.70</td>
<td>2.27</td>
<td>2.78</td>
</tr>
<tr>
<td>DGM I</td>
<td>1992</td>
<td>12.50</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Equity Int</td>
<td>1993</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Equity M 1</td>
<td>1992</td>
<td>15.00</td>
<td>13.60</td>
<td>13.30</td>
<td>1.59</td>
<td>1.75</td>
</tr>
<tr>
<td>F.B Modaraba</td>
<td>1989</td>
<td>.60</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Fidelity M 1</td>
<td>1992</td>
<td>16.70</td>
<td>18.20</td>
<td>2.00</td>
<td>2.66</td>
<td>23.30</td>
</tr>
<tr>
<td>Grindlays M</td>
<td>1987</td>
<td>17.00</td>
<td>19.10</td>
<td>7.90</td>
<td>3.00</td>
<td>1.22</td>
</tr>
<tr>
<td>Habib Bank I</td>
<td>1991</td>
<td>13.40</td>
<td>8.50</td>
<td>1.55</td>
<td>93.00</td>
<td>53.60</td>
</tr>
<tr>
<td>Habib M 1</td>
<td>1985</td>
<td>17.30</td>
<td>8.20</td>
<td>1.06</td>
<td>.46</td>
<td>22.20</td>
</tr>
<tr>
<td>Hajvery M 1</td>
<td>1991</td>
<td>15.50</td>
<td>9.60</td>
<td>1.86</td>
<td>1.26</td>
<td>32.40</td>
</tr>
<tr>
<td>Ibrahim M 1</td>
<td>1993</td>
<td>14.00</td>
<td>12.20</td>
<td>1.63</td>
<td>2.77</td>
<td>16.30</td>
</tr>
<tr>
<td>Inter Fund M 1</td>
<td>1991</td>
<td>10.00</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>LTV Capital</td>
<td>1989</td>
<td>10.40</td>
<td>44.00</td>
<td>.44</td>
<td>3.33</td>
<td>17.70</td>
</tr>
<tr>
<td>M Al Mal</td>
<td>1987</td>
<td>24.00</td>
<td>10.90</td>
<td>2.61</td>
<td>1.23</td>
<td>34.50</td>
</tr>
<tr>
<td>Punjab M 1</td>
<td>1993</td>
<td>29.90</td>
<td>12.90</td>
<td>3.50</td>
<td>1.48</td>
<td>70.00</td>
</tr>
<tr>
<td>Sanaullah M 1</td>
<td>1990</td>
<td>12.00</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Schon M</td>
<td>1992</td>
<td>13.80</td>
<td>4.20</td>
<td>1.67</td>
<td>.53</td>
<td>33.40</td>
</tr>
<tr>
<td>Tri Star M I</td>
<td>1990</td>
<td>15.00</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Tri Star M II</td>
<td>1993</td>
<td>10.00</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Trust M</td>
<td>1992</td>
<td>28.60</td>
<td>16.80</td>
<td>5.21</td>
<td>2.82</td>
<td>78.10</td>
</tr>
<tr>
<td>UDL M</td>
<td>1991</td>
<td>9.50</td>
<td>27.80</td>
<td>1.09</td>
<td>3.98</td>
<td>18.50</td>
</tr>
<tr>
<td>Unicap M</td>
<td>1991</td>
<td>18.10</td>
<td>10.90</td>
<td>2.00</td>
<td>1.35</td>
<td>24.80</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>13.10</td>
<td>17.44</td>
<td>13.59</td>
<td>1.93</td>
<td>6.38</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>15</td>
<td>20</td>
<td>19</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

Notes: (·) implies complete information missing.
Abbreviations: Ml, First Modaraba; Mll, Second Modaraba; MIII, Third Modaraba; D/E, Debt/Equity; ROE, Return on Equity; EPS, Earnings Per Share; PAT, Profits after Tax.

5.3 THE MARKET ENVIRONMENT

For most companies the choice to list themselves in stock exchanges comes after some operational experience. Except for mutual funds, initiation of business activities with listing in a stock market is a rare phenomenon. Despite operational differences between MCos., and mutual funds regarding initiating business by listing in a stock market, the case of Modarabas is similar to mutual funds. It is extremely difficult for the MCos., to mobilize funds without being listed. Consequently, it is unique with MCos., to initiate business by listing in a stock market, rather than to initiate operations and list latter. The market environment for the MCos., is briefly provided in this section with an overview of the KSE along with the overall status of MCos., in the market during 1994.

5.3.1. Stock Markets In Pakistan

The operational pattern of MCos., indicates that the stock market is crucial for their existence. Pakistan has three stock exchanges: A matured one in Karachi, and two novices, one each in Lahore and Islamabad. Most Modarabas are listed in all the three markets, but KSE is the hub of their business. The historical development of the KSE is summarized in chart-5(l) depicting the number of companies, chart-5(m) reflecting the paid-up capital and market capitalization and finally chart-5(n) showing the pattern of MVR\(^1\).

Established in 1950, the KSE is now a matured market. In 1950, 15 companies were listed in the KSE, with a total paid-up capital of Rs. 117 million. By April 1995, about 700 companies were listed in the market with a total paid-up capital of about Rs. 87 billion. It can safely be expected that the number of listed companies will increase to over 780 during the next five years. The forecast for this trend is given in chart-5(l).

\(^{1}\) The charts in this sub-section are based on KSE Brochures.
Chart-5(I): Number of Companies Listed in the KSE

- Number of Companies Listed
- Poly. (Number of Companies Listed)

\[ y = -2.5085x^2 + 89.701x - 36.413 \]

\[ R^2 = 0.9649 \]
Chart-5(m): Size of the KSE in billion Rupees

Y = 0.535x² + 0.475x + 0.228
R² = 0.9976

Listed Capital
Market Capitalization
Poly (Market Capitalization)
Poly (listed Capital)
It is interesting to note that during the 1970-80 period, the market remained almost stagnant at around 300 companies (actual figures, 300 in 1970, 314 in 1980). During this period, the total paid-up capital of the listed companies increased to Rs. 7.5 billion from Rs. 4.4 billion in 1970. However, the market remained stagnant, as the capitalization declined to lower levels, even compared to the paid-up capital.

Business activities of the market accelerated after 1980 (see, charts 5(l) and (m). By 1986, the number of listed companies increased to 360, involving a paid-up capital of Rs. 14.4 billion. Actual acceleration of the market is obvious from the five-fold increase in the market capitalization to Rs. 30.3 billion in 1986 from Rs. 6.4 billion in 1980. Since then, the KSE continuously gained strength. While growth in the number of listed companies and paid-up capital has steadily increased ever since, during 1990-91, there was an upsurge in the trading activity and market capitalization increasing from Rs. 62 billion in 1990 to Rs. 190 billion in 1991. Since then, the increase in market capitalization has again been steady, whereas, relatively, the paid-up capital has increased at a faster pace.

On the basis of the past 45 years operations and expansion of the KSE, some forecasts can also be made about the future status of the KSE (see, chart 5(l). By the year 2000, about 780 companies will be listed in the KSE. The total paid-up capital of these companies is estimated to reach Rs. 170 billion. As the $R^2$ is significantly high, (.988), this estimate could be considered as a good approximation. On the other hand, the market capitalization is estimated to reach over 800 billion Rs. Again, given the .96 value for the $R^2$ this can be considered another reasonable estimate.
Chart-5(n): Valuation Ratio of the Market
(Market Capitalization/ Listed Capital)
The MVR considerably improved in 1960 over 1950, but substantially declined during the seventies (see, chart-5(n)). During the 1986-90 period, the MVR remained around 2 points. The up-surge in the market activity pulled the ratio to 5 points in 1991, again declining to around 3 points during 1992-93. There has been an improvement in the market activity during 1994. But, due to policy differences between the government and the business community, the market activity declined to record lows during the early half of 1995 pushing the MVR ratio to below 3 points.

However, the market activity is expected to take momentum. Based on the 45 years activity of the KSE, our projected mean MVR for the future five years is around 5 points. This scenario is based on expectations that an understanding between the business community and the government will be reached, political stability, particularly in Karachi will be achieved, privatization and macro-economic improvement expected from foreign investment-based energy sector led growth will be realized by time of budget for fiscal year 1996. For the period 1997-2000, we expect the MVR to remain over 6 points on an average which will prove instrumental in covering the losses during 1995-96.

5.3.2 Basis Of Competition

Under the law, MCos., can operate as mutual funds. However, in practice, almost all MCos., are operating in the leasing and installment trade business. Thus, as far asset management is concerned, MCos., are practically competing with the LCos. Moreover, commercial banks have also entered the leasing business. Banks are also involved in the installment trade as an Islamic mode of finance. There is, however, a difference between the installment trade business of banks and Modarabas: banks only finance trade, and Modarabas involve in trade directly.

Like Modarabas, leasing is a new and fast growing sector in Pakistan. Most Modarabas are in fact LCos., but for their preference for shari'ah, have registered as MCos. Except for this choice of the legal framework, and requirement that the paid-up capital of a leasing company must be at least Rs.
100 million, as compared to Rs. 5-7 million for Modarabas, LCos., and Modarabas are treated similarly by the SBP, Controller of Capital Issues and Stock Market as non-banking financial institutions. Reform in corporate income tax laws has recently permitted the deduction of asset depreciation only from rentals for the purposes of taxation. This is seen as an incentive for the leasing sector.

By the end of 1994, 23 LCos., were listed in the KSE. The information about these companies is provided in table-5(f) and summarized in charts 15, 16 and 17 respectively, for profit after tax, EPS and net investment in leasing. The cumulative net investment of these companies in leasing activities in 1994 increased to Rs. 9.4 billion from Rs. 8.9 billion in 1993. The cumulative after tax profits of the sector stood at Rs. 440.6 and 439.34 million, respectively, in 1993 and 1994. The mean EPS improved from Rs. 1.7 in 1993 to Rs. 2.2 in 1994.

Compared to MCos., for the LCos., the stock market is not an inevitable institution. Indeed, many LCos., get listed after acquiring a certain level of operational experience. This is not possible for the Modarabas. LCos., can and do borrow money on the basis of interest. Several LCos., have long-term credit lines with banks and even international financiers. This is not the case with Modarabas, which have opted not to deal in interest. Modarabas do receive short-term mark-up funds from banks. But most leasing operations involve long-term investment, therefore, MCos., involved in leasing activities cannot benefit much from such credit compared to the LCos.

LCos., to a larger extent and MCos., to some extent depend on banks for acquiring credit. On the other hand, banks compete with these companies in the leasing business. Compared to the LCos., and MCos., banks have, thus, a better access to cheaper finance. Therefore, even in their own area of specialization, LCos., and MCos., are at a disadvantage compared to banks.

---

1 All charts of this sub-section are derived from table-5(f).
Chart 5(o-a)

After Tax Profits 1993 (million Rs.)

Std. Dev = 14.42
Mean = 13.0
N = 23.00

Chart 5(o-b)

After Tax Profits 1994 (million Rs.)

Std. Dev = 19.80
Mean = 17.3
N = 23.00
Chart 5(p-a)

![Chart](chart5p-a)

- **Number of ICs**: 0.0, 1.0, 2.0, 3.0, 4.0, 5.0, 6.0
- **Mean**: 1.7
- **Std. Dev**: 1.70
- **N**: 23.00

Chart 5(p-b)

![Chart](chart5p-b)

- **Number of ICs**: 0.0, 1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0
- **Mean**: 2.2
- **Std. Dev**: 2.08
- **N**: 23.00
Chart 5(q-a)

Net Investment in Leasing 1993 (million Rs.)

Std. Dev = 394.68
Mean = 285.7
N = 23.00

Chart 5(q-b)

Net Investment in Leasing 1994 (million Rs.)

Std. Dev = 457.05
Mean = 351.8
N = 23.00
<table>
<thead>
<tr>
<th>Name of LCo.</th>
<th>Year of Listing</th>
<th>NIL 1993 Rs. (M)</th>
<th>NIL 1994 Rs. (M)</th>
<th>PAT 1993 Rs. (M)</th>
<th>PAT 1994 Rs. (M)</th>
<th>EPS Rs. 1993</th>
<th>EPS Rs. 1994</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian leasing</td>
<td>1990</td>
<td>408.2</td>
<td>428.6</td>
<td>20.70</td>
<td>23.60</td>
<td>2.9</td>
<td>1.56</td>
</tr>
<tr>
<td>Askari leasing</td>
<td>1993</td>
<td>203.3</td>
<td>593.3</td>
<td>6.50</td>
<td>24.20</td>
<td>3.3</td>
<td>4.00</td>
</tr>
<tr>
<td>Atlas BOT lease</td>
<td>1989</td>
<td>740.0</td>
<td>973.0</td>
<td>18.20</td>
<td>24.20</td>
<td>3.3</td>
<td>4.00</td>
</tr>
<tr>
<td>Capital Asset</td>
<td>1993</td>
<td>39.5</td>
<td>53.0</td>
<td>2.90</td>
<td>3.00</td>
<td>0.6</td>
<td>0.60</td>
</tr>
<tr>
<td>Crescent leasing</td>
<td>1992</td>
<td>88.8</td>
<td>121.2</td>
<td>2.50</td>
<td>3.80</td>
<td>0.5</td>
<td>0.50</td>
</tr>
<tr>
<td>Dadabhoy leasing</td>
<td>1992</td>
<td>23.2</td>
<td>.</td>
<td>2.60</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>English leasing</td>
<td>1992</td>
<td>144.1</td>
<td>153.3</td>
<td>18.70</td>
<td>9.80</td>
<td>2.3</td>
<td>1.23</td>
</tr>
<tr>
<td>First leasing</td>
<td>1992</td>
<td>286.3</td>
<td>367.6</td>
<td>29.90</td>
<td>16.50</td>
<td>2.3</td>
<td>1.27</td>
</tr>
<tr>
<td>Ghemni leasing</td>
<td>1992</td>
<td>191.3</td>
<td>188.7</td>
<td>11.40</td>
<td>7.60</td>
<td>2.3</td>
<td>1.51</td>
</tr>
<tr>
<td>Inter Asia</td>
<td>1993</td>
<td>81.6</td>
<td>83.1</td>
<td>8.30</td>
<td>10.00</td>
<td>0.8</td>
<td>1.00</td>
</tr>
<tr>
<td>International Multi</td>
<td>1991</td>
<td>104.2</td>
<td>105.0</td>
<td>5.60</td>
<td>3.40</td>
<td>1.1</td>
<td>0.69</td>
</tr>
<tr>
<td>Lease Pak Ltd.</td>
<td>1983</td>
<td>33.0</td>
<td>82.3</td>
<td>.00</td>
<td>6.10</td>
<td>.0</td>
<td>1.02</td>
</tr>
<tr>
<td>National Asset</td>
<td>1991</td>
<td>141.5</td>
<td>126.2</td>
<td>5.60</td>
<td>4.70</td>
<td>0.6</td>
<td>1.01</td>
</tr>
<tr>
<td>N. D. L.C</td>
<td>1985</td>
<td>2356.0</td>
<td>1668.0</td>
<td>124.60</td>
<td>70.90</td>
<td>3.0</td>
<td>1.37</td>
</tr>
<tr>
<td>N. Motor Lease</td>
<td>1994</td>
<td>77.7</td>
<td>67.4</td>
<td>4.90</td>
<td>2.60</td>
<td>0.0</td>
<td>0.49</td>
</tr>
<tr>
<td>Orix</td>
<td>1986</td>
<td>1371.0</td>
<td>1932.0</td>
<td>40.60</td>
<td>53.10</td>
<td>6.2</td>
<td>7.33</td>
</tr>
<tr>
<td>Pak Ind. &amp; Com.</td>
<td>1988</td>
<td>332.4</td>
<td>371.9</td>
<td>16.20</td>
<td>20.00</td>
<td>3.2</td>
<td>5.08</td>
</tr>
<tr>
<td>Pak Ind. Leasing</td>
<td>1989</td>
<td>1347.0</td>
<td>1053.0</td>
<td>55.90</td>
<td>42.10</td>
<td>5.3</td>
<td>3.47</td>
</tr>
<tr>
<td>Standard Chartered</td>
<td>1991</td>
<td>710.0</td>
<td>779.0</td>
<td>42.90</td>
<td>58.80</td>
<td>4.3</td>
<td>4.90</td>
</tr>
<tr>
<td>Trust leasing</td>
<td>1992</td>
<td>212.0</td>
<td>292.6</td>
<td>22.60</td>
<td>60.00</td>
<td>2.3</td>
<td>6.01</td>
</tr>
<tr>
<td>Union leasing</td>
<td>1994</td>
<td>21.0</td>
<td>.</td>
<td>5.70</td>
<td>.</td>
<td>.</td>
<td>.57</td>
</tr>
<tr>
<td>Sum</td>
<td>8891.1</td>
<td>9406.0</td>
<td>440.60</td>
<td>439.34</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>444.6</td>
<td>470.3</td>
<td>22.03</td>
<td>21.97</td>
<td>2.1</td>
<td>2.30</td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>23.2</td>
<td>21.0</td>
<td>.00</td>
<td>2.60</td>
<td>.0</td>
<td>.49</td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td>2936.0</td>
<td>1932.0</td>
<td>124.60</td>
<td>70.90</td>
<td>6.2</td>
<td>7.33</td>
<td></td>
</tr>
</tbody>
</table>

N 20

Abbreviations: NIL, net investment in leasing; PAT, profits after tax; EPS, earnings per share

Source: Derived from *Pakistan and Gulf Economist*, Karachi, various issues.
5.3.3 Overall Market-Status Of Modarabas

The companies listed in the KSE are classified into 28 sectors (see, table- 5(g). Modarabas, LCos., and financial institutions are considered as separate sectors. The information provided in table-5(g-a) is sorted for companies on the basis of their numbers. Although on June 31, 1994, about 53 MCos., were listed in the KSE, for 49 companies complete information was available.

It can be seen that in terms of numbers, the Modaraba sector largest as it is second in rank on descending order, financial institutions rank sixth, LCos., rank thirteenth and mutual funds rank eighth. In terms of total size of the paid-up capital, the 7.4 billion rupees of the MCos., keep these companies in the fourth position. Whereas, financial institutions with a total paid-up capital of 9 billion rupees rank second and LCos., are in the twelfth position with 2 billion rupees capital.

The total paid-up capital of the Modarabas constitute 9.35% of the total KSE paid-up capital. Whereas, financial institutions contribute 11.34% of the total KSE capital. The contribution of the leasing sector is a mere 2.56%. But looking at the market capitalization, the significance of different sectors is changes to different positions. With a total about Rs. 10 billion market capitalization, Modarabas move to the thirteenth position in the ranking, contributing only 2.57% to the overall KSE capitalization. Whereas, banks move to the third position with Rs. 47 billion capitalization and 12% contribution to KSE capitalization. In terms of capitalization leasing gained value about five times of their paid-up capital, at almost the same amount of Rs. 10 billion capitalization as MCos., and 2.5% contribution to KSE capitalization.

Useful comparisons can be made on the basis of some average figures. The size of an average company suggests that MCos., are rather more capital intensive compared to an average company on the KSE list. The size of an average MCos' paid-up capital is Rs. 152 million, whereas, the market average for the same is Rs. 146 million.
The size of the paid-up capital of an average financial institution (Rs. 282 million) is much larger compared to the MCos. Compared to this, the size of an average LCo's paid-up capital is much smaller at Rs. 93 million. The average size of a LCo., is much smaller compared to the market average. In this comparison, Modarabas are, thus, closer to the market average.

In terms of the average market capitalization both leasing and financial institutions out-perform Modarabas. The average market capitalization of a MCo., is Rs. 203 million compared to Rs. 1.5 billion for financial institutions and Rs. 452 million for LCos. In terms of the market - capitalization for an average company in the KSE (Rs. 650 million rupees) both Modarabas and leasing are weaker. Leasing, is nevertheless, much stronger compared to Modarabas whose average market capitalization is less than even 1/3 of the market average.

In terms of the amount of shares in circulation, Modarabas come in the second position with a total amount of 779 million shares in circulation, compared to 298 million sector average for the KSE, 774 million for financial institutions and 170 million for LCos. Lesser shares are in circulation in the leasing sector compared to the average of the KSE, Modarabas and financial institutions. But looking at the average size of shares per company in the Modaraba sector, it can be noticed that average size is closer to the KSE average (16 million for Modarabas and 15 million for KSE sector average).

These comparisons provide some indications about the overall market performance of the various sectors. Table -5(g-b) lists the various sectors in descending order on the basis of MVR. Sorting the sectors in terms of this crucial variable drops Modarabas to the bottom 25th position in a ranking among 27 sectors. Moreover, the MVR for Modarabas (1.34), is much below the market average (5) for the 27 sectors. Compared to this, financial institutions and leasing maintained a sound MVR (5.2, 4.9). Their ranking is respectively 10th and 11th compared to 25th for the MCos. The ratio for financial institutions is 0.3 points above the KSE market average of 4.98 and
the leasing sector faired as good as the market average. Obviously, these facts have to be reflected in the price earning and earnings per share. Again Modarabas are pushed to the bottom of the ranking compared to financial institutions and LCos.

Thus, our over-all assessment suggests that the Modaraba is a sizable sector in terms of number of companies and total capital listed. But in terms of performance comparisons, for the year 1994, the Modaraba sector is seen to be much weaker compared to the leasing sector and other financial institutions. The over-all market valuation suggests that to survive in the market, the Modaraba sector has to perform much better in the years ahead.
Table 5(g-a): Modarabas, Leasing Companies and Banks: Over-all Status in the Karachi Stock Exchange (as on June 31, 1994, otherwise indicated)

<table>
<thead>
<tr>
<th>Sectors</th>
<th>No. of Cos.</th>
<th>Paid up Capital Rs (M)</th>
<th>Average Size of Co. Rs. (M)</th>
<th>Capitalization of Sector Rs. (M)</th>
<th>Average Co. Capitalization Rs (M)</th>
<th>% of Sector Capitalization in KSE</th>
<th>% of Sector Capitalization in KSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textile Spinning</td>
<td>150</td>
<td>10572.95</td>
<td>70.49</td>
<td>22462.68</td>
<td>149.75</td>
<td>13.29</td>
<td>5.80</td>
</tr>
<tr>
<td>MCos.</td>
<td>49</td>
<td>7438.86</td>
<td>151.81</td>
<td>9962.10</td>
<td>203.31</td>
<td>9.35</td>
<td>2.57</td>
</tr>
<tr>
<td>Textile Composite</td>
<td>42</td>
<td>4994.05</td>
<td>118.91</td>
<td>13829.46</td>
<td>329.27</td>
<td>6.28</td>
<td>3.57</td>
</tr>
<tr>
<td>Sugar &amp; Allied</td>
<td>37</td>
<td>4007.53</td>
<td>108.31</td>
<td>8455.70</td>
<td>228.53</td>
<td>5.04</td>
<td>2.18</td>
</tr>
<tr>
<td>Chemical &amp; Pharmac</td>
<td>36</td>
<td>5817.06</td>
<td>161.59</td>
<td>76018.90</td>
<td>2111.64</td>
<td>7.31</td>
<td>19.61</td>
</tr>
<tr>
<td>Banks etc.</td>
<td>32</td>
<td>9018.47</td>
<td>281.83</td>
<td>47044.12</td>
<td>1470.13</td>
<td>11.34</td>
<td>12.14</td>
</tr>
<tr>
<td>Insurance</td>
<td>31</td>
<td>910.03</td>
<td>29.36</td>
<td>9731.34</td>
<td>313.91</td>
<td>1.14</td>
<td>2.51</td>
</tr>
<tr>
<td>Mutual Modarabas</td>
<td>28</td>
<td>1368.32</td>
<td>48.87</td>
<td>5241.67</td>
<td>187.20</td>
<td>1.72</td>
<td>1.35</td>
</tr>
<tr>
<td>Textile Weaving</td>
<td>26</td>
<td>2331.78</td>
<td>89.68</td>
<td>1930.16</td>
<td>74.24</td>
<td>2.93</td>
<td>.50</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>25</td>
<td>1103.92</td>
<td>44.16</td>
<td>2715.72</td>
<td>108.63</td>
<td>1.39</td>
<td>.71</td>
</tr>
<tr>
<td>Auto &amp; Allied</td>
<td>23</td>
<td>2584.17</td>
<td>112.36</td>
<td>10806.14</td>
<td>469.83</td>
<td>3.25</td>
<td>2.79</td>
</tr>
<tr>
<td>Food &amp; Allied</td>
<td>22</td>
<td>1511.83</td>
<td>68.72</td>
<td>19131.62</td>
<td>869.62</td>
<td>1.90</td>
<td>4.94</td>
</tr>
<tr>
<td>L.Cos.</td>
<td>22</td>
<td>2037.83</td>
<td>92.63</td>
<td>5936.00</td>
<td>451.64</td>
<td>2.56</td>
<td>2.56</td>
</tr>
<tr>
<td>Synthetic &amp; Rayon</td>
<td>22</td>
<td>4068.37</td>
<td>184.93</td>
<td>29769.89</td>
<td>1353.18</td>
<td>5.11</td>
<td>7.68</td>
</tr>
<tr>
<td>Vanaspati &amp; Allied</td>
<td>19</td>
<td>394.44</td>
<td>20.76</td>
<td>576.70</td>
<td>30.35</td>
<td>.50</td>
<td>.15</td>
</tr>
<tr>
<td>Engineering</td>
<td>17</td>
<td>967.40</td>
<td>56.91</td>
<td>3375.56</td>
<td>198.56</td>
<td>1.22</td>
<td>.87</td>
</tr>
<tr>
<td>Fuel &amp; Energy</td>
<td>17</td>
<td>8179.53</td>
<td>481.15</td>
<td>54042.98</td>
<td>3179.00</td>
<td>10.28</td>
<td>13.94</td>
</tr>
<tr>
<td>Cable &amp; Electrical</td>
<td>16</td>
<td>700.87</td>
<td>43.80</td>
<td>6371.56</td>
<td>398.22</td>
<td>.88</td>
<td>1.64</td>
</tr>
<tr>
<td>Cement</td>
<td>16</td>
<td>3663.62</td>
<td>228.98</td>
<td>33411.94</td>
<td>2088.25</td>
<td>4.61</td>
<td>8.62</td>
</tr>
<tr>
<td>Paper &amp; Board</td>
<td>15</td>
<td>890.78</td>
<td>59.39</td>
<td>6892.98</td>
<td>459.53</td>
<td>1.12</td>
<td>1.78</td>
</tr>
<tr>
<td>Glass &amp; Ceramic</td>
<td>10</td>
<td>639.79</td>
<td>63.98</td>
<td>1548.93</td>
<td>154.89</td>
<td>.80</td>
<td>.40</td>
</tr>
<tr>
<td>Jute</td>
<td>9</td>
<td>427.58</td>
<td>47.51</td>
<td>446.55</td>
<td>49.62</td>
<td>.54</td>
<td>.12</td>
</tr>
<tr>
<td>Woolen</td>
<td>9</td>
<td>218.47</td>
<td>24.27</td>
<td>773.08</td>
<td>85.90</td>
<td>.28</td>
<td>.20</td>
</tr>
<tr>
<td>Leather &amp; Tannery</td>
<td>7</td>
<td>305.98</td>
<td>43.71</td>
<td>2164.67</td>
<td>309.24</td>
<td>.39</td>
<td>.56</td>
</tr>
<tr>
<td>Tobacco</td>
<td>7</td>
<td>519.69</td>
<td>74.24</td>
<td>3743.29</td>
<td>534.76</td>
<td>.65</td>
<td>.97</td>
</tr>
<tr>
<td>Construction</td>
<td>4</td>
<td>116.42</td>
<td>29.11</td>
<td>73.43</td>
<td>18.36</td>
<td>.15</td>
<td>.02</td>
</tr>
<tr>
<td>Transport</td>
<td>4</td>
<td>4773.03</td>
<td>1193.26</td>
<td>7117.96</td>
<td>1779.49</td>
<td>6.00</td>
<td>1.84</td>
</tr>
<tr>
<td>Sorted by No. of Cos.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All figures rounded</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sum                           | 79562.77    | 3930.68                | 387575.12                  | 17607.04                          | 100.02                            | 100.02                           |                                  |
Mean                          | 2946.77     | 145.58                 | 14354.63                   | 652.11                            | 3.71                             | 3.70                             |                                  |
Minimum                      | 116.42      | 20.76                  | 73.43                      | 18.36                             | .15                              | .02                              |                                  |
Maximum                      | 10572.95    | 1193.26                | 76018.90                   | 3179.00                           | 13.29                            | 19.61                            |                                  |
N                             | 27          | 27                     | 27                         | 27                                | 27                               | 27                               |                                  |
Table 5(g-b): Modarabas, Leasing Companies and Banks: Over-all Status in the Karachi Stock Exchange (as on June 31, 1994, otherwise indicated)

<table>
<thead>
<tr>
<th>Sectors</th>
<th>PE 1993</th>
<th>PE 1994</th>
<th>No. of Co. shares</th>
<th>Average No. of shares</th>
<th>Valuation Ratio EPS 1993</th>
<th>EPS 1994</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical &amp; Pharmac</td>
<td>24,550</td>
<td>22,620</td>
<td>599,160</td>
<td>16,643</td>
<td>13,060</td>
<td>5,540</td>
</tr>
<tr>
<td>Food &amp; Allied</td>
<td>22,410</td>
<td>18,850</td>
<td>93,430</td>
<td>4,247</td>
<td>12,660</td>
<td>8,440</td>
</tr>
<tr>
<td>Insurance</td>
<td>15,500</td>
<td>14,530</td>
<td>110,960</td>
<td>3,579</td>
<td>11,000</td>
<td>5,800</td>
</tr>
<tr>
<td>Cement</td>
<td>14,870</td>
<td>21,040</td>
<td>427,020</td>
<td>26,689</td>
<td>9,120</td>
<td>6,240</td>
</tr>
<tr>
<td>Cable &amp; Electrical</td>
<td>14,810</td>
<td>16,190</td>
<td>72,830</td>
<td>4,552</td>
<td>9,100</td>
<td>7,090</td>
</tr>
<tr>
<td>Paper &amp; Board</td>
<td>3,860</td>
<td>3,090</td>
<td>98,980</td>
<td>6,599</td>
<td>7,720</td>
<td>2,590</td>
</tr>
<tr>
<td>Synthetic &amp; Rayon</td>
<td>16,320</td>
<td>15,280</td>
<td>706,350</td>
<td>32,107</td>
<td>7,320</td>
<td>3,210</td>
</tr>
<tr>
<td>Tobacco</td>
<td>14,520</td>
<td>14,520</td>
<td>52,570</td>
<td>7,510</td>
<td>7,210</td>
<td>4,580</td>
</tr>
<tr>
<td>Leather &amp; Tannery</td>
<td>14,850</td>
<td>17,000</td>
<td>36,600</td>
<td>5,229</td>
<td>7,090</td>
<td>3,950</td>
</tr>
<tr>
<td>Fuel &amp; Energy</td>
<td>22,050</td>
<td>23,830</td>
<td>714,240</td>
<td>42,014</td>
<td>6,600</td>
<td>3,920</td>
</tr>
<tr>
<td>Banks etc.</td>
<td>24,380</td>
<td>19,120</td>
<td>773,850</td>
<td>24,183</td>
<td>5,220</td>
<td>2,440</td>
</tr>
<tr>
<td>LCos.</td>
<td>13,370</td>
<td>9,960</td>
<td>169,640</td>
<td>7,711</td>
<td>4,870</td>
<td>2,510</td>
</tr>
<tr>
<td>Auto &amp; Allied</td>
<td>30,690</td>
<td>21,710</td>
<td>277,750</td>
<td>12,076</td>
<td>4,180</td>
<td>1,200</td>
</tr>
<tr>
<td>Mutual Modarabas</td>
<td>8,250</td>
<td>7,160</td>
<td>140,580</td>
<td>5,021</td>
<td>3,830</td>
<td>4,020</td>
</tr>
<tr>
<td>Woolen</td>
<td>48,310</td>
<td>14,080</td>
<td>21,850</td>
<td>2,428</td>
<td>3,550</td>
<td>.670</td>
</tr>
<tr>
<td>Engineering</td>
<td>.</td>
<td>.</td>
<td>103,710</td>
<td>6,101</td>
<td>3,490</td>
<td>-3,830</td>
</tr>
<tr>
<td>Textile Composite</td>
<td>.</td>
<td>.</td>
<td>19,150</td>
<td>500,860</td>
<td>11,925</td>
<td>-150</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>10,180</td>
<td>.</td>
<td>54,580</td>
<td>2,183</td>
<td>2,460</td>
<td>2,610</td>
</tr>
<tr>
<td>Glass &amp; Ceramics</td>
<td>10,770</td>
<td>15,220</td>
<td>83,370</td>
<td>8,337</td>
<td>2,420</td>
<td>1,650</td>
</tr>
<tr>
<td>Textile Spinning</td>
<td>.</td>
<td>10,890</td>
<td>7,260</td>
<td>8,856</td>
<td>2,600</td>
<td>1,570</td>
</tr>
<tr>
<td>Sugar &amp; Allied</td>
<td>15,000</td>
<td>17,600</td>
<td>320,290</td>
<td>8,656</td>
<td>2,060</td>
<td>1,570</td>
</tr>
<tr>
<td>Transport</td>
<td>11,000</td>
<td>19,130</td>
<td>475,120</td>
<td>118,780</td>
<td>1,470</td>
<td>1,320</td>
</tr>
<tr>
<td>Vanaspatt &amp; Allied</td>
<td>.</td>
<td>39,440</td>
<td>10,240</td>
<td>2,076</td>
<td>1,460</td>
<td>-10,060</td>
</tr>
<tr>
<td>MCos.</td>
<td>5,830</td>
<td>4,920</td>
<td>778,840</td>
<td>15,895</td>
<td>1,340</td>
<td>1,580</td>
</tr>
<tr>
<td>June</td>
<td>.</td>
<td>51,040</td>
<td>5,671</td>
<td>1,040</td>
<td>-2,000</td>
<td>-1,000</td>
</tr>
<tr>
<td>Textile Weaving</td>
<td>.</td>
<td>234,430</td>
<td>9,017</td>
<td>.830</td>
<td>-1,310</td>
<td>-260</td>
</tr>
</tbody>
</table>

Sorted by Valuation Ratio; Capitalization/Paid-up capital
All figures rounded. (.) implies missing value of variable due to non-availability. Case eliminated.

| Sum                   | 341,520 | 352,330 | 804,630          | 400,272               | 134,620                  | 52,030   |
| Mean                  | 17,076  | 16,778  | 297,838          | 14,825                | 4,986                    | 1,927    |
| Minimum               | 3,860   | 3,090   | 15,140           | 2,076                 | .630                     | -10,060  |
| Maximum               | 48,310  | 37,330  | 1089,000         | 118,780               | 13,060                   | 8,440    |
| N                     | 20      | 21      | 27               | 27                    | 27                       | 27       |

Source: Compiled and calculated from various issues of Pakistan and The Gulf Economist, Karachi.
5.4. DO MODARABA CERTIFICATES REWARD RISK?

Profit and loss sharing (PLS) principle of Islamic financing is considered unambiguously distinct from the interest-based system and therefore, widely cherished in the Islamic economic literature\(^1\). For the PLS system to work efficiently, it must reward risk with matching rates of return. The actual performance of the PLS in this regard has so far been discussed only theoretically without any empirical evidence. *Modaraba* certificates (MCs) represent a pure form of the PLS. In this Section, we formally analyze the actual market performance of MCs. In this and subsequent sections of the paper, we discuss how the MCs., using the MCs., as a solitary Islamic financial instrument are incapable of successfully competing in a market environment where diverse forms of financial instruments are available to the competitors.

5.4.1 On Capital Assets Pricing In An Islamic Economy

In uncertain markets, the claim for a fixed and certain rate of return on pure financial capital is unanimously considered by the Islamic scholars as a central cause of several economic inefficiencies and inequities. The theory of Islamic finance, as a corollary, rests on the natural phenomenon of the existence of risk, and as a result, on an uncertain rate of return on pure finance. Though Islamic scholars assign great social responsibilities to Islamic financial institutions, the rate of return is, however, the most crucial consideration of undertaking any financial activity. If the profit-sharing arrangement of Islamic financing has to function successfully, it must pass the actual test of performing in the market.

Investors, in both conventional and an Islamic framework, look for an accumulation of value for their wealth. In a world of uncertain markets, the accumulation of value by different companies is therefore crucial for their

---

\(^1\) The PLS is mostly comprised of *mudharabah* and *musharakah* modes of Islamic financing. For a call to implement the PLS, see, e.g., CII (1981) and FSC (1995).
survival, as investors overtime, have to choose between them on the basis of this criterion.

On The Existence of Fixed Return Assets

Some Islamic economic discussions treat the deferred price underlying bai’ murabaha lil amir bil shira (mark-up) similar to interest due to its non-risk-sharing characteristics. Therefore, the existence of mark-up is considered as a characteristic of the transition process from the interest-based financial system to an Islamic one. Its role is thus ruled out from a truly PLS-based Islamic financial system. These analysis therefore, rule out the presence of a fixed return asset in an Islamic portfolio. Moreover, some researchers introduce zakah as a 2.5% financial penalty on holding cash as well as on the cash to be distributed as dividends.

The practical merits of these academic ideas are yet to be seen. However, for a number of reasons, the existence of a risk-free asset cannot and should not be ruled out from an Islamic economy. First, interest has been prohibited as a fixed return on pure finance. Indeed, the scholars of fiqh recognize that deferred price may contain a fixed return as a reward for the deferment of payment. As this fixed return is a phenomenon of the goods and services market, in economic terms, this cannot be treated as a return on pure finance. Islamic banks use this return with the consent of fiqh scholars. Second, risk aversion helps keeping the cost of capital low. Elimination or bypassing risk aversion by refusing the existence of a risk-free asset cannot be rationalized. Moreover, no Islamic scholar has argued that risk aversion is not acceptable in Islam. The only important injunction to be derived from the prohibition of interest is that if risk exists, it should be shared by mutual agreement between all parties to a contract. Third, the above mentioned academic ideas which decline the existence of a risk-free asset do not provide

2 Ibn Qudama is reported to have written, “It is permissible if the seller of a commodity says that he sells it by such amount if the payment is on the spot and by such (excess) amount if the payment is after a certain time”. See, FSC (1995, p173).
an alternative mechanism through which the cost of capital can be compared for different projects and for the same project with different life span. Fourth, the introduction of zakah as a 2.5% financial penalty will not make any difference as it would be a universal rate. Moreover, zakah contribution and for that matter, contribution of interest-free loans both fall in the non-economic domain. The incorporation of these in considerations similar to the one in question lack approval from shari'ah scholars. Lastly, but most importantly, the market strength of the MC as a financial instrument would depend on the demand for it. This demand cannot be restricted to only those investors who believe in the non-existence of a fixed return investment. The imposition of this additional consideration will simply weaken the demand for the asset and will lead to a depreciation in its value overtime. For these reasons, we consider that the portfolio of an Islamic investor may contain a risk-free asset.

Therefore, in addition to risky investment opportunities, the legitimacy of the mark-up in the shari'ah provides the investors the opportunity to seek risk-free, but "qualified" fixed return investments. The coexistence of mark-up as a risk-free investment opportunity along side the risk bearing opportunities is known to improve the welfare of investors over a situation where only one of these opportunities may be available. Given these opportunities, and depending on their risk profile, investors must expect from risk-bearing investment opportunities, a reward over and above the risk-free mark-up rate, as a risk premium. The higher is the total risk over and above the risk-free rate, the higher must be the premium, its reward.

On Partitioning of Total Risk

The current literature on Islamic financing does not formally discuss the fact that risk cannot be diversified completely. In this literature, risk refers, in general, to uncertainty or total risk of a project or economic activity involving time. This is not without reason. In the context of investment projects which are new or which relate to non-listed enterprises, risk can only refer to the

---

1 Indeed, most critics argue that the mark-up based asset management strategies of Islamic
uncertainty of the future outcome of such projects, which is the total risk of the project.

However, the situation of companies listed in the stock exchanges is different. In these cases, not only total risk of new opportunities in investing in the stocks can be calculated precisely, but also this risk can be partitioned into firm specific and market related, respectively, diversifiable and non-diversifiable risk. In competitive markets, the diversifiable risk should not exist and it is the non-diversifiable risk which needs to be rewarded.

This theoretical framework of evaluation and pricing of capital assets under conditions of risk is thus, equally applicable to the evaluation of profit sharing arrangements as long as these are listed in the capital markets. Since the MCos., are listed, and MCs., are traded, these can be evaluated using the framework.

5.4.2 Reward For Risk

In the framework of the premises referred to above, i.e., under conditions of risk, investors view the outcome of investments in terms of some probability distribution. The investment decisions are made in terms of a) the expected value of the probability of outcome of an investment and b) its standard deviation. The utility function of a typical investor is thus written as:

\[ U = f(E_w, \sigma_w) \]

\( E_w \) is expected future wealth; \( \sigma_w \) is predicted standard deviation of actual future wealth from the expected, \( E_w \). Since expected future wealth depends on expected future return \( R \) on present investment, and the standard deviation of the \( R, \sigma_R \), investor's utility function directly depends on the expected \( R \).

\[ U = g(E_R, \sigma_R) \]

banks make the mark-up prone to becoming a fixed return on pure finance. See, ibid.

1 This extremely useful premises of partitioning total risk is laid down by Sharpe (1964) and Treynor (1965) in their models of pricing capital assets under conditions of risk.
\[ \frac{dU}{dE_R} > 0; \] Higher expected return is preferred to lower expected return, and

\[ \frac{dU}{d\sigma_R} < 0; \] Lower risk is preferred to higher risk.

These rational assumptions imply up-ward sloping indifference curves relating to \( E_R \) and \( \sigma_R \). Each \( E_R, \sigma_R \) combination reflects a unique investment opportunity. Investment opportunities lying on higher indifference curves improve welfare of the investor over lower indifference curves (in Figure - A, the tangency of these indifference curves, not shown, will correspond to points A, B and C, respectively, for lower, middle and higher curves).

All investment possibilities other than the risk-free opportunity will involve certain level of risk. An efficient investment plan, like point C in Figure - 5 (a), will be chosen by the investor by ensuring: a) No alternative with the same \( E_R \), but with lower \( \sigma_R \) is possible, b) No alternative with the same \( \sigma_R \) and higher \( E_R \) is possible and c) No alternative with a higher \( E_R \), and a lower \( \sigma_R \) is possible.

All investors have also the possibility of borrowing and/or investing at a risk-free rate and share equal amount of information of the market. Under these conditions, combination of efficient investments \((E_i)\) will fall along a straight line, similar to OC' and OB' in Figure A. \( E_i = R_f + b\sigma_i \); \( R_f \), Risk-free rate, \( b \), is risk premium, which will always be positive as investors prefer lesser risk over more.
Given that an investor can receive credit or invest at a risk-free rate (Rf) and have the choice to invest in risky stocks with expected outcome subject to \((E_i, \sigma_i)\), then by allocating his funds between the Rf and risky investment, the investor can attain the best point which gives highest value for \((E_i - Rf)/\sigma_i\), i.e., the investor will maximize the reward for risk.

While comparing individual stocks (or portfolios), for a level of risk, efficient stocks should give higher return. Conversely, for a level of return, efficient stocks should be lesser risky. In Figure A, stock C is the most efficient at the risk class of 10% variability of return, given the risk-free (Rf) mark-up rate which we assume as 7% for Pakistan for the period of the study.

We calculate reward (average monthly return on MCs and stocks minus the 7% annual risk-free mark-up rate adjusted on monthly basis)/variability of average return ratio to find how the MCs and stocks of the companies in our sample have rewarded the risk over and above the 7% rate. The existence of stocks close to or lower than the risk-free rate (e.g., points A, a and so on, compared to B and C will indicate non-economic (may be ideological)}
determinants of investment decisions, suggesting need for improvements in performance. Obviously, if the market rewards risk the prospect for risk-sharing (mudharabah and musharakah) would be high. We use two indices, the Sharpe Index and the Treynor Index as a measure of the reward for variability of return.

The Sharpe Index is calculated as: Expected rate of return on an asset minus the risk-free mark-up rate divided by variability of the rate of return on the asset (measured by the standard deviation of average monthly expected return). Hence,

$$SI = \frac{R_e - R_f}{V}$$

The Treynor index, replaces variability of return by the beta, non-diversifiable risk of the asset. Therefore, the

$$TI = \frac{R_e - R_f}{\beta}$$

Data

Karachi Stock Exchange (KSE) is the main stock market (see, previous sections). Systematic information about the KSE is provided by at least two sources. Since 1961, the State Bank of Pakistan (SBP) publishes systematic information about certain aspects of the companies listed in the market. Since 1991, KSE has also started to provide information about selected companies. This useful information is unpublished and distributed among the members of the KSE only. This section relies mostly on the SBP sources, except for the use of the KSE sources in a few places. Using the SBP data, in this section, we calculate the Sharpe and Treynor Indices, for MCos., LCos., and banks. The SBP index of share prices, (SBPI) is treated as the market index. The composition of sectors which make the SBPI is given in table-5(h).
Table-5(h).
Sectoral Composition of the SBPI of Share Prices

<table>
<thead>
<tr>
<th>Number of Sectors</th>
<th>Name of Sectors</th>
<th>Number of Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Textiles</td>
<td>24</td>
</tr>
<tr>
<td>2.</td>
<td>Chemical and pharmaceuticals</td>
<td>8</td>
</tr>
<tr>
<td>3.</td>
<td>Engineering</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>Auto and Allied</td>
<td>7</td>
</tr>
<tr>
<td>5.</td>
<td>Cables and Electrical</td>
<td>5</td>
</tr>
<tr>
<td>6.</td>
<td>Sugar and Allied</td>
<td>8</td>
</tr>
<tr>
<td>7.</td>
<td>Paper and Board</td>
<td>5</td>
</tr>
<tr>
<td>8.</td>
<td>Cement</td>
<td>5</td>
</tr>
<tr>
<td>9.</td>
<td>Energy and Fuel</td>
<td>6</td>
</tr>
<tr>
<td>10.</td>
<td>Transport and Communication</td>
<td>5</td>
</tr>
<tr>
<td>11.</td>
<td>Banks</td>
<td>5</td>
</tr>
<tr>
<td>12.</td>
<td>Modarabas</td>
<td>8</td>
</tr>
<tr>
<td>13.</td>
<td>Issuance</td>
<td>4</td>
</tr>
<tr>
<td>14.</td>
<td>Leasing</td>
<td>5</td>
</tr>
</tbody>
</table>

Expected Return, Variability of Return and Betas

The performance of individual stocks is measured by studying the return on the stock in question in relation with the market rate of return (return on SBPI). The prices of most stocks move together in a systematic fashion. Pakistan's main market - the Karachi Stock Exchange has been suffering serious instability due to socio-political strife. This and similar other causes of instability are in general common to all stocks. In normal circumstances, on the average, 25-30% of total instability in prices of individual stocks are counted for the instability of the market due to similar socio-political, technological and market conditions. However, some stocks follow the market more than others - having more than average systematic risks and vice-versa. The firms having more than average risk characteristics are in general leveraged, firms whose assets depreciate fast, firms having cyclical sales and firms engaged in the basic industries. A large part of instability (in general, 70-75%, in average) in the rate of return on stocks of individual firms is, however, due to individual characteristics of the firms and are unsystematic. In competitive markets, this risk is eliminated and not rewarded. So, it is the degree of the systematic risk of a stock which counts.
The Model

To analyze the performance of individual stocks in relation to the market, following the seminal works of Treynor and Sharpe, the simplified variant of capital asset pricing model under conditions of risk as given below is utilized. This simple model is extremely useful in calculating a stock's systematic and unsystematic risk, i.e., its relationship and performance vis-à-vis the market and for assessing how a stock rewards per unit of risk. The general form of the model to estimate the regression line is

\[ r_t = a_t + b_t r_{mt} + e_t \]

\( r_t \) return on the stock of an individual company in period t, the dependent variable of the model, is calculated as:

\[ r_t = (p_{t+1} - p_t + d_t) / p_t \]

\( p_t \), beginning of period market price of individual stock

\( p_{t+1} \), end of period t price of same stock

\( d_t \), cash dividend in period t for individual stock

\( r_{mt} \) is return from market in period t - independent variable of the model, calculated as,

\[ (SBPI_{t+1} - SBPI_t) / SBPI_t \]

\( SBPI_{t+1} \), Rupee amount of the SBP Index of 100 companies at the end of period t and \( SBPI_t \), rupee amount of the SBPI index at the beginning of period t.

Monthly \( r_t \)s for 18 companies (8 MCos., 5 LCos., and 5 banks) and \( r_{mt} \) calculated for 27 months (November 1, 1991 - January 1, 1994) as such are

---

1 See, Evans and Archer (1968).
given in table 5(i). The period of 27 months has been selected as it is generally accepted that for such purposes a period of 25 - 30 months is an ideal period.

The regression intercept $a_i$ estimates the rate of return on individual stock $r_i$ when return on the SBPI is stationary i.e., the $r_m=0$. The slope statistic $b_i$ gives the predicted response of $r_i$ to changes in $r_m$ - the beta index of the non-diversifiable systematic risk of the individual stock. This component of risk is crucial, because the remaining part of risk, which is specific to the stock in question can be eliminated by diversification. $e_t$ is the random error around the regression line which occurs in period $t$. For a specific stock then, the regression model becomes:

$$r_i = a_i + b_i r_m$$

We apply this model to the data of table 5(i) to run regression for the rate of return of the 18 companies as dependent variable and rate of return on the market index as an independent variable. The resultant betas (separation of systematic and unsystematic risk of companies), standard deviation, Sharpe and Treynor indices are given in tables 5(i) and 5(j).

Sector Comparisons

The results of inter-sector comparisons in terms of risk-reward as given by the Sharpe Index are provided in table-5(i). These results suggest that the Modaraba sector does not at all reward risk. The risk adjusted return for the Modaraba sector is 15% below the fixed return on markup-based investments. In fact, Modaraba is the only sector which is characterized with this phenomenon. Compared to this, investment banks and LCos., perform much better. The cement sector gives maximum reward for risk followed by the chemicals and pharmaceutical companies.

Company Comparisons

The Sharpe Index and Treynor Index calculated for the 18 companies are given in table-5(j). These suggest that the return adjusted for total risk as
well as adjusted for systematic risk offered by 3 MCos., falls below the markup rate. One leasing and one investment bank fall to the lowest position in this regard. The risk adjusted return offered by the other 5 MCos., is slightly above the markup-based return amongst which 2 offer above average risk adjusted return, in this classification.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>( E_R )</td>
<td>2.72</td>
<td>-0.67</td>
<td>2.46</td>
<td>5.7</td>
<td>2.63</td>
<td>0.83</td>
<td>3.45</td>
<td>2.69</td>
<td>2.66</td>
<td>3.04</td>
<td>2.8</td>
<td>2.5</td>
<td>7.24</td>
<td>3.97</td>
<td>2.92</td>
</tr>
<tr>
<td>( \sigma_R )</td>
<td>7.94</td>
<td>9.05</td>
<td>8.21</td>
<td>12.15</td>
<td>13.62</td>
<td>6.8</td>
<td>7.59</td>
<td>9.62</td>
<td>8.19</td>
<td>8.70</td>
<td>7.12</td>
<td>7.34</td>
<td>9.9</td>
<td>11.97</td>
<td>12.99</td>
</tr>
<tr>
<td>SI</td>
<td>0.259446</td>
<td>-0.15</td>
<td>0.22</td>
<td>0.41448</td>
<td>0.145</td>
<td>0.025</td>
<td>0.37</td>
<td>0.21</td>
<td>0.244</td>
<td>0.2717</td>
<td>0.301</td>
<td>0.251</td>
<td>0.665</td>
<td>0.227</td>
<td>0.174</td>
</tr>
</tbody>
</table>

Source: Derived from various issues of Statistical Bulletin State Bank of Pakistan.

Table 5(j): Sharpe and Treynor Indices for Banks, Leasing and Modaraba Companies

<table>
<thead>
<tr>
<th></th>
<th>CIB</th>
<th>BE</th>
<th>IIB</th>
<th>PiIB</th>
<th>PICIC</th>
<th>AL</th>
<th>NAL</th>
<th>NDLC</th>
<th>OL</th>
<th>SCL</th>
<th>ALM</th>
<th>BFM</th>
<th>BRR</th>
<th>GM</th>
<th>HBM</th>
<th>LTVM</th>
<th>SM</th>
<th>TM</th>
</tr>
</thead>
<tbody>
<tr>
<td>SI</td>
<td>0.22</td>
<td>0.25</td>
<td>0.08</td>
<td>-0.1</td>
<td>0.14</td>
<td>0.2</td>
<td>0.32</td>
<td>0.29</td>
<td>0.17</td>
<td>-0.1</td>
<td>0.05</td>
<td>0.11</td>
<td>0.06</td>
<td>0.11</td>
<td>-0.2</td>
<td>0.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TI</td>
<td>5.23</td>
<td>6.69</td>
<td>2.46</td>
<td>-1.96</td>
<td>5.38</td>
<td>-3.95</td>
<td>12.5</td>
<td>6.05</td>
<td>4.14</td>
<td>-0.37</td>
<td>-2.55</td>
<td>1.16</td>
<td>4.05</td>
<td>8.27</td>
<td>2.62</td>
<td>-3.93</td>
<td>5.36</td>
<td></td>
</tr>
</tbody>
</table>

Source: Derived from Table 5(k).

Abbreviations:
- **Indices**
  - SI: Sharpe Index
  - TI: Treynor Index

**Investment Banks**
- CIB: Crescent Investment Bank
- BE: Banker's Equity
- IIB: Islamic Investment Bank
- PiIB: Prudential Investment Bank
- PICIC: Pakistan Industrial Credit and Investment Corporation

**LCoS**
- AL: Asian Leasing
- NAL: National Assets Leasing
- OL: Orix Leasing
- SCL: Standard Chartered Leasing
- NDLC: National Development Leasing Corporation

**McOs**
- ALM: Almali Modaraba
- BFM: B. F. Modaraba
- BRR: B. R. R. Capital Modaraba
- GM: 1st Grindlays Modaraba
- HBM: 1st Habib Bank Modaraba
- SM: 1st Sanaullah Modaraba
- TM: 1st Tawakal Modaraba
- LTVM: L. T. V. Modaraba
Both in terms of the Sharpe and Treynor indices, the reward for risk offered by 35.5% of MCos., 20% of LCos., and 20% of investment banks is below the 7% annual benchmark of fixed rate of return. On the average, MCos., do not at all, and LCos., and investment banks do reward total risk. But MCos., do offer 2 units of reward per unit of systematic risk. This is half of the reward offered by LCos., and investment banks. These findings highlight the fact that MCos., compared to both LCos., and investment banks have inherent problems both in relation to the market and within the industry.

<table>
<thead>
<tr>
<th>Companies</th>
<th>$\Omega_{a}$/dividend</th>
<th>$\Omega_{a}$+dividend</th>
<th>$\Omega_{a}$(3-markup)</th>
<th>V of $\Omega_{a}$</th>
<th>Beta of $\Omega_{a}$</th>
<th>SV(6/5)</th>
<th>USV(5-7)</th>
<th>SI(4/5)</th>
<th>TI(4/6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. AL</td>
<td>1.79</td>
<td>2.79</td>
<td>2.19</td>
<td>11.16</td>
<td>0.712</td>
<td>7.94592</td>
<td>3.21408</td>
<td>0.1962366</td>
<td>3.075842697</td>
</tr>
<tr>
<td>2. BE</td>
<td>6.32</td>
<td>7.32</td>
<td>6.72</td>
<td>26.66</td>
<td>0.695</td>
<td>18.5287</td>
<td>8.1313</td>
<td>0.252063</td>
<td>9.669064748</td>
</tr>
<tr>
<td>3. BFM</td>
<td>-0.91</td>
<td>-0.51</td>
<td>-1.11</td>
<td>9.34</td>
<td>0.436</td>
<td>4.07224</td>
<td>5.26776</td>
<td>-0.118844</td>
<td>-2.54557156</td>
</tr>
<tr>
<td>4. BRR</td>
<td>-0.13</td>
<td>1.33</td>
<td>0.73</td>
<td>14.18</td>
<td>0.632</td>
<td>8.96176</td>
<td>5.21824</td>
<td>0.051481</td>
<td>1.155063291</td>
</tr>
<tr>
<td>5. CIB</td>
<td>4.39</td>
<td>5.39</td>
<td>4.79</td>
<td>22.11</td>
<td>0.915</td>
<td>20.23065</td>
<td>1.87935</td>
<td>0.2166441</td>
<td>5.234972678</td>
</tr>
<tr>
<td>6. GM</td>
<td>0.2</td>
<td>2.45</td>
<td>1.85</td>
<td>16.14</td>
<td>0.457</td>
<td>7.37598</td>
<td>8.76402</td>
<td>0.1146221</td>
<td>4.048140044</td>
</tr>
<tr>
<td>7. IBBM</td>
<td>1.66</td>
<td>2.66</td>
<td>2.06</td>
<td>34.01</td>
<td>0.249</td>
<td>8.46849</td>
<td>25.54151</td>
<td>0.0605704</td>
<td>8.273092369</td>
</tr>
<tr>
<td>8. HIB</td>
<td>1.12</td>
<td>2.12</td>
<td>1.52</td>
<td>18.77</td>
<td>0.618</td>
<td>11.59986</td>
<td>7.17014</td>
<td>0.0809803</td>
<td>2.459546926</td>
</tr>
<tr>
<td>9. TM</td>
<td>2.01</td>
<td>3.68</td>
<td>3.08</td>
<td>22.89</td>
<td>0.526</td>
<td>12.04014</td>
<td>10.84986</td>
<td>0.1345566</td>
<td>5.855113308</td>
</tr>
<tr>
<td>10. LTVM</td>
<td>1.42</td>
<td>2.42</td>
<td>1.82</td>
<td>16.68</td>
<td>0.695</td>
<td>11.5926</td>
<td>5.0874</td>
<td>0.1091127</td>
<td>2.618705036</td>
</tr>
<tr>
<td>11. ALM</td>
<td>-1.98</td>
<td>0.35</td>
<td>-0.25</td>
<td>10.35</td>
<td>0.669</td>
<td>6.92415</td>
<td>3.42585</td>
<td>-0.024155</td>
<td>-0.37369208</td>
</tr>
<tr>
<td>12. NAL</td>
<td>-2.45</td>
<td>-1.45</td>
<td>2.05</td>
<td>15.95</td>
<td>0.519</td>
<td>8.27805</td>
<td>7.67195</td>
<td>-0.128527</td>
<td>-3.94990366</td>
</tr>
<tr>
<td>13. NDLC</td>
<td>4.42</td>
<td>5.42</td>
<td>4.82</td>
<td>15.25</td>
<td>0.387</td>
<td>5.90175</td>
<td>9.34825</td>
<td>0.3160656</td>
<td>12.45478036</td>
</tr>
<tr>
<td>15. PIIB</td>
<td>-1.77</td>
<td>-0.77</td>
<td>-1.37</td>
<td>15.62</td>
<td>0.7</td>
<td>10.934</td>
<td>4.686</td>
<td>-0.087708</td>
<td>-1.95714286</td>
</tr>
<tr>
<td>16. PICIC</td>
<td>2.21</td>
<td>3.21</td>
<td>2.61</td>
<td>18.99</td>
<td>0.307</td>
<td>5.82993</td>
<td>13.16007</td>
<td>0.1374408</td>
<td>3.2150628664</td>
</tr>
<tr>
<td>17. SCL</td>
<td>2.29</td>
<td>3.29</td>
<td>2.69</td>
<td>15.49</td>
<td>0.649</td>
<td>10.05301</td>
<td>5.43699</td>
<td>0.1736604</td>
<td>4.144838213</td>
</tr>
<tr>
<td>18. SM</td>
<td>-2.11</td>
<td>-1.11</td>
<td>-1.71</td>
<td>9.26</td>
<td>0.435</td>
<td>4.0281</td>
<td>5.2319</td>
<td>-0.184665</td>
<td>-3.93103448</td>
</tr>
</tbody>
</table>

Note: Monthly returns for individual companies ($\Omega_{a}$) are adjusted for dividends where available; mean values are used where such information was not available.

Abbreviations: SV, systematic variability; USV, unsystematic variability; SI, Sharpe Index; and TI, Treynor Index.

Also see, Table-5(j)
Source: Derived from Table 5(l).
<table>
<thead>
<tr>
<th>PERIOD</th>
<th>Monthly return on LTV</th>
<th>Monthly return on Modaraba</th>
<th>Monthly return on national portfolio of 100 securities</th>
<th>Monthly return on NDLC</th>
<th>Monthly return on Orix Leasing</th>
<th>Monthly return on Prudential Investment Bank</th>
<th>Monthly return on PICIC</th>
<th>Monthly return on Standard Chartered Leasing</th>
<th>Monthly return on Sanaullah Modaraba First</th>
</tr>
</thead>
<tbody>
<tr>
<td>01-NOV-91</td>
<td>0.00</td>
<td>20.44</td>
<td>19.85</td>
<td>9.89</td>
<td>25.00</td>
<td>33.05</td>
<td>4.23</td>
<td>76.92</td>
<td>40.91</td>
</tr>
<tr>
<td>01-DEC-91</td>
<td>-2.44</td>
<td>9.09</td>
<td>17.18</td>
<td>34.00</td>
<td>14.53</td>
<td>3.16</td>
<td>10.81</td>
<td>11.30</td>
<td>-25.81</td>
</tr>
<tr>
<td>01-FEB-92</td>
<td>-12.04</td>
<td>-15.64</td>
<td>-10.31</td>
<td>-17.86</td>
<td>-5.38</td>
<td>-5.51</td>
<td>-16.67</td>
<td>-17.20</td>
<td>-35.42</td>
</tr>
<tr>
<td>01-MAR-92</td>
<td>4.76</td>
<td>-27.15</td>
<td>-5.7</td>
<td>-6.52</td>
<td>2.19</td>
<td>12.45</td>
<td>7.27</td>
<td>6.28</td>
<td>41.94</td>
</tr>
<tr>
<td>01-APR-92</td>
<td>-11.36</td>
<td>-6.36</td>
<td>8.00</td>
<td>-4.65</td>
<td>32.14</td>
<td>-35</td>
<td>-5.08</td>
<td>10.00</td>
<td>-4.33</td>
</tr>
<tr>
<td>01-MAY-92</td>
<td>-16.67</td>
<td>-10.68</td>
<td>-0.0</td>
<td>-8.54</td>
<td>-12.16</td>
<td>-1.39</td>
<td>-10.71</td>
<td>-27.27</td>
<td>-5.43</td>
</tr>
<tr>
<td>01-JUN-92</td>
<td>-1.54</td>
<td>-21.52</td>
<td>-4.23</td>
<td>-1.33</td>
<td>0.0</td>
<td>36.62</td>
<td>-16.00</td>
<td>0.57</td>
<td>5.75</td>
</tr>
<tr>
<td>01-JUL-92</td>
<td>-7.81</td>
<td>-5.82</td>
<td>-7.73</td>
<td>-5.95</td>
<td>-9.23</td>
<td>-19.59</td>
<td>-14.29</td>
<td>-14.12</td>
<td>1.09</td>
</tr>
<tr>
<td>01-SEP-92</td>
<td>-1.08</td>
<td>-2.78</td>
<td>2.55</td>
<td>-4.00</td>
<td>-5.65</td>
<td>-1.47</td>
<td>7.58</td>
<td>6.57</td>
<td>-2.45</td>
</tr>
<tr>
<td>01-OCT-92</td>
<td>-21.74</td>
<td>.00</td>
<td>1.24</td>
<td>-7.99</td>
<td>-2.56</td>
<td>19.40</td>
<td>.00</td>
<td>5.14</td>
<td>3.77</td>
</tr>
<tr>
<td>01-NOV-92</td>
<td>27.78</td>
<td>-2.86</td>
<td>-1.84</td>
<td>-18.87</td>
<td>5.26</td>
<td>-5.54</td>
<td>.28</td>
<td>-7.17</td>
<td>6.67</td>
</tr>
<tr>
<td>01-DEC-92</td>
<td>-8.70</td>
<td>2.35</td>
<td>2.50</td>
<td>16.28</td>
<td>2.00</td>
<td>2.88</td>
<td>3.95</td>
<td>8.07</td>
<td>-7.39</td>
</tr>
<tr>
<td>01-JAN-93</td>
<td>-9.52</td>
<td>-8.6</td>
<td>1.22</td>
<td>-4.00</td>
<td>5.39</td>
<td>-9.56</td>
<td>-11.62</td>
<td>-1.95</td>
<td>3.07</td>
</tr>
<tr>
<td>01-FEB-93</td>
<td>-3.95</td>
<td>-4.93</td>
<td>-4.22</td>
<td>-12.50</td>
<td>1.55</td>
<td>-1.62</td>
<td>-12.84</td>
<td>-4.46</td>
<td>8.93</td>
</tr>
<tr>
<td>01-MAR-93</td>
<td>4.11</td>
<td>-4.88</td>
<td>-3.77</td>
<td>-3.81</td>
<td>1.07</td>
<td>-0.99</td>
<td>-12.28</td>
<td>-8.00</td>
<td>-1.64</td>
</tr>
<tr>
<td>01-APR-93</td>
<td>.00</td>
<td>-10.26</td>
<td>-4.58</td>
<td>1.98</td>
<td>3.47</td>
<td>10.00</td>
<td>-21.60</td>
<td>-5.80</td>
<td>-3.89</td>
</tr>
<tr>
<td>01-MAY-93</td>
<td>2.63</td>
<td>.71</td>
<td>5.48</td>
<td>11.65</td>
<td>3.65</td>
<td>3.03</td>
<td>-3.06</td>
<td>-20.00</td>
<td>4.05</td>
</tr>
<tr>
<td>01-JUN-93</td>
<td>19.23</td>
<td>-4.96</td>
<td>5.19</td>
<td>-13.91</td>
<td>-11.27</td>
<td>2.50</td>
<td>23.68</td>
<td>-2.88</td>
<td>10.56</td>
</tr>
<tr>
<td>01-JUL-93</td>
<td>2.15</td>
<td>2.61</td>
<td>4.94</td>
<td>-4.04</td>
<td>3.97</td>
<td>25.61</td>
<td>-14.89</td>
<td>18.81</td>
<td>4.32</td>
</tr>
<tr>
<td>01-SEP-93</td>
<td>3.75</td>
<td>2.00</td>
<td>1.23</td>
<td>-10.34</td>
<td>-3.65</td>
<td>-9.10</td>
<td>-9.00</td>
<td>.97</td>
<td>-1.90</td>
</tr>
<tr>
<td>01-OCT-93</td>
<td>39.76</td>
<td>14.51</td>
<td>14.02</td>
<td>36.92</td>
<td>3.79</td>
<td>-3.89</td>
<td>34.62</td>
<td>8.17</td>
<td>.00</td>
</tr>
<tr>
<td>01-NOV-93</td>
<td>6.90</td>
<td>-2.40</td>
<td>5.88</td>
<td>-13.48</td>
<td>19.71</td>
<td>9.32</td>
<td>-8.16</td>
<td>16.00</td>
<td>7.73</td>
</tr>
<tr>
<td>01-DEC-93</td>
<td>45.16</td>
<td>7.02</td>
<td>18.18</td>
<td>29.87</td>
<td>56.10</td>
<td>4.71</td>
<td>42.22</td>
<td>19.54</td>
<td>16.59</td>
</tr>
<tr>
<td>01-JAN-94</td>
<td>20.56</td>
<td>12.79</td>
<td>11.11</td>
<td>-15.00</td>
<td>-8.59</td>
<td>27.81</td>
<td>1.56</td>
<td>2.56</td>
<td>-7.69</td>
</tr>
<tr>
<td>ER</td>
<td>1.42</td>
<td>-1.98</td>
<td>2.72</td>
<td>-2.45</td>
<td>4.42</td>
<td>3.71</td>
<td>-1.77</td>
<td>2.21</td>
<td>2.29</td>
</tr>
<tr>
<td>σR</td>
<td>16.68</td>
<td>10.35</td>
<td>7.94</td>
<td>15.95</td>
<td>15.27</td>
<td>14.17</td>
<td>15.62</td>
<td>18.99</td>
<td>15.49</td>
</tr>
</tbody>
</table>

Source: Calculated from various issues of the Bulletin State Bank of Pakistan
Betas

The average beta for the 18 companies is 0.60, i.e., the unavoidable systematic risk of these companies is 60%, leaving 40% of the unsystematic risk which can be diversified away. These 18 companies cannot be representative of the market which consists about 700 companies. Nevertheless, this is indicative of the fact that the KSE is almost three times more riskier compared to some developed market economies, as the average beta for a developed market is considered to be 0.25 which leaves the diversifiable risk to 75%. The higher risk of our example of the KSE is consistent with the existence of higher rate of return in the developing countries compared to the developed countries and offers better investment opportunities. It should be noted that betas for the same company changes overtime. Thus it is often more useful to depict the stability of betas over time. But due to limited availability of data, it was not possible for us in the present study to check for this characteristic.

Unsystematic and systematic risk, partitioned, company-wise for our sample is given in table-5(k). Non-risk-rewarding companies constitute a larger part of the average systematic risk of our sample of 18 companies. According to experience based conventional wisdom, riskier companies should offer higher return, but in this sample they, do not. Risk-rewarding companies have relatively lower systematic risk. This sounds paradoxical, but is consistent with our finding that some companies are simply riskier than others irrespective of what they can offer in return.

Inter Sector Linkages

It is also interesting to see that with what sectors of the economy the MCos., and LCos., are integrated? Given the nature of this research and the data used for it, we can only translate the inter-sector linkages in terms of the movement of share prices. The correlation coefficients of stock prices for different sectors for the period October 1991 - January 1994 is provided in table 5(m). It can be seen that MCos., are inversely correlated with most other
sectors except for textiles and banks. The correlation coefficients between MCos., banks and textiles are positive and strong indicating an integration and strong linkages between these sectors. But comparatively, banks and MCos., have weaker, MCos.-textiles, and Banks - textiles have stronger correlation. The correlation of leasing with these sectors are weak, but with most other sectors it is strong. It is also very interesting that only MCos., and transport have weak correlation with the market.

There are reasonable explanations for the strong positive correlation between MCos., and textiles. First, a good number of MCos., is floated by companies which have strong stake in the textile sector. Second, textiles and MCos., are both on the down swing in the market. Since MCos., have negative correlation with most sectors, it seems during the weak days of MCos., most investments have been diverted from MCos., to cement and chemicals. Similar is the case with textiles.
### Table-5(m) : Modarbas: Inter-relationship with other Sectors

<table>
<thead>
<tr>
<th>SBPGI</th>
<th>MCos</th>
<th>LCos</th>
<th>B&amp;IBs</th>
<th>INSURC</th>
<th>Miscellan</th>
<th>Textile</th>
<th>CH&amp;PH</th>
<th>ENG</th>
<th>Auto&amp;All</th>
<th>Cabl&amp;E</th>
<th>Sugar</th>
<th>Cement</th>
<th>Energy</th>
<th>Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.2043</td>
<td>1</td>
<td>4</td>
<td>0.9624</td>
<td>0.08121</td>
<td>1</td>
<td>6</td>
<td>0.7510</td>
<td>0.78405</td>
<td>0.6416</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>0.08121</td>
<td>1</td>
<td>0.9624</td>
<td>0.7510</td>
<td>0.78405</td>
<td>0.6416</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>0.7510</td>
<td>0.78405</td>
<td>0.6416</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>B&amp;IBs</td>
<td>0.7510</td>
<td>0.78405</td>
<td>0.6416</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>INSURC</td>
<td>0.8135</td>
<td>0.22899</td>
<td>0.8677</td>
<td>0.334</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Miscellan</td>
<td>0.8715</td>
<td>0.04052</td>
<td>0.8399</td>
<td>0.5555</td>
<td>0.77577</td>
<td>1</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Textiles</td>
<td>-0.4891</td>
<td>0.88045</td>
<td>0.3577</td>
<td>0.8816</td>
<td>-0.02156</td>
<td>0.28289</td>
<td>1</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>CH&amp;PH</td>
<td>0.7660</td>
<td>-0.42322</td>
<td>0.8231</td>
<td>0.2009</td>
<td>0.88887</td>
<td>0.78311</td>
<td>-0.15649</td>
<td>1</td>
<td>5</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>ENG</td>
<td>0.9628</td>
<td>0.19116</td>
<td>0.9421</td>
<td>0.7275</td>
<td>0.81874</td>
<td>0.80331</td>
<td>0.422249</td>
<td>0.7656</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Auto&amp;All</td>
<td>0.7559</td>
<td>-0.30397</td>
<td>0.7839</td>
<td>0.279</td>
<td>0.80006</td>
<td>0.87205</td>
<td>-0.04975</td>
<td>0.92366</td>
<td>0.73835</td>
<td>1</td>
<td>8</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Cabl&amp;E</td>
<td>0.7765</td>
<td>-0.32385</td>
<td>0.7974</td>
<td>0.2707</td>
<td>0.81103</td>
<td>0.68467</td>
<td>0.031791</td>
<td>0.80751</td>
<td>0.73525</td>
<td>0.7541</td>
<td>1</td>
<td>5</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Sugar</td>
<td>0.8253</td>
<td>-0.23665</td>
<td>0.8339</td>
<td>0.3638</td>
<td>0.89844</td>
<td>0.8631</td>
<td>-0.02766</td>
<td>0.95007</td>
<td>0.80883</td>
<td>0.92011</td>
<td>0.801</td>
<td>1</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Cement</td>
<td>0.7486</td>
<td>-0.42398</td>
<td>0.8090</td>
<td>0.1756</td>
<td>0.95378</td>
<td>0.755</td>
<td>-0.19958</td>
<td>0.9061</td>
<td>0.75546</td>
<td>0.86</td>
<td>0.8466</td>
<td>0.92901</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Energy</td>
<td>0.9608</td>
<td>0.06596</td>
<td>0.9348</td>
<td>0.6503</td>
<td>0.81453</td>
<td>0.82031</td>
<td>0.352828</td>
<td>0.84114</td>
<td>0.9517</td>
<td>0.79932</td>
<td>0.835</td>
<td>0.86267</td>
<td>0.79498</td>
<td>1</td>
</tr>
<tr>
<td>Paper</td>
<td>0.9411</td>
<td>0.11552</td>
<td>0.8928</td>
<td>0.6696</td>
<td>0.81605</td>
<td>0.91864</td>
<td>0.335885</td>
<td>0.8186</td>
<td>0.91833</td>
<td>0.84116</td>
<td>0.7516</td>
<td>0.9129</td>
<td>0.79233</td>
<td>0.92236</td>
</tr>
</tbody>
</table>

**Source:** Calculated from various issues of the *Statistical Bulletin State Bank of Pakistan.*

**Abbreviations:**
- **SBPGI:** State Bank General Index of Share Prices.
- **MCos:** *Modaraba* Companies
- **LCos:** Leasing Companies
- **B&IBs:** Banks
- **INSURC:** Insurance Companies
- **Miscellan:** Miscellaneous
- **Textiles:** All Textiles
- **CH&PH:** Chemicals and Pharmaceuticals
- **ENG:** Engineering
- **Auto&All:** Auto and Allied Industries
- **Cabl&E:** Cable and Electrical

184
5.5. CHALLENGES OF MODARABA COMPANIES

The preceding discussion highlights that in a short period of time MCos., have expanded fast and acquired substantial market significance. This can be attributed among other things to wide scale ideological preference accorded to this sector by the investors. MCos., however, do not perform well compared to other sectors particularly, leasing and investment banks which are registered as non-banking financial institutions and treated to a large extent similarly by the SBP. In the present section, some of the peculiar problems of MCos., are briefly discussed.

5.5.1 Salient Features Of Modaraba Companies

The challenges confronted by the MCos., can be better understood in the light of their peculiarities. The following salient features of MCos., may be recapitulated.

1. MCos., have found the stock market inevitable for their existence. There has been no example of Modaraba company, big or small, which may have started operations without being listed. It is unique characteristic of MCos., to open to stock market competition without any prior experience of business.

2. MCos., are almost 100% equity financed. Due to non-availability of appropriate financial instruments, these are incapacitate of mobilizing Funds other than the MCs and initial contribution o the paid-up capital by the sponsors.

3. Due to the second feature, MCos., have to overwhelming rely on distributing stock bonuses for saving cash.

4. Again, due to the second feature, for mobilizing Funds, MCos., overwhelmingly rely on rights issues.

5. Many MCos., are registered as leasing MCos., which have to have at least 100 million Rs. paid up capital. As leasing institutions, 70% of their Funds must be kept in leasing operations. Due to constraints on cash flows capital replacement is restricted. Depreciation of assets overtime, leads to the depreciation in the prices of MCs.
6. Leasing MCos., are also competing with LCos., and leasing operations of commercial banks. Unlike MCos., the latter group of organizations have an access to local as well as international long-term credit lines.

7. MCos., have to distribute all profits as dividends. These cannot retain profits. Due to cash flow problems, distribution has mostly been in form of stocks dividends.

8. MCos., have to build a cash reserve with the State Bank of Pakistan equivalent to their paid-up capital. This reserve is built by a 20% contribution out of annual profits till the reserve is fully built. Thereafter, they have to contribute 5% of annual profits for the preservation of this Funds. According to new regulations, they can issue bonus shares only against this reserve. This regulations is considered to constrain the cash flow as well as dividend distribution by MCos.

9. Investors are understood to consider MCos., as a form of non-conventional business. The collapse of finance companies, and cooperatives which were somehow not similar to conventional financial institutions, has created a confidence problem for MCos., too.

10. Initially, MCos., were tax exempt provided they paid 90% of profits in dividends; 10% is paid to the management company as mudharib's share prescribed in the law. This tax benefit prompted many established companies to float MCos. The more novice MCos., are in fact competing with these matured institutions.

11. At the present, MCos., are paying taxes on earnings in the following form: First 3 years no taxes, following 2 years 12.5% and after 5 years of listing 25%. In addition, for leasing business, capital depreciation is adjusted in rentals for tax exemption.

12. Total 15% of liabilities must be invested in the shares of National Investment Trust (NIT Units).

13. Current assets/current liabilities ratio must be maintained at 1:1.

14. Equity/leveraged ratio must not exceed the 1:7 for first 2 years, and 1:10 ratio thereafter.

15. MCos., are over-regulated by the SBP, CLA, Registrar of MCos., RSB, Monopoly Control Authority, Controller of Corporate Issues, Stock Market authorities and Tax officials.
16. A consensus is emerging that MCs., have over-spread.
17. MC-holders have no voting rights; thus common stocks-holders have a preference over the MCs.
18. MC-holders do not enjoy the preferential treatment which holders of preference share do as a reward for not voting.
19. *Modaraba* firms are intensive in physical capital. MCs are issued against these physical assets. The value of the MCs basically depends on the value of these assets. The assets depreciate over time. Asset replacement by means of profit retention or borrowing is not common. Naturally, therefore, the price of MCs must depreciate in proportion to depreciation of the assets.
20. MCs., have no R&D investments. These investments, e.g., in the chemical and pharmaceutical firms enable them to acquire value and capital gains overtime.
21. MCs., do not produce commodities. Improvement is product designs and other innovations add value to the firm and improve capital gains, e.g., in the electronic and engineering sector.
22. MCs., have not been able to spread their activities, e.g., like the banking sector. Banking services are wide spread and banks are able to continuously improve their services by the use of modern technology which adds to the value of the industry and capital gains for investors.
23. Most MCs., indigenous have abruptly exposed to stiff competition in an widely open economy. Compared to this, most other companies of the KSE were protected and subsidized in their infancy.
24. The above is a short list of the unique characteristics of MCs. These pose challenges to the future development of these Islamic enterprises. Thorough investigation of these and similar other considerations such as negligence of growth financing could be highly useful to understand the observed phenomenon regarding MCs., and to guide policies to alleviate some of their problems.

5.5.2 Salient Policies Of Modaraba Companies

The above is a short list of the unique characteristics of MCs. These pose challenges to the future development of these Islamic enterprises. Thorough investigation of these and similar other considerations such as
negligence of growth financing could be highly useful to understand the observed phenomenon regarding MCos., and to guide policies to alleviate some of their problems. For many limitations, such a comprehensive treatment of the subject is not feasible in the present paper. In the following we will concentrate, in more detail, only on: a) excessive reliance on rights issues, b) excessive reliance on stock dividends and c) consequences of constraining the dividend and financing policy of MCos.

Scope of Rights Issues

When a firm needs more Funds it resorts to various options - various forms of debts, various forms of equities and various forms of "dequities" (quasi-equities). For additional Funds, MCos., are relying only on equities. The three prominent forms of raising additional equity are: a) selling new stocks to the public (public offering) through firm commitment underwriters, b) issuing rights to holders of existing stocks with insurance to purchase the non-subscribed stocks by standby underwriters and c) uninsured rights issues to holders of existing stock on pro rata basis.

As opposed to public offering (PO), rights offering (RO) is an offering of additional stocks to existing stock holders in proportion to their holding. Thus rights issue allows the selling of additional stocks while maintaining the ownership proportion of the firm intact. In addition, it is beneficial for firms whose stocks are kept in blocks by few interest groups and the firms are not much known to the general investors. ROs., are also considered to be concessional sale of stock thus some form of bonus. Moreover, ROs., are considered to be much less costlier compared to POs. As the prices of the stock will generally fall after new issues, in POs., the new owners benefit at the expense of the old owners. In ROs., this is completely avoided.

1It is reported that over the 1933-55 period, 50% of new issues worth $ 1 million and more were raised by ROs. By 1963-81, this reduced to 5% i.e., 95% of new issues came through firm commitment arrangements. In Canada, 50%, in Europe close to that level but actually declining in amount, is the share of ROs. This is despite the fact that ROs are much cheaper and convenient compared to POs. See, Smith (1978).
In general, POs., are very common compared to ROs., particularly in the US. Companies in Europe and Canada are known to use ROs., too. In Pakistan, POs., are common in general. However, MCos., entirely rely on ROs., for mobilizing additional equity.

The RO., by MCos., works in the following general form. Assuming the price (market value) of an MC., of a particular Modaraba is Rs.30 on 31.5.1995. An investor holds 12 MCs., on that date. The Modaraba needs to mobilize more equity. The management decides that for each 6 MCs., held by investors one right will be offered. Each right can be converted into one MC., at a price of Rs.27 instead of Rs.30 provided the option of conversion is utilized by the owner of the existing MCs., by 22-6-1995.

Existing MC-holders are owners of the right to purchase the new MCs., at Rs.27, during the specified period subject to the number of MCs., already held by them. If they do not want to subscribe to new MCs., they can sell these rights to other investors. In this particular example, each right apparently offers a bonus of Rs.3. By selling this right for any positive amount the owner will benefit. Thus most MC., owners who are in need of cash will sell their rights. But they have to act fast; the subscription period is usually short, the offer can lapse.

Some indeed lapse. Since ROs., involve cost for the firm, the firm likes all ROs., must be utilized. To ensure this, the subscription price is kept low, over-subscription privilege is given to MC-holders and sometimes standby underwriting (a formal commitment with an underwriter to buy the unsubscribed MCs) is ensured.

When new capital is required, MCos., have the only choice between POs., and ROs. It is generally known that share prices decline after each PO. Thus, although, the company benefits from POs., in case of price decline as a result of a PO., the senior stock-holders shall loose. Their net wealth is transferred to the new share-holders. This problem is avoided by ROs., as new
stocks will be bought by senior stock-holders and wealth transfer does not take place.

It should however, be noted that if ROs., are used by senior stock-holders, the wealth transfer will not take place. Many ROs., are indeed not used by senior stock-holders. Some are used as by over-subscription rights by other investors and underwriters. As ROs., are meant to issue new stocks, stock prices are bound to decline after these are issued. Thus, theoretically, the problem of wealth transfer cannot be avoided by ROs., either. This is to indicate that in the interest of senior owners, both POs., and ROs., need to be issued carefully. An constant increase in ROs., associated with a constant decrease in the prices of MCs., indicates that things have gone wrong in conformity with the theory and against the interests of senior owners of MCs.

The above cannot be acceptable from the shari’ah point of view. ROs., are however, useful in maintaining the proportional ownership structure of the company. This can be seen as consistent with the pure mudharabah principle of not diluting the ownership structure with old and new owners.

Limitations of Stock Dividends

MCos., predominantly depend on distributing stock dividends. A minority of them distribute cash dividends. Only a few distribute both. The over reliance on stock dividends is often related to the cash flow problems of the companies. By distributing stocks, the companies save cash for some other urgent uses. Stock dividends are distributed in proportion to the already held MC., shares by investors.

In general, investors prefer cash dividends over stock dividends. This is because, in fact, stock dividends, merely “divide the pie into smaller slices”. If a 20% stock dividends is issued, an investor holding 4 shares will get an additional one. The increase in the number of shares will put a downward pressure on share prices. Given total earning the same, an increase in the number of shares will simply lead to a proportionate decrease in earning per
Investors will be well-off, only if an increase in stock dividend is associated with an increase in the total earnings of the company, EPS and cash dividends.

Stock dividends, are thus good for companies whose share prices are increasing rapidly and which desire to check this increase to keep an optimal price level. This objective is, however, more directly achieved by stock splits; an over-priced stock, for example, is divided into two, so that an optimal price structure can be maintained.

As the prices of MCs., are already much weaker compared to the share prices in general, stock dividends can only put further downward pressure on the MC prices. This coupled with ROs., which are also expected to suppress MC., prices, provide enough explanation for the MCs., to constantly loose value.

To assist the prices of the MCs., MCos., in fact need to adopt MC., re-purchase plans rather than stock dividends and ROs. This option is however difficult, because most MCos., are already short of cash. Another possible option is to resort to reverse split. MCs., are grossly under-priced. To bring these prices closer to certain optimal level, MCs., can be withdrawn, and instead of 3 MCs., for example, one MC., can be issued. If the price of one MC., is Rs. 10, instead of 3 MCs., being kept, one MC., of Rs.30 can be kept by an investor. This proposal at this stage should be treated a mere idea. This crucial area indeed requires a separate study.

Consequences of Constrained Policies

MCos., are unique in the sense that these companies can neither device their financial policy independently nor their dividend policy. Their financing policy is constrained by non-availability of diversified financial instruments for resource mobilization. They are virtually dependent on one instrument: the MC. Reliance on one type of financial instrument could have been fair, provided it was the same for all market participant. All the non-Modaraba
sector has the choice to utilize the over 30 instruments available. Obviously, therefore, this constrain is reflected through the market on the depreciating prices of the MCs.

Similar is the case with the dividend policy. Compared to other companies, MCos., are not free in deciding between how much to retain and how much to pay in dividends. In fact, the concept of retention of profits in the Modaraba business has not yet been thoroughly discussed.

Working together, these two factors impose a severe constrain on the policy of growth financing by the MCos., as compared to other companies. As a matter of fact, it seems that MCos., have no growth financing policies. For ongoing firms growth financing is an important source of continuity, dynamism and acquisition of value.

5.6 VALUE OF MODARABA CERTIFICATES AND ROLE OF ISLAMIC WARRANTS

As we saw in the preceding analysis, in terms of its size, the modaraba is a significant sector of the Karachi Stock Exchange, yet, it has not been able to reward the risk taken by investors by investing in the modaraba certificates. Most recently, the pressure of the market on the sector has further increased and the market value of modaraba certificates has depreciated.

The theoretical explanation for this phenomenon is very simple. Other things remaining the same, an increase in supply is bound to put a downward pressure on the prices of an asset. Since, for resource mobilization, the modaraba companies have entirely relied on the modaraba certificates, the supply of these certificates has increased, consequently the value of the certificates has decreased. To avoid complicating the simple matter we rely on this fundamental explanation and propose ways to support the value of modaraba certificates as dominant assets of the companies.
Uncertainty and the Value of Managerial Options

The independence of the manager of a *mudharabah* enterprise to make decisions relating to the operations of the enterprise are discussed in detail in the relevant literature. The literature recognizes the fact that in order to make the enterprise profitable, the manager must be given suitable flexibility in decision making. Rigid conditions such as "trade only in one specific commodity" etc., are not approved by a large group of *shariah* scholars. However, we noticed that the modaraba companies are over-regulated. Moreover, in context of lack of application of profit sharing in contemporary Islamic financial practices, some researchers suggest to impose rigid conditions on the manager of funds. They justify this in order to safeguard the interests of owners of funds. The modaraba companies have little flexibility even in areas of crucial policy making such as financing and dividend policies.

Rigid conditions on managerial decision making of a modaraba company cannot be justified in the framework of the recent developments in the theory of managerial options. This development is consistent with the traditional theory of managerial options under the *mudharabah* in the sense that the manager by assumption is a trustworthy person and always works in the best interest of the owners of the enterprise. Thus he must be able to make independent decisions to ensure profitability of the enterprise.

![Value of Managerial Options vs Uncertainty of Project's Outcome](image)

**FIG. 5(b) Uncertainty of Projects' Outlays and Value of Managerial Options**

The theory suggests that as uncertainty about a project's outcome increases, managerial options become more valuable and as certainty
increases, managerial options become lesser valuable. This relationship between the value of managerial options and uncertainty of the project's outcome is shown in Fig. 5(b). The point is simple. If it was certain that trading, e.g., in one commodity is profitable, restricting the manager's decisions to trade in that commodity does not cause a loss to the enterprise. As trading in a single commodity is not sure to make the enterprise profitable, allowing additional decision powers to the manager will improve the probability of profitability of the enterprise, thus, these managerial options become valuable.

The theory of managerial options considers that opportunities for the firm to acquire value must be treated as options - *rights but not obligations*. The manager has the right but not obliged to take these opportunities. It is interesting to note that investment decisions which may apparently be irrational in the framework of the traditional theory may in fact turn out to be rational decisions when viewed in the framework of the theory of managerial options.

As an extreme case, postponing a positive net present value (NPV) investment opportunity by itself may in some cases be valuable. In some other cases, speeding with a go ahead decision can be valuable even if the project's NPV may be negative. Unless, the manager of a modaraba company is fully trusted and given complete freedom to make timely decisions, value maximization by the company will be constrained.

This premises can be used to highlight the simple problem of the modaraba companies. Assets of a typical company comprise of: a) assets in place and b) new investment opportunities. New investment opportunities are options not obligations, therefore, can or cannot be taken at the discretion of the manager. If new investment opportunities are financed by new equity issues, the price (value) of assets in place will decline. Therefore, unless the expected profits are very high, a trustworthy manager will not take new investment opportunities with new equity issues. As the value of assets in place increases more and more investment opportunities will be given up if

---

1 For a full treatment of the managerial options theory, see, Dixit and Pindyck (1994)
these were to be financed by only equities. This relationship is defined in Fig. 5(c).

![Diagram of Positive NPV Investment opportunities](image)

*FIG. 5(c): Value of Assets in Place and Limitations of Equity Financing*

If the value of old modaraba certificates is as high as $V_2$, the new investment opportunity must be as high as $NPV_2$, to issue new modaraba certificates and undertake the project. Thus given the value of existing modaraba certificates as $V_2$ all investment opportunities below $NPV_2$ will be given up unless the company has financial resources such as leasing, installment purchase, retained earnings etc. Thus, to keep the value of equity high there must be sources of growth financing other than permanent equity. In case of modaraba companies, this principle was ignored as can be seen by the reliance on modaraba certificates, amount of stock dividends paid and right issues.

**The I.F.C. Initiative in Mudharabah Financing**

The modaraba companies have recently increased their effort to seek sources of funds, particularly, temporary funds in addition to the modaraba certificates. As a result, three types of additional instruments have been approved by the Religious Board and are being used by some companies. These instruments are: a) *musharakah* certificates, b) redeemable *musharakah* certificates and c) convertible income notes. It is expected that all these instruments will predominantly be offered to institutional investors.

---

1 See, Myers, and Majluf, (1984) for detailed analysis.
The musharakah certificates are issued for a minimum period of three months, held to maturity and are tradable. Certificate holders will share in the 90% profits of the respective companies and will share in losses in proportion of their contribution to total capital of the companies. Redeemable certificates are convertible to modaraba certificates and are also tradable. A redemption reserve fund is generated equivalent to 5% of outstanding redeemable certificates. In case of both certificates 18% rate of return is secured through hypothecation of assets, pledge of share of listed companies and personal pledges of clients of modaraba companies.

While both these instruments are welcome addition, the introduction of the income notes (IN) of the IFC is a much more significant development in many respects. First, the IFC has not only recognized the viability of the modaraba companies but has also entered the business. This initiative is expected to enhance the understanding of the business in the international financial markets. Second, the initial capital commitment by the IFC has been around US dollars 80 million which is a substantial amount. Third, the IFC’s involvement is also expected to be instrumental in financial innovation by the modaraba companies.

The IN is a redeemable financial instrument; can be redeemed in six equal installments but with a seven years grace period. The IFC can opt any time for up to 20% value of the IN for modaraba certificates. The IN will share in cash dividends of the company but will not share in operational losses. It will however share losses proportionate to its capital in case of liquidation. The share of the IFC in cash dividends declared by the company will be as follows: If cash dividend is up to 15%, the IFC will claim 60% of this. If cash dividend is up to 30%, the IFC will claim 60% of it up till 15%, and 40% of the remaining. If cash dividend is above 30%, the IFC will share 60% up to 15% and thereafter 20%. In this way, the IFC is not sharing anything in the 10% management fee, but only sharing dividends with the modaraba certificate holders.

1 See, Siddiqi (1995) and Mangi (1995) for notes on these new instruments.
Need for Islamic Warrants

In the framework of our theoretical explanation of the depreciation of the value of modaraba certificates, we can expect that the initiatives by the companies may alleviate some of the downward pressure. This expectation is consistent with the above simple but most powerful explanation for the need of a value maximizing company for different forms of funds. If a company has readily available funds by retention or it can raise non-risky debt it can take more investment opportunities without putting a downward pressure on the value of its assets in place. Such an expansion will in fact enhance the value of its existing assets.

If the company has no retained earnings for re-investment, such as the modaraba companies which are by law bound to distribute all profits, the same theory suggests that the company must issue convertible warrants. Warrants are quasi debt instruments and contain an option (but not an obligation) for the owner to convert the debt into common or preference stock of the company at a specific time and specified price. These new instruments have become popular among new firms, which cannot raise debt easily and among depressed firms which cannot issue straight equities. Thus, warrants are called for. In warrants, investors have secured debt instruments with prospects of earning more by converting them into equity if firms become profitable.

Warrants are basically interest-based. Moreover, the option is normally traded in the market. Indeed, these two features need to be removed to make warrants acceptable from the perspective of Islamic financing. In addition, warrants involve conversion of debt for equity. This also has to be justified in the framework of Islamic economics.

Raising Resources Through Murabahah

Modaraba companies are relying on shareholder's equity and modaraba certificates and the new found instruments. In addition, these companies have the potential to expand their activities and improve their return on equity by
opting for installment purchase to finance their trading and leasing operations. Such financing may be readily available with the Islamic banks which are looking for investment opportunities.

Even if these institutions can adopt a policy of 20% mark-up based leverage, by avoiding up-front and lump-sum payments and resorting to installment purchase, they can mobilize substantial resources. The case of Islamic institutions is different compared to conventional banks. Islamic institutions are involved in deferred trading. The assets financed by them make their clients more solvent compared to the clients of conventional banks where the use of funds is often not possible to monitor. Hence, the assets' side of the Islamic institutions is comparatively more stable. Moreover, Islamic institutions do not have any fixed obligations on the liability side of their balance sheet at the present. Thus, they have a better potential to take the burden of a suitable amount of leverage.

Suppose this leverage is US dollars 20 million. The company will approach investors to purchase the assets on its behalf on the basis of mark-up. The investors can be attracted only on the basis of a guaranteed return, which is suppose, 8% mark-up. Thus the total mark-up would be 1.6 million US dollars and the total funds to be repaid in installments by the company would be 21.6 million US dollars.

Suppose, the dollars 20 million is mobilized by issuing 50,000 murabahah debt certificates (MDCs). The value of each MDC would be US dollars 432 (principal = 20,000,000 + 50,000 = 400 plus mark-up = 1,600,000 + 50,000 = 32). A MDC is created in the same manner as a mark-up debt is created by an Islamic bank. The only difference is that instead of one financier, in the present case there would be several financiers. In this manner the MDC financing would be similar to a syndicated murabahah.
Liquidity of the MDCs and Role of Warrants

The MDC is only a certificate of debt. The principle of *hawala al dyin* allows the transfer of debt from one person to another person only on its face value. Thus there is no market for the MDCs. Due to the liquidity problems it will be difficult to issue MDCs.

How to make the MDCs more liquid? To achieve this goal, MDC holders may be given the option (not obligation) to convert their MDCs into common stock of the firm in some future date at a specified price¹. Suppose, it is offered that the MDC holders can either claim their guaranteed debt of 432 dollars in the future, or if they desire, they can convert the MDCs into the stock of the firm at the rate of dollars 20 per share during a period of 3 years. Assuming poor prospects for the firm, (stock prices not rising over the dollars 20 offer rate), investors will only claim their secured debt.

But, in general the prospects must be good for the firm and the stock prices may be expected to surpass the dollars 20 rate. Thus the option to convert the MDC into equity becomes valuable. In case the option is a valuable asset, MDCs will be transferred on the principle of *hawalah al dayin*. Persons having liquidity will invest in taking responsibility of the MDC obligations so that they can benefit from the value of the option. In this way the market for the MDCs would be created strictly following the rule of *hawalah al dayin*.

Given that the debt is not created through interest mechanism, and that options are not traded, we propose that there should be a wide range of flexibility for the use of these MDC warrants. For instance, some MDCs may be converted into stocks, some others may be converted into the redeemable equity of the firm. In this manner, the preferences of different investors can be looked after.

¹This proposal resembles combination of sale and lending which is avoided. We will define this problem later.
Conversion of Debt into Equity

The MDC warrants lead to the conversion of debt into equities. The rationale of this arrangement within the framework of Islamic economics can be looked at from three alternative scenarios:

First Scenario: Debt as Principal of mudharabah

First, the arrangement becomes similar to the use of debt as a principal capital of mudharabah or musharakah contracts. This subject has thoroughly been discussed in the Fiqh literature. In general, all scholars do not accept such a use of debt. But it is reported that according to the Hanafis it is possible to say that “collect such and such debt and do mudharabah or musharakah with it”. Moreover, reportedly some Hanbalis went further by saying that an indebted person can collect a debt from himself and does with it mudharabah.

Second Scenario: Debt as Price in Sale

Second, it can be looked at as a sale of debt for equity. It is known that debt cannot be sold for debt, but debt can be treated as a price in a sale transaction. The companies can approach the owners of the debt, offering their existing shares (not new issues) in a sale for the outstanding debt. This would be equivalent to using the debt as a price in the specific trade which is not objected by shari'ah scholars.

Third Scenario: Replacing MDCs with Real Asset Certificates

Finally, an installment sale is indeed a finance lease in the conventional sense. In Islamic economics, finance leases are not encouraged. If finance

---

For this subsection, I am grateful to Dr. Monzer Kahf, and Dr. Leyachi Feddad for providing me with useful insights during discussions.

See, Government of Kuwait, mausu'al fiqh al Islamiyah

For a consensus opinion in this regard, see ibid Vol. 21, p 126 paragraph 58.

The OIC Fiqh Academy dealing with hire purchase agreements concluded by discouraging such arrangements and by urging to deal in installment sale with appropriate guarantees instead. See, IFA: 1989 p 88.
leases can be encouraged, MDCs would be replaced by real asset certificates (RACs). Holders of RACs would be entitled to fixed rental incomes as compared to the fixed murabahah profits of MDC owners. The purpose of mobilizing fixed income resources will thus equally be achieved by replacing RACs for MDCs.

Suppose the same company which mobilizes murabahah funds and issues MDCs, mobilizes funds to establish the ownership-partnership (sharikah al milk) by issuing RACs. The value of one RAC would be again 432 dollars and a total of 50,000 RACs will be issued to mobilize the 21.6 million dollars for the purchase of the asset.

Since RACs are title to ownership of rentable real assets, RAC owners together constitute sharika al milk. If warrants are attached with rent sharing RACs, the question than becomes one of providing an option to transform sharika al milk into sharika al aqd (contractual partnership) in a future date. The transformation of sharika al milk into sharika al aqd may also be fully acceptable from an Islamic economic point of view.

Thus the modaraba companies can explore with the Religious Board the feasibility of issuing warrants either on the basis of MDCs or RACs. These warrants can be instrumental in relieving the pressure on the modaraba certificates. As the theory fully explains the issue at hand, the suggestion based on the theory need to be taken seriously.

\[1\text{Many Islamic banks do undertake finance leases. Ijara bonds discussed in Kahf (1995) are based on the premises of finance leases used by the Islamic banks.}\]
CHAPTER 6

PROFIT-LOSS SHARING IN RETROSPECT:
FIRM LEVEL CONSIDERATIONS
6.1 INTRODUCTION

In chapter four we analyzed some alternative explanations for the non-existence of PLS in the Islamic bank's operations. In chapter five we took up the case of the market performance of the pure PLS and found that the market for the PLS does not at all reward risk. Among many reasons we explained that the PLS companies in our sample relied only on a solitary financial instrument, namely, *mudharabah certificates* compared to the several instruments available in the conventional markets. As a result the PLS was not able to perform well in the market in terms of acquisition of value for investors and rewarding risk.

In the present and the following chapters we look at the PLS in retrospect. In the present chapter we critically look at the PLS from the micro (firm level) perspective. We saw that the PLS is dominated by the mark-up as far as the operations of Islamic banks are concerned. It did not perform well in the financial markets where it was applied in its pure form. Nevertheless, participation in the capital of enterprises offers a crucial investment opportunity for investors who abstain from interest; the enterprises, in turn, mobilize resources. Ideally, capital participation entails providing finance in the form of funds\(^1\) by acquiring ownership. Examples of participation in the risk of an enterprise are the ownership of capital shares in *musharakah*; the ownership of capital and entrepreneurial qualities in *mudharabah* and the resultant responsibilities for the uncertainty of outcome respectively, in the two cases.

Due to the striking contrast of the PLS principle with interest, the articles of agreements establishing some Islamic banks have given priority to the use

---

\(^1\) Durable asset participation is another form of risk sharing through allocation of rentable assets instead of funds.
of PLS in their operations. However, in their present practices, the participation of Islamic banks in the capital of enterprises is negligible. Islamic scholars have been urging the Islamic banks to enhance the flow of participatory capital in their supply of funds. However, the Fiqh Academy of the Organization of Islamic Conference, in a number of meetings, has asked the Islamic banks to refrain from participating in the capital of such companies which have interest-based assets/liabilities in their balance sheets.

The above considerations imply that the Islamic banks should enhance their capital participation in enterprises, but, should at the same time, avoid investing in leveraged firms. Apparently, the conclusion is paradoxical: Does it mean that for all practical purposes, the Fiqh Academy ruling prohibits the Islamic investors from investing in existing enterprises?

Prohibition of capital participation in enterprises has important economic implications. Many investors must withdraw their existing funds from leveraged enterprises. Consequently, the basket of investment opportunities will reduce having adverse implications for savings and growth. Thus, efforts must be made at academic as well as policy levels to enhance capital participation in enterprises within the framework of the premises provided by the sharia'h ruling. The ongoing efforts in this regard can broadly be classified into two groups.

The first group of efforts is related to the exploration of possibilities where existing interest-based debts of specific firms could be replaced by

---

2 The authors of the report on Islamization of the financial system in Pakistan also treat profit sharing as the foremost alternative for the interest-based financial system. See Council of Islamic Ideology Pakistan (1981).


4 In its 7th Session held in Jeddah, 7-12/11/1412H (May 9-14, 1992), the learned Fiqh Academy formally considered the legal status of Islamic banks' owning shares of such companies' whose capital structure includes interest-based funds and the resolution was made that: "...it is originally unlawful to participate in companies dealing sometimes in unlawful things, like interest etc.; despite the fact that their activities are basically lawful". This resolution was reiterated in the recommendations of the seminar on Problems of Islamic Banks, jointly organized by the Academy and IRTI, held in Jeddah during 22-10-1413H (14-4-1993).
Islamically acceptable alternatives. Once the capital structure is cleaned from interest, investors can participate in the capital of such enterprises. The crucial parameters for the success of these efforts are: i) Willingness of the management of enterprises to replace their existing interest-based debts with Islamically acceptable forms of funds, ii) Availability of the Islamic alternatives to achieve the objective and iii) Once the capital is replaced appropriately, its maintenance overtime.

If a typical firm is willing to replace its existing interest-based debts, what are the possible Islamic alternatives? The problem is simply one of availability of cash, so that the firm can pay its debts. In this regard, the ongoing efforts refer to some possible arrangements. The cash-fund may be provided by an Islamic financier by purchasing part of the assets of the indebted enterprise and either selling these back on installments, leasing them back or assuming the role of a partner in the enterprise. In addition, flow of the company's retained savings may be diverted towards the payment of the debts. This can be ensured if an Islamic financier provides funds to meet those needs which the company would have otherwise met by its retained profits. The cash flow of the enterprise may be enhanced by raising its equity capital.

The above mentioned efforts of cleansing the capital structure of companies from interest, are nevertheless, limited in nature as these depend on the willingness of the companies (management commitment cannot be ensured for ever). While these efforts are underway, some basic questions must also be addressed to: Why, in the first instance, interest enters in the capital structure of enterprises? How to avoid the entrance of interest in the

---

5 In this regard, the IDB has initiated a Pilot Project of replacing interest-based capital with Islamic alternatives in some of the companies where the IDB has an equity stake.
6 It should be noted that all debts of an enterprise may not be interest bearing as some of these may be due to qard (interest-free loans) and some may be the result of a deferred purchase arrangement such as mark-up and others may be due to accrued rents.
7 Although this method is suggested in IDB (1994), shariah objections are raised against such arrangements.
8 See IDB (1994).
capital of enterprises in their infancy? How to let the enterprises grow without using interest? For, if there is any analogy between raising up a human being and an enterprise, the enterprise like the human being must be put into the right direction from its infancy. Thus, a rather fundamental consideration is the development of comprehensive participatory Islamic financial instruments which can meet the requirements of enterprises at their infancy and throughout their growth.

The central point of the present chapter rests on the proposition that because of its redeeming feature, debt (whether it is the result of mark-up or interest-based credits) is preferred particularly, by sole proprietorship enterprises. Due to this preference, debt enters the capital structure of sole proprietorship enterprises at their infancy. As the enterprises grow, they contract one debt after another. Hence, although each debt contract redeems, certain level of debt permanently remains in the capital structure of enterprises. This implies that enterprises which prefer debt for its redeeming nature, should equally prefer redeemable profit and loss sharing arrangements of financing.

Given the above background, the present chapter aims at putting forward some considerations for enhancing capital participation in enterprises within the framework of the OIC Fiqh Academy Resolution. The specific objectives of the chapter are to discuss the:

1. Limitations imposed on the wider use of profit sharing principle of Islamic financing by the non-redeemable nature of the notion of PLS prevalent in the existing Islamic banking literature,

2. Need for, and feasibility of redeemable PLS for use in ongoing enterprises, such as sole-proprietorships,

3. Implications of redeemability of PLS for profit retention, self-financing and growth of interest-free enterprises and

4. Possibility of subordinating the sale-based financing to the PLS and its usefulness in enhancing the cash flow of Islamizing enterprises.
Section Two of the chapter briefly discusses differences between modes of financing, forms of enterprises and a comprehensive financing mechanism. Section Three, argues that an enterprise has the right to prefer any type of Islamically defined ownership structure. Maintaining this ownership structure, it must also be given the right by the society for a comprehensive profit and loss sharing financing instrument. In Section Four, it is argued that a redeemable financial instrument has the capability of providing a comprehensive profit and loss sharing financing mechanism, which can simultaneously be neutral to the longer-run ownership structure of the enterprise. Section Five, tries to invoke support for the scheme of re-payment of mudharabah funds discussed in section four. Section Six argues that a redeemable financial instrument is also expected to promote self-financing, thus ensure growth as well as restrict the enterprises exposure to interest to a minimum level. Section Seven puts forward some considerations to subordinate sale based finance to the PLS and enhance cash flow of Islamizing enterprises.

6.2 COMPREHENSIVE FINANCING MECHANISM AND ITS NEED IN AN ISLAMIC ECONOMY

In the present section, it is argued that in order to effectively replace interest, the Islamic economy needs a comprehensive financing mechanism. In the absence of such a mechanism, even if the capital structure of an enterprise is cleansed from interest, overtime, the maintenance of such an interest-free capital structure may not be possible. On the other hand, if a comprehensive Islamic financing mechanism can be devised, not only interest can be prevented from entering in the capital of enterprises but also existing enterprises may be able to replace their interest-based debts at a larger scale.
6.2.1 Modes of Financing and Comprehensive Financing Mechanism

In the outset, a comprehensive financing mechanism may be defined as a financing facility which provides monetary financial accommodation to enterprises but remains neutral with respect to their longer-run ownership structure. In order to understand the relevance of such a mechanism for the Islamic economy, there is a need to thinly define and differentiate between a mode of finance and a comprehensive financing mechanism.

Profit sharing and deferred sale are the two parent principles of Islamic financing. Installment sale (in fact, installment purchase, which uses the mark-up mechanism) and leasing (in fact hiring, which uses the renting mechanism) and mudharabah, etc., are examples of modes of finance derived from the parent principles. In addition, one may also finance, for instance, the construction of a house on one plot from funds generated by the sale of another plot (if one possesses an additional one!). Similarly, one may finance one part of ones enterprise, by accepting new partners after selling its part as stocks. Selling a plot or part of a company, is simple sale (mostly spot, as such sellers in general, need lump sum), yet, both sales function as modes of finance.

Although, hiring, installment purchase, and spot sale of owned assets and mudharabah etc., serve the purpose of financing but, neither of these can function as a comprehensive financing mechanism. Exhibit 6(a), highlights this comparison between the implications of a mode of finance and a comprehensive financing mechanism for an enterprise. Hiring and installment purchase are not comprehensive, because, these are specific to the equipment/assets in question. For some reasons, if the company needs cash, installment purchase or hiring does not directly meet such requirements. But on the other hand, if cash is available to the enterprise, it can always purchase the required equipment. Mudharabah and musharakah arrangements directly meet

9 The word "pure finance", is more suitable instead of "comprehensive financing mechanism". Nevertheless, due to an objection of a colleague, on the use of the previous word, throughout this chapter the latter phrase is used.
the company’s cash requirements. But both of these essentially lead to a change in the ownership structure of the enterprise. Thus, enterprises which need cash, but, for the time-being, not wanting or being able to change their ownership structure would find hard to compromise.

The summary of Exhibit 6(a), is re-produced as Exhibit 6(b). The choice of most enterprises for a financing mechanism is expected to be effected by three basic inter-related considerations: i) acquisition of, or access to equipment by the enterprise, ii) direct adjustment of the enterprise's cash flows\(^{10}\) and iii) separation of the financing decisions from decisions related to the ownership structure or non-interference of the financing mechanism in the ownership structure of the enterprise.

\(^{10}\)Installment purchase and leasing can however indirectly be instrumental for the cash flow adjustment as funds which could otherwise have been used for the purchase of assets can be released.
<table>
<thead>
<tr>
<th>Financing Mechanism</th>
<th>Form of Financing received by the enterprise</th>
<th>Effect of Financing on the Enterprise</th>
<th>Implications of the Financing Mechanism for the Ownership Structure of the Enterprise</th>
<th>Possible Response of the Enterprise to Ownership Implications of the Financing Mechanism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale-based Modes</td>
<td>in kind</td>
<td>Addition to or replacement of equipment</td>
<td>Expansion in the asset-base thus liabilities but no change in the ownership structure. Enterprise strengthened by the addition of new assets</td>
<td>If there is a need for the equipment, it will be a welcome addition</td>
</tr>
<tr>
<td>Leasing</td>
<td>in kind</td>
<td>Addition to or replacement of equipment</td>
<td>No change in asset-base thus liabilities. No change in ownership structure. But, since the equipment is only temporarily attached to the enterprise, in the longer-run its implications could be adverse.</td>
<td>If the purchase of the equipment is not feasible, the enterprise will unwillingly rely on the borrowed equipment</td>
</tr>
</tbody>
</table>
| Musharakah Mudharabah | in kind or cash                             | a) Addition to or replacement of equipment  
|                     |                                             | b) Direct adjustment of cash flow        | If the enterprise is a one transaction activity, the expected ownership change is irrelevant. But if the enterprise is an ongoing activity, the ownership structure of the enterprise must change. Addition to asset-base but no change in liabilities as such* | An excellent option for a one transaction enterprise. But for an ongoing enterprise, where ownership change is inevitable, the decision will depend on the needs of the enterprise and its preference for the change. |
| Comprehensive Financing Mechanism | cash                                       | a) Addition to or replacement of equipment  
|                     |                                             | b) Direct adjustment of cash flow        | No change in the ownership structure, but addition to the asset-base, no change in liabilities as such* | Best preference if the enterprise is not willing to undergo any type of ownership change, particularly if cash is needed. |

* It may be noted that, in the balance sheet of an enterprise each asset must has a corresponding liability, in this sense the liabilities must also change as a result of the change in the asset-base. Nevertheless, these financing mechanisms do not create any fixed liabilities. The relevant connotation is used in this sense.
From the brief comparison of Exhibit 6(b), it can be seen that installment purchase and hiring, simultaneously meet only two namely, acquisition or access to assets and non-interference in the ownership structure, out of the three requirements of the firm. These two modes however, do not meet the requirement of the enterprise for direct cash flow adjustment. The mudharabah and musharakah mechanism, on the other hand meets both the requirements for asset acquisition and direct cash flow adjustment, but aggravates the non-interference requirement. A comprehensive financing mechanism is one which meets all the three requirements simultaneously. An interest-free comprehensive financing mechanism is thus needed by an Islamic economy.

Exhibit 6(b) Matching Financing Mechanisms with Important Considerations of Enterprises

<table>
<thead>
<tr>
<th>Financing Mechanism</th>
<th>Acquisition of or Access to equipments</th>
<th>Direct adjustment of cash flows</th>
<th>Non interference of financing in the ownership structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installment purchase/hiring</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>Mudharabah</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Musharakah</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comprehensive financing</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>

From what is discussed above briefly, the following characteristics of a an Islamic comprehensive financing mechanism can be derived: i) It is a mechanism which by itself is derived from a financing or enterprising principle, ii) It is always available in the form of cash, iii) It does not interfere in the organizational structure of the enterprise, iv) It remains in the ownership of the provider, v) It is in general capable to replace all other forms of finance in a an ongoing enterprise and vi) In the longer-run perspective, it does not cause a change in the ownership structure of the enterprise.
6.2.2 Forms of Enterprises and a Comprehensive Financing Mechanism

Most Islamic modes of financing have the dual connotation of mode of financing and form of enterprising. In fact, in their original form, the characteristics of mudharabah, musharakah, muzara', musaqa' and istisna' in the sense of enterprises or companies are more dominant than their characteristics as modes of financing. Indeed, a mudharabah or musharakah enterprise is established to overcome the difficulties related to both manpower and finance\(^{11,12}\). As a comprehensive financing mechanism must be in the form of cash, among the Islamic forms of enterprises, only the first four arrangements remain relevant for comparison. The limitations of these business forms in rendering financing functions at a wider scale can be identified with their requirement to establish new enterprises, each time, when more funds are needed.

In most forms of the above mentioned enterprises the required manpower (management) as well as assets (financing) are equally important. In fact, the enterprise is the result of an integration and combination of human and financial resources. Thus, after the integration of funds and human resources, one cycle of the function of finance, namely establishing the enterprise is completed, but, another crucial cycle of the need for finance emerges. The difference between these two cycles is crucial: In the first instance, establishment of the enterprise (in the present case, the ongoing enterprise) is eminent, where in the second case it is not.

This is the case with all modern forms of enterprises too. First, whether, sole proprietorship, partnership, or a joint stock company, all enterprises, need

\(^{11}\) To illustrate this point, we may refer to the pre-revelation mudharabah enterprise between Lady Khadijah and Prophet Mohammed. As the story is narrated, Khadijah was a pious rich lady. She needed a pious and honest manger for her funds. Mohammed was approached to manage these funds through a mudharabah enterprise. The point is that the mudharabah was initiated as an enterprise for managing surplus funds rather than for financing a deficit. But this enterprise, financed the utilization of the entrepreneurial talents of Mohammad. It naturally implies that mudharabah inevitably leads to the establishment of an enterprise.

\(^{12}\) Actually people need resources not money as such. The provision of resources with deferred payment arrangements serves the purpose of finance. But, here we are talking about financing in the general sense, where money only is relevant.
funds and human resources for their establishment. Second, with their establishment, the need for financing does not however, discontinue. For instance, its own profits, and bank borrowings may be a main source of financing the sole proprietorship, the partnership company may in addition sell its own debt instruments, and the joint stock company, will in addition sell its parts as common stock, or resort to quasi-debt such as preferred stocks. In any case, we cannot think of one form of an enterprise, e.g., partnership to serve as a mode of financing for another form, e.g., a sole proprietorship and vice-versa.

In context of the modern enterprise as an ongoing concern, the same logic is applicable to the Islamic forms of business organizations. For instance, when a musharakah or mudharabah company is established, the matter of its financing continues. In the most common form of the traditional mudharabah - a single transaction enterprise, the differentiation between the two cycles of financing is not required. But, if a mudharabah or musharakah enterprise of longer-term duration is visualized as an ongoing concern, e.g., in the form of partnership, joint stock companies, the Unit Investment Fund of IDB or Pakistani Mudharabah Companies, etc., the difference between the two cycles becomes evident. Overtime, the mudharabah or musharakah company will itself need financing. Moreover, as a sole proprietorship and a mudharabah are two different forms of enterprises, we should not expect any one of these enterprises to serve as a financing mechanism for the other enterprise.

The last is an important point and needs further elaboration. For illustrative purposes, a mudharabah enterprise or a sole proprietorship as an ongoing concern can be considered. Suppose, after one year of operation, the enterprise needs more funds for expansion. Can the mudharabah or musharakah be used to raise the additional funds? The answer is yes, provided either or both of the following two restrictive conditions are met.

First, an enterprise requiring more funds could identify an independent transaction within the enterprise, which can be financed (can constitute a
subordinate enterprise) by a new mudharabah. For example, if the enterprise is a grocery store, it can identify edible oil to be financed by the new mudharabah - a subordinate mudharabah enterprise will be established. The operational results of trading in this item will be calculated to meet the mudharabah conditions. In some businesses such an arrangement is possible. But the practical difficulty with a larger scale use of this method is that the profitability of an enterprise, in general, can be calculated only after aggregating the profits and losses of the operations of different sections of the enterprise. Many items in the grocery store for example, may not actually be generating substantial profits but these items may be essential to attract clients for the store. Moreover, consider advertising costs; on what items the store should charge these? Therefore, for practical reasons it is extremely inconvenient to identify specific items, each time when new funds are needed. We believe that this is one of the difficulties due to which the much cherished profit sharing principle is not widely used by the Islamic banks.

Second, if funds are needed for expansion and business sections cannot be identified for new mudharabas or musharakas the enterprise has to admit new mudharibs/musharikhs (partners) e.g., by issuing profit sharing financial instruments. Besides the cost of such arrangements, this option is suitable only for those enterprises which are willing to change their ownership structure. As discussed in the subsequent sections of this chapter, in the Islamic economy we shall expect to have numerous enterprises needing funds but for many reasons not willing to change their longer-run ownership structure. How to meet the financing needs of such enterprises? The limitation for mudharabah and musharakah to meet the need of these enterprises shall persist, as these are basically business forms. Again, we believe that the practical non-existence of profit sharing in Islamic banking is also related to this difficulty.
6.3 THE ROLE OF A COMPREHENSIVE FINANCING MECHANISM IN THE CAPITAL STRUCTURE OF ENTERPRISES

In the previous section a comprehensive financing mechanism was defined as an arrangement which meets the cash requirements of enterprises but remains neutral to their longer-run ownership structure. The conceptual difference between this and a mode of financing and the limitations of using a form of enterprise as a financing mechanism were also discussed. In the present section, the preference of different enterprises for such a comprehensive financing mechanism is briefly discussed in the context of strengthening the finance-enterprise relationship in the capital and entrepreneur scarce Muslim countries.

6.3.1 Initiating Infant Enterprises

In the Muslim countries, in general, the entrepreneurial class is nascent. As technological progress and growth of all economies depend on entrepreneurial risk-taking, recent research on Islamic economics has rightly raised the issue of promotion of such qualities through small enterprises. Sole proprietorships require the entrepreneur to borne all risks of the enterprise. The bankruptcy risks confronted by infant entrepreneurs, in fact, may not allow entrepreneurs to initiate enterprises. Since capital participation by a financier will spread the risks of the enterprise, it can thus encourage the entrepreneurial functions.

We argued in chapter four that when the enterprise starts functioning, the entrepreneur gets acquaintance with its operation, his risk profile improves, and he is expected to manage more and more risks over time. The proper development of this improving risk profile is in the interest of the financial and

---

13 An interested reader may refer to Siddiqi (1983) and Chapra (1986) for how by removing the collateral requirement, the PLS can encourage small enterprises on mere efficiency grounds, to Khan (1992b) how profit sharing is conducive to human resources development.

14 Islamic economists also argue that the social security system provided by zakah will provide a shield against such risks.
economic system. In this regard, the most effective mechanism would be to assign more and more ownership responsibilities of the enterprise to the entrepreneur. The logical implication of this mechanism is a gradual withdrawal of the financier from the project by redeeming his funds. This will also relieve the financier to support other infant projects. This reasoning, nevertheless, implies a reverse-order capital structure relationship. As a convention, when an enterprise grows it sells stocks. In the present case, as the enterprise grows, it is expected to become a sole proprietorship. Nevertheless, in context of Muslim countries, for instance, Bangladesh, Indonesia or Pakistan, such a promotional policy can be considered logical and rational.

6.3.2 Capital Structure of Sole Proprietorships

As single person owned enterprises, normally, sole proprietorships are established either by borrowed resources or out of the savings of the owner. In either case, the entire liabilities of the enterprise, rest on the owner-operator. Some of these enterprises actually die in their infancy, some close after attaining maturity while many others develop into corporations of different sizes. The significance of such enterprises can be seen from several facts related to them. For instance, these enterprises are effective source of productive engagement of manpower, particularly, in the capital-scare developing countries. Being owner-operated, these may even be efficient. Major innovations are undertaken by them.

The existence of sole proprietorships at a large scale, in itself is an evidence of the fact that for certain justifications of their own, the owners of these enterprises prefer their typical ownership structure. As sole proprietorships do not like to associate others with their enterprise, they cannot utilize musharakah or mudharabah finance. Even if these opt to mobilize funds by issuing stocks to the public, they cannot do so until their operations reach a

---

15According to the Small Business Administration Department of the US Government, 98% of all business in the US is considered as small, these provide about 60% of total US business employment, 100% of new jobs in US industry, these enterprises innovated more than half of all
certain minimum size. In addition, the relative cost of issuing stocks is much higher for smaller enterprises compared to bigger firms, effecting their relative competitiveness. The availability of appropriate form of finance (finance which is consistent with their ownership structure) is an important known factor for the growth of these small enterprises into joint stock companies.

The capital structure of these enterprises may contain debt as a natural result of shortage of internal resources to finance either the establishment of the enterprise or its expansion. But, since these are solely owned by a single person, by definition, the capital structure of such firms shall never contain external funds such as mudharabah, musharakah, or common stock. In other words, due to their typical ownership structure, these enterprises could not benefit from the traditional Islamic participatory modes of financing or from equity finance. This should be seen as a universal rather than a localized phenomenon. Hence, in the absence of an Islamically acceptable comprehensive financing mechanism, these enterprises could face serious financial constraints compared to enterprises which can use interest-based finance. Since comprehensive Islamic finance is not available in the Muslim world, enterprises which use interest-based funds are in a relatively advantageous position compared to those which avoid interest. Once grown as corporations on the basis of interest, it is natural for these corporations to become indifferent to the Islamic injunctions against interest as e.g., re-activated by the Fiqh Academy resolution mentioned above.

US product and service innovations since the early forties. For more details see Brigham, (1992).

16 The flotation cost is estimated as 4% for offerings worth more than US $50 million and 21 % for offering up to $1 million. Given the same rate of dividend payout the cost of equity for the smaller firm is 19% compared 15.6% for the larger firms. In addition the market rate of return on stocks of smaller firms is also reported to be high - the market also charges more. See ibid.

17 Although in the framework of the present chapter it is irrelevant to ask sole proprietorships to opt for mudharabah or musharakah, some recent empirical studies confirm this proposition. See al-Hajjar and Presley, (1996) for the preferences of these enterprises for mode of financing in a capital surplus country. Also see Ahmad (1990) for the lack of preference of firms in a capital deficit country.
It may not be just to ask the enterprises to sacrifice their ownership characteristics if they need financial accommodation. Nor, such an administrative arrangement sounds efficient or even logical economy-wise. The right approach, in our opinion, is therefore, to evolve a scheme of permissible financial accommodation which could also be consistent with the universal preference of these enterprises for the form of capital structure. The problem is one of meeting the cash needs of a sole proprietorship for establishment and growth, but at the same time, without changing the structure of the enterprise. Thus conceptual efforts as well as institutional arrangements are required to provide such a financing mechanism in conformity with the ban on interest.

In the developing countries, sole proprietorships mostly get finance from informal sources. In the traditional Islamic framework, financial accommodation in the form of cash can only be provided either as qard (interest-free loan) or by participating in the risk profile of the enterprise through mudharabah or musharakah\(^1^8\).

Individual motivation, for example, for the construction of a house, for the purchase of a consumer durable, for the education of a child etc., is a primary factor in effecting the saving choice. Inflation wipes away a large part of the purchasing power of these savings. Individual savers whose choice pattern is not effected by the prohibition of interest, to some extent, can however, neutralize the eroding effect of inflation by interest-based investments. But, individual savers who are conscious about the prohibition of interest, are hence, left with a dilemma; to forego present consumption, save, but only to be wiped away by inflation! It is obvious that two individuals, otherwise facing similar conditions, but one being disappointed with investment opportunities or even not being able to protect the purchasing power of his

---

\(^{18}\)Interest-free loans are the most effective form of finance. Such loans do not disturb the sole proprietorship structure of an enterprise. In context of the birth of sole proprietorships in Japan and their rise into multinationals, the importance of interest-free funds is often considered as a predominant factor. Interest-free loans may equally be effective in the developing Muslim
savings will save lesser compared to the one who enjoys at least some investment opportunities.

Islamic banking facilities are not available to an overwhelming number of the population which is conscious about the prohibition of interest. Informal participation in the capital of enterprises can however, provide investment opportunities to a significant segment of the Muslim individual savers. There may be numerous sole proprietorships needing such funds. The two can benefit from each others complimentarities, but, only if, the funds are consistent with the legitimate preferences of the enterprises. Again, a mechanism to informally bring these two parties together is in the larger interest of the society.

6.3.3 Capital Structure of Joint-Stock Companies

The discussion of this sub-section inevitably leads us to the controversy between different theories of capital structure of the firm. The competing theories try to explain several related phenomenon: Why some firms rely more on internal financing compared to others? Why firms combine debt and equity? Why firms issue common and preferred stocks? Why firms sometimes buy their own stock? What is the optimal policy related to these issues? Why this optimal policy is different for different firms and even for the same firm in different times? These numerous and complex issues are thoroughly analyzed in the relevant literature. It is not the objective of this chapter to deal with these complex issues.

In this context, in a broader sense, it is relevant to mention that, after decades of domination by the neo-classical and Keynesian theories (led by the Miller-Modigliani propositions), the traditional capital structure theory has re-emerged. In simple terms, the intuitively appealing implication of this several decades old theory is that, the first preference of firms is to finance their growth countries. Nevertheless, the existence of a return-free mechanism does not necessarily impose a restriction on the Islamically legitimate return bearing informal financing mechanism.
from internal sources. If firms have to choose between debt and equity, they will prefer debt simply because it is consistent with their first preference. The preference for internal financing, is in fact, a preference for internal ownership. The stronger is the internal ownership, the more it is secure to borrow, i.e., borrowing is consistent with internal financing. On the other hand, the strength of internal ownership in fact, weakens external ownership and vice-versa\textsuperscript{20,21}.

The re-emphasis on this theoretical premises has been strengthened by at least two considerations. First, tax, bankruptcy, and agency costs (moral hazard, adverse selection etc.), all relate to external (stocks) rather than internal financing. Second, profit retention (which is a positive function of the size of internal ownership and an inverse function of external ownership) improves cash flows and capital base of the firm, hence enhances its growth prospects. In chapter four we reported the results of some recent studies revealing that for the 1970-85 period, in average, corporations in the G - 7 countries met 73% of their financing needs by their retained earnings, 22% through longer-term bank-industry relationships as direct equity linkages or loans and the remaining 3% through stock markets. The average figures for direct bank-industry relationships are in fact inflated by the high dependence of West German and the Japanese Corporations on this source of funds.

This evidence suggests that even in the economies where they are expected to function most efficiently, the stock markets are not effectively promoting savings which is considered to be their important function. As major companies are financing their growth through retained earnings (not issuing much new stocks), the volume of daily turnover in the stock markets, is an act of speculation, rather than real investment. The day to day hazards of

\textsuperscript{19} For an updated review and comparison of the competing theories one may refer to Brigham (1992), and Kelly (1989).


\textsuperscript{21} The robust signaling theory advises that investors should suspect the intention of large corporations whenever these issue new stocks. Because, if the prospects of the corporation were good, why should corporations share it with stock holders? Conversely, they will only try to share the bad prospects of the enterprise. In other words, if the prospects are good they will borrow and if bad issue stocks!
speculative practices in the stock markets and the resultant damage to the wealth of the society is equally criticized by the Islamic scholars as well a large number of Western economists.

Referring to similar problems, one of the most prominent contemporary analysts of capitalist institutions raises a serious objection on the stocks as "investments that are not associated with particular assets". As such, the risk of expropriation is quite substantial. The risk is due to the fact that "the assets in question are numerous and *ill-defined and cannot be protected in a well-focused, transaction specific way*" (emphasis added). As Islam puts emphasis on well defined property rights, this observation need to be taken seriously by Islamic economists.

Stock markets have also contributed to the elimination of risk-aversion by enhancing portfolios of assets whose returns are negatively correlated. As a result, under the normal functioning of the market, even with a decline in the price of a stock, for instance, from $30 to $10 next morning, investors still stand gainers because the price of the other assets held in the portfolio must increase. Thus the gambling process and the short-termism is permanently vitalized. In the existence of such a trend non would be willing to accept a lower (competitive) rate of return. The cost of capital eventually aggravates the efficiency of the production system - a popular explanation for the competitiveness of Japanese bank dominated economy over the relatively stock market oriented US and European economies.

---

22 Keynes is reportedly used to resemble stock markets with "casinos", on his views and an interesting discussion on the role of stock markets in economic development, see Sing (1993). Also see Allais (1993) on the speculative moves in the stock market, the damage caused by it and the proposed reforms. For the views of Islamic scholars on the subject one may refer to al Qari (1993).


24 Sing (1993) refers to a MIT study on the subject of competitiveness of US and Japanese industries. The MIT study concludes that as a result of diversification - seeking higher rate of return, the US firms have lost competitiveness to the Japanese.
Given the fact that corporations in the developed market economies have met only a small part of their total financing needs, the existence of trading in billions of dollars every day is the result of mere speculation. A little more reliance of these companies on such a method of financing could further increase the speculative process and further undermine the competitive basis of the market system. So, the minimum existence of common-stock financing in companies capital structure must be considered as a prudent policy on their part.

In the chapter four we made an attempt to explain the reasons of the overwhelming use of mark-up (Islamically approved form of debt financing) by the Islamic banks within the framework of the traditional theory. An implication of this approach is that the overwhelming existence of mark-up is also related to the preferences of the companies as user of funds. This consideration opens the possibility of exploring such strategies for capital participation in enterprises which like mark-up can be consistent with the preferences of the enterprises.

Again, therefore, in the absence of a comprehensive financing mechanism, which can at the same time be consistent with the considerations of firms for ownership, their reliance on the mark-up can be considered as a sound second best option. If mark-up is reduced, capital requirements will be met by increasing reliance on stocks/PLS. Given the present experience with stocks, a greater reliance on the mechanism of financing is not prudential. Evolution of a comprehensive PLS financing mechanism can thus meet these considerations of the enterprises. It may be suggested that financing through the mark-up or debt in general, strengthens internal ownership, because it is redeeming in nature. The debt may be a long-term one, but each time contracted, it has to be re-paid and it is not going to stay in the capital structure of the enterprises permanently. If debt financing is preferred by the enterprises for its redeeming nature, for the same reason, participatory financing will also be preferred, provided that it is also redeeming in nature.
6.4 DECLINING PROFIT AND LOSS SHARING: A COMPREHENSIVE ISLAMIC FINANCING MECHANISM

In the preceding sections, it was argued that within the framework of Islamic interest-free economy, the right of enterprises for a comprehensive financing mechanism need to be recognized. A comprehensive financing mechanism was defined to be a device of providing funds through participation in the risk of an enterprise but without interfering in the enterprise's longer-term ownership structure. Further, it was argued that because of its redeeming nature, therefore non-interference in the ownership structure, debt is popular among enterprises. Since, Islam prohibits the provision of funds on the basis of fixed return, a comprehensive Islamic financing mechanism can only be based on the parent principle of participation in the risk profile of an enterprise. In the present and following sections, broader outlines of the proposed redeeming PLS mechanism are proposed and some related issues are analyzed.

6.4.1 Issues in the Redeemability of PLS Funds

Are the funds provided under mudharabah and musharakah redeemable? Some researchers consider that in their pure forms, these two Islamic modes of financing are redeeming in nature. As redeemability is closely related to the manner in which the principal funds are re-paid, a closer look at the re-payment method of the principal of mudharabah and musharakah funds is therefore, required. However, before discussing whether these funds are redeemable or not, it is important to describe the specific notion of redeemability of funds as adapted in the chapter.

The re-payment of the principal funds depends on the nature of the specific activity which uses the funds in question. Some activities seeking finance are simple and single operation transactions. In such cases, the issue of redeemability is irrelevant as all funds will retire together with the conclusion of the transaction. Whereas, an overwhelming number of contemporary activities seeking finance are in fact inseparable parts of ongoing enterprises. One part of the funds (the permanent equity) of such enterprises cannot be
retired. But often, a greater proportion of funds is retired on the basis of contractual agreements about timely planned re-payment schedules.

In the present chapter, all retiring funds as treated redeemable. These funds are usually of two types. A smaller, yet, an important part of the funds is re-payable in lump-sum at maturity. In the conventional economy, short term debts are examples of such funds. A significant part of all retiring funds is however, amortized in installments. Contractually, these installments mature at different time intervals. This maturity structure is of vital importance as it enables the enterprises to manage their cash flows conveniently. Long-term debts particularly created as a result of fund flows are examples of such funds.

With regard to re-payment of the principal of mudharabah funds, a distinction must be made between the pure (traditional) form of mudharabah, and the mudharabah principle used by the Islamic banks on their deposits' side.

Non Redeemability of the Pure mudharabah Funds

In the traditional sense, the principal of the mudharabah can be re-paid only after the calculation of its growth. In general, both the mudharabah and musharakah enterprises are started with monetary contributions. Hence, calculation of capital growth is possible only when all non-monetary assets of the enterprise are transformed into money. The amount of monetary increase in the principal funds deployed constitutes profits and a decrease in them losses. This type of calculation of capital growth is a factual rather than hypothetical phenomenon. It is important to note that in case of pure mudharabah, this factual calculation of capital growth is a result of conclusion and liquidation of the enterprise. It is therefore, a rule not exception.

Two types of mudharabas are known: transaction specific and time specific. Whether the funds are provided for carrying out a specifically identified transaction or provided for non-specific transaction but for utilization within a specific time frame, with the conclusion of each mudharabah the
contracting parties depart. It is only due to this reason, i.e., factual liquidation of each enterprise, factual calculation of capital growth becomes feasible. As the enterprise liquidates, all funds are retired, together. Thus, the funds of pure mudharabah and musharakah, in fact, resemble the permanent equity of a modern enterprise; hence, non-redeemable.

But if the enterprise is non-liquidating i.e., if it is an ongoing concern, factual calculation of capital growth is not feasible. Since, ongoing enterprises are the product of the industrial age, the re-payment of the principal amount of musharakah and mudharabah in such enterprises is therefore, an entirely contemporary phenomenon. This phenomenon has two important aspects.

First, most ongoing enterprises periodically prepare balance sheets reflecting their respective depreciation, assets-liabilities and profit-loss positions. Instead of actually liquidating an enterprise for the calculation of capital growth, these estimated evaluation (tandhid al hukmi) reports can be treated as the basis for the calculation of capital growth and payment of the mudharabah profits.

However, re-payment of the principal amount of mudharabah funds being utilized in non-specific activities of an ongoing enterprise is one of the most important complications confronted in the application of the mudharabah principle. Would that the principal was also re-paid, the retiring funds could have been characterized as redeeming. Although profits can be paid on the

---

25 To illustrate the importance of this point, we can compare hypothetical transaction specific mudharabah contracts. Different mudharabas may deal in the same merchandise and involve the same amount of funds. Yet some of these may convert goods into cash, liquidate faster than the others. Demand conditions, efficiency of the mudharib etc., will contribute to the difference in the time needed for the cash conversion process. Whereas, in the second case, the two parties are forced to stay in their contractual relationship unless the merchandise is sold. The other option for the owner of funds is to enforce premature liquidation. In this case, the unsold goods will be treated as scrap, the owner of funds has to accept a lesser evaluation of the enterprise and incur a loss. This implies that factual liquidation of an enterprise is needed to enable the parties to depart.

26 Tandhid al hukmi is used by the Islamic banks for the purposes of fulfilling mudharabah conditions of actual liquidation for distribution of profits. In ongoing enterprises since the principal amount remains in active utilization, its ultimate growth is only a matter of forecast
basis of periodic evaluation reports, a great difficulty is encountered in the re-
payment of the principal funds of mudharabah until factual liquidation of the
enterprise is undertaken.

Second, if funds are made transaction specific, after evaluation reports,
whatever, capital growth is obtained, the funds will be re-paid in lump-sum. In
other words, the vital importance of gradual retirement of the funds by gradual
re-payment needs further conceptual investigation. In our understanding, the
gradual rather than abrupt re-payment of the mudharabah funds and profits is
of immense importance. We do not need to go into the detail of this obvious
point. However, it may be reiterated that gradual re-payment of the funds
enables the enterprise to manage its cash flows with ease and efficiency27,
among several other benefits.

Redeemability of Bank Deposits as Mudharabah Funds

The deposits' side of the Islamic banks presents an important
contemporary example of wide scale utilization of the profit sharing principle
underlying mudharabah. In many respects, this application has widened the
horizon of the traditional concept28. The Islamic banks use the mudharabah
principle as a resource mobilization technique. The bank as a legal entity is
one person (mudharib-manager of funds), dealing with numerous suppliers of
funds (depositors-owner of funds). It is note worthy that unlike in the original
form of mudharabah, in case of the deposits of Islamic banks, in general, PLS
deposits are not rigidly linked with the operation of any specific transactions
and depositors withdraw the principal amount of their deposits at wish.29. A

rather than actual. To offset any ultimate negative growth in these funds a reserve fund is
recommended by Islamic scholars. See Chapra (1985)

27It is note worthy that newer explanations of the firm's capital structure rely mostly on the
relative implication of different forms of funds for the firms' cash flows.
28For a detailed study of the differences between traditional mudharabah and contemporary
mudharabah (deposits' side of Islamic bank), one may refer to al Amin (1991).
29We also need to keep in record that al Jarhi (1976) calls for a 100% reserve requirement.
Fahmi (forthcoming) calls for the complete abrogation of the present deposit mobilization
mechanism of the Islamic banks to conform it with the original principle of mudharabah. In this
chapter we do not aim to discuss this particular issue. Suffice it to emphasise that the deposit
depositor must wait for the forthcoming evaluation for sharing profits, but can withdraw by foregoing his profit claims for the unevaluated period.

We noted earlier that the pure mudharabah is in fact a form of business enterprise. In case one party ceases to continue, the enterprise shall also come to an end. In case of the PLS deposits of Islamic banks, normal withdrawals do not affect the operations of the bank as a mudharabah enterprise. In this manner, the deposit side of the Islamic banks is a major departure from the original form of the enterprise, while at the same time using the basic principle of profit and loss sharing.

Conceptually, the depositor-bank relationship is the same as the 

\textit{rab al mal} and \textit{mudharib} relationship. Keeping in view the condition of an evaluation period for profit claims, PLS depositors, in general, are free to deposit their money at will and to withdraw at will, often, in proportions and amounts of their choice$^{30}$. If we consider the depositors as financiers, their funds can be considered as redeemable capital, as the withdrawal of these in normal circumstances will not create any hazard for the banks as ongoing enterprises. This is so because each PLS deposit is considered as an enterprise in itself. In this way, the Islamic bank is involved in as many enterprises as its mudharabah depositors. The cost of a premature liquidation of this typical enterprise for the depositor (\textit{rab al mal}) is negligible because, factually an individual deposit is not specifically linked to any real economic activity; although as a pool, these constitute the bank as an enterprise. The cost of the premature liquidation of a deposit-enterprise for the bank (mudharib) is also negligible for the same reasons and for the fact that the depositors are numerous.

Thus, we observe that there is a disguised but an important dichotomy between the contemporary practice of mudharabah on the deposit side of Islamic banks are almost uniform and it has the approval of the consensus of sharia'h scholars.
Islamic banks on one hand and an expected *mudharabah* on the assets' side of these banks (for the same reasons between individual *rab al mal* and *mudharib* related in ongoing enterprises) on the other. In the previous case, the Islamic banks have benefited from the book keeping and balance experience of modern ongoing enterprises including conventional banks. This has not been done in the second case as *mudharabah* on the asset side of the banks is still subject to the conditions of the traditional *mudharabah*. The traditional *mudharabah*, though not restricted to but were predominantly practiced to finance single transaction trading activities. Thus, it can be concluded that, through *tanthid hukmi* (annual evaluation) and linking *mudharabah* deposits (funds) with the general performance of the enterprise (bank) rather than a specific activity in it, the basic principle of profit sharing has been adapted to suite the liability side of Islamic banks. In principle, it should also be adapted to meet the requirements of financial as well as non-financial ongoing enterprises on their asset as well as liability side.

**Implications of Redeemability of Finance for Ownership Structure**

As emphasized in the opening paragraph of this chapter, the essence of PLS financing lies in taking the responsibility of the risk inherent in ownership of assets. In pure *mudharabah* the financier wholly owns the capital of the enterprise and wholly bears the risk of loss of this capital. In pure *musharakah* each party bears the loss of his part of ownership. We concluded that pure *mudharabah* and *musharakah* contracts impose ownership considerations on the firm's financial policy. In other words, the firm cannot acquire funds unless it is willing to change its ownership structure. A large number of enterprises, obviously, cannot compromise with this condition. As a compromise solution, we proposed that in order to be universally acceptable, the PLS arrangement should be flexible with respect to the longer-run ownership structure of the enterprise. An objection can thus be raised: How can the PLS principle remain neutral with respect to the ownership structure of an enterprise?

30 It shall be noted that Islamic banks have different types of PLS deposits, such as specific purpose and general purpose etc. But in general, all these deposits can be withdrawn at wish
An infinite life span of an enterprise and infinite number of occasions of need for unknown sizes of finance is in our perspective. This phenomenon is not the same in the pure form of mudharabah or musharakah. However, perspective is synonymous with the deposit-enterprise outlined above. The deposit-enterprise does not interfere with the longer-run ownership structure of the mother enterprise - the Islamic bank, yet the depositor is fully responsible for the loss of his money. Each PLS deposit is a full-fledged PLS contract. If some funds are withdrawn, the remaining funds in the deposit constitute newer PLS contract and so on.

In the scheme of the PLS proposed in the next sub-section, the concept of the deposit-enterprise has been generalized. Thus each PLS contract apportions ownership among parties. The parties will be responsible for the risk of their respective parts of ownership. But, the ownership of the financier systematically and gradually extinguishes, implying that a single financier will not have any permanent ownership stake in the project. Certainly, some financiers will always be there, but all of them in their perspective, will not hold any permanent ownership in the enterprise.

An anonymous sharia'h referee on an earlier version of this chapter, explains the sharia'h implication of this arrangement in the following words: "If the enterprise wants to obtain finance from a person without giving him a share in the ownership of his assets it will not be in accordance with the sharia'h. However, it may be true that even though the holder of such an instrument will get a share in the assets of the enterprise, yet, because, of the redeemable nature of this instrument, this sharing in the assets will not change the ownership structure of the enterprise in the long run" (emphasis added).

6.4.2 Outlines of the Proposed Redeemable PLS Scheme

It is an irony that despite the academic soundness of the PLS literature, we fail to identify a conceptual scheme for systematically retiring the PLS funds from an enterprise. Specifically, if a bank or an individual investor extends

(See, e.g., Ahmad 1993).
funds to an ongoing enterprise on the basis of *mudharabah*, how these funds will be re-paid after adjusting for losses if any? In the present sub-section, we try to initiate discussion on this issue.

A number of efforts have been made to evolve interest-free financial instruments. Some of these aim to mobilize resources to supplement the available public funds as well as the resources of the Islamic banks. The principle underlying these efforts is similar to the idea of issuing common stocks i.e., these proposals generate non-redeemable, permanent and tradable ownership titles. Hence, the limitations of common stocks as a source of funds (discussed in previous sections) in general apply to these instruments as well. For instance, at a given time, the enterprise in question may consider to issue permanent ownership claims on its assets, to raise funds it needs. The holders of these claims become permanent owners of the enterprise.

The problem arises from the fact that the need for finance is a continuous reality. There is no guarantee that after issuing these shares, the enterprise will not need more finance in the near future. As an ongoing activity, the enterprise must always need more funds. What it should do? Could it issue more permanent claims on its ownership? The simple answer is that such claims can be issued but to a certain limit and this limit is much narrower than often considered in the literature on PLS financing. We discussed the minimal role of stocks in companies capital structure in the industrialized countries. The extreme case is the inability of an overwhelming number of sole proprietorships to go public.

The Proposed Scheme

The example of informal financing can be taken as an illustrative case. Due to the fact that, in the majority of Muslim countries, individual savers as

---

31 For example, M. El-Hennawi, (1993) proposed investment certificates as permanent ownership titles on specific projects. The idea of leasing certificates being formally developed in Kahf (forthcoming) is another example in the same lines. Revenue sharing bonds as interest-free project financing techniques were innovated and patronized by the late President Turgut
well as small enterprises do not have an access to Islamic banks, informal participation in the capital of the enterprises can enhance investment and growth in these countries. Moreover, these small enterprises are not expected to be leveraged, capital participation in them will be consistent with the OIC Fiqh Academy Resolution. Furthermore, a wider scale business interaction between the people is expected to enhance the cherished social solidarity among the Muslims.

Suppose a small sole proprietorship enterprise, is in need of funds, (for instance, $25,000)\textsuperscript{32}. As the enterprise is sole-proprietorship, these funds cannot be extended on the basis of pure mudharabah or musharakah. We propose that these funds can be provided on the basis of redeemable PLS. Suppose, the annual evaluation reveals that at the time of seeking the new funds the total net worth of the enterprise was US $75,000. To this we add US $25,000 contributed by an individual financier, so that the new PLS enterprise with a present value of $100,000 is established. For simplicity, we also assume that on pro rata basis the two parties share profits and losses in proportion to their capital contribution. As long as the capital contribution remains in this proportion, the entrepreneur will take 75% of total profits and 25% of total profits will accrue to the financier.

We assume that the entrepreneur is not interested in a permanent partner. The financier also is not interested in tying-up his funds permanently with the enterprise. For his own considerations the financier requires to redeem his funds completely during a specified period, say 5 years. For adjusting cash flows, it is also convenient for the entrepreneur to re-pay these funds in 5 yearly installments instead of accumulating them for the end of the fifth year.

\textsuperscript{32}The existing literature on informal finance in the capital scarce developing countries gives the impression that interest-based informal lending exists in all developing countries including Muslim countries. This author has discussed the matter with relevant researchers from India, Pakistan, Bangladesh, Sudan, Algeria, Tunisia, and Egypt. All maintain the position that some

---

Ozal of the Republic of Turkey. Zarqa (1990) proposed istisna’ certificates for financing the social infrastructures according to the Islamic requirements.
We assume that both parties complete all formalities which are required for implementing a *musharakah* contract\(^ {33} \). In addition, we make the following important considerations.

First, the contract is based on the expected profitability of the entire enterprise rather than an specific activity in it.

Second, to calculate capital growth, the contract recognizes the annual evaluation (audit) reports as a perfect substitute of factual liquidation.

Third, the contract stipulates that in case of profits a certain part say $5000 of the financier's funds will be retired on yearly basis, in case of loss in yearly operations, nothing will be retired and capital will be depreciated proportionately.

In this way, the contract will also specify that PLS contract in the first year will be based on capital contribution in 25% ($25,000), 75% ($75,000) proportion respectively, by the financier and entrepreneur. In the second year, after re-payment of $ 5000, of the principal amount, the capital contribution in the enterprise will change to 20%, 80%; in the third year to 15%, 85%; in the fourth year to 10%, 90%; and in the fifth year to 5%, 95%; finally, the entrepreneur will own 100%. The profits will be shared each year in proportion to the capital contribution relevant for that year. However, with adjustment for losses in some years, this schedule may not be strictly observed.

Fourth, a third party, viz., a Savings' Association administered by the government, may endorse the contract with a guarantee for the yearly repayment of the agreed proportion of the funds contributed by the financier.

Fifth, the contract does not impose any restrictions on the entrepreneur regarding mobilization of funds from other *shariah* consistent sources.

---

Muslims, though use interest-based institutional finance, however, do not charge interest on inter-personal loans.

\(^ {33} \) For these conditions, one may refer to Omar (1992)
However, if the enterprise plans to sell its shares on permanent basis, it cannot do so without first offering the partnership to the financier.

Thus it can be expected that using this mechanism the enterprise can meet its financing needs to expand without involving in *riba* and without compromising its longer-term ownership preferences.

The case can further be generalized. Suppose, the above funds were acquired and the new enterprise established on 1-1-1995 with the present value of $100,000. Since, this enterprise does not restrict the entrepreneur to mobilize additional funds, on 1-1-1996, after the first annual audit report, the entrepreneur may acquire more funds on conditions mentioned above to expand the enterprise further. Thus, a continuous flow of PLS funds can be generated. Retiring funds will thus continuously be replaced by new funds without any rigid conditions imposed on the ownership structure of the enterprise. The door for utilization of entrepreneurial skills, which is now stagnated, in the Muslim countries, can be made dynamic by removing the financial constraint.

Following the proposed scheme, the Islamic banks are expected to open line of redeemable PLS with enterprises seeking finance. It is noticeable that at the present Islamic banks extend very short-term mark-up based funds. An important reason for this is the requirement of matching liabilities (deposits) which are mostly short-term in nature, with assets (mark-up funds). As the proposed scheme is biased against issuing stocks and in favor of resorting to direct and redeeming relationship between banks and enterprises, the banks are required to participate at least in the medium term capital of the enterprises. This requires the Islamic banks to mobilize medium and long-term funds to supplement their ordinary PLS deposits.

34It must be emphasized that we are not offering any panacea. But we notice in Pakistan that excess liquidity has been termed by the State Bank as the number one problem of the economy. One reason of this phenomenon is the non-availability an appropriate financing mechanism. The moral conditions of the people of Pakistan may not be ideal. Even with these conditions it is almost impossible to find interest-based informal funding. Thus, our attempt is a
The banks need to issue financial instruments to raise the required funds. It is a *sharia'h* requirement that these instruments must be supported by assets which may comprise some debts but should overwhelmingly constitute cash and real assets. Islamic banks' assets overwhelmingly comprise of mark-up based debt, therefore these banks cannot mobilize long or medium term funds by issuing financial instruments. On the assets' side, the involvement of the banks in redeemable PLS is expected to leave them with a much better cash flow and liquidity situation compared to the permanent PLS. This situation will further improve, as a change in the asset structure of the banks would enable them to issue redeemable PLS instruments.

Policy makers in the Muslim countries may benefit from the experience of finance and industry relationship in Japan and Germany. As it is well known, the corporate sector in these countries does not rely much on stocks for financing their growth. Rather, the relationship between banks and industry is much stronger in terms of equity and credit linkages. The banks in turn resort to the market to mobilize funds by issuing long-term bonds. This experience is highly relevant in the framework of the proposed redeemable PLS scheme.

Furthermore, the scheme is also expected to enhance managerial incentives as compared to permanent PLS, as will strengthen internal ownership of the enterprise. In addition, the scheme may also overcome the inevitable domination of the economic system by financial institutions under the permanent PLS. This matter is of immense importance viewed in context of mobilization of external finance for the resource scarce Muslim countries. As compared to permanent PLS, redeemable does not endanger the host economies to external domination in the longer-run. This aspect is more formally discussed in chapter seven.
6.5 INVOKING SUPPORT FOR THE PROPOSED SCHEME

The proposal to redeem the *mudharabah* and *musharakah* funds in installments is knew for the literature on PLS banking. Therefore, critics may raise an objection about the *sharia'h* permissibility of the proposal. In the present section we argue that although redeemable PLS is not known in the academic literature on PLS financing, its underlying principle has been adapted in a number of contemporary Islamic legislation in different countries. Moreover, some Islamic banks with the approval of their *sharia'h* advisors have also started issuing redeemable financial instruments.

6.5.1 A Lesson from Financing Awqaf Properties

A waqf is a legal person. Its property cannot be owned but by itself. This implies that the waqf cannot be financed on the basis of the *mudharabah*. Also, the waqf property cannot be shared by others. This implies that the permanent *musharakah* also is not a convenient financing technique as the *waqf* will become a permanent partnership (the waqf may however, manage its current assets with doing short-term *musharakas*). This financing problem is a typical example of a situation where the need for a comprehensive Islamic financing mechanism outlined in the previous section of the chapter emerges. The example is generally valid. Therefore, a solution put forward to overcome this typical problem, can also be valid for all such cases where generalization of the problem is possible. To overcome the typical problem, the *Muqarada Bonds* Act 1981 was introduced by the Government of the Kingdom of Jordan under supervision of a *sharia'h* board comprised of prominent *sharia'h* scholars.

Salient features of this legislation which are relevant for the present chapter are as follows: i) Sponsors of a project can avail funds from a financier with a third party guarantee of the principal amount, ii) The provider of funds, instead of claiming a fixed return on the funds provided, will in fact share in the positive outcome (profits) of the project, iii) The funds provided will be amortized on the basis of the third party guaranteed principal amount and on
the basis of shares in profits and an agreed upon formula of amortization which will also be implemented under the guarantee of the third party, iv) Consequently, through a redeemable financial instrument, a financier participates in the capital of a waqf project without interfering in its ownership structure in the longer-run.

It is noticeable that the law was enacted under the supervision of a Fatwa committee. Therefore, a sharia'h evaluation of the legislation is not in the competence of the present chapter\textsuperscript{35,36}.

6.5.2 A Lesson from Financial Islamization in Pakistan

During the time when the legislation about Muqarada bonds were being incited in Jordan, Pakistan was also making efforts to Islamize its banking and financial system. Regarding, the re-payment of the principal amount of a financial accommodation, another significant contemporary development is the evolution of the concept of Participation Term Certificates. The concept was evolved when the experts involved in the Islamization (led by the Council of Islamic Ideology, Pakistan) of the financial system in Pakistan felt the need to replace ordinary debentures (which are redeemable) with profit and loss sharing alternatives\textsuperscript{37}.

For the purpose of this discussion, major features of the PTCs may be highlighted: i) Primarily PTCs are supposed to be the Islamic version of what is known as redeemable capital in the conventional financing practices, ii) PTCs also contain the characteristics of what is known as preferred stocks in the conventional financing practices, iii) As such PTCs will be issued by an enterprise which needs medium and longer-term finance, but for such time horizon, for the value of the finance needed, the firm does not plan to undertake any changes in the ownership structure of the enterprise, iv) The

\textsuperscript{35}For more details of the legislation, see Khairallah (1986).
\textsuperscript{36}However, one may refer to the OIC Fiqh Academy Resolution regarding Muqarada Bonds for sharia'h observations on the legislation.
\textsuperscript{37}See Council of Islamic Ideology (1981).
principal amount of the funds as such generated will be re-paid in a specified time period, in specified installments. In addition, the PTC holders will share in the profits of the enterprise as agreed a priori, v) As the principal amount will start declining due to payments of installments, the proportion of the PTC holders will decline overtime and those of the enterprise will increase, iv) When old PTCs are retiring, the enterprise has the choice to directly invest the increasing amount of the retained earnings in the growth of the enterprise or use them indirectly for the same purpose by issuing new PTCs, and vii) For the purposes of retiring the PTCs, the profits of the enterprise are tax deductible.

However, as practiced by companies under trusteeship of the Bankers Equity Limited, the PTC arrangement of financing has certain objectionable features, such as: i) The assets of the issuing firms are kept as a collateral against the principal amount of the PTCs, ii) The principal amount also includes, the discounted values of the PTC funds for the grace period of the enterprise (if it is new) and iii) In case of loss, the bondholders through their trustee, will have a recourse to the bank accounts and other assets of the issuing enterprises.

6.5.3 Lesson from Islamic Banks and Mudharabah Companies

As discussed above, another significant lesson can be drawn from the deposits' side of Islamic banks which represents the most successful contemporary experience of the application of the PLS principle. Similar is the case with mudharabah companies. The calculation and payment of profits to the certificate holders like profit for the depositors does not require a practical liquidation of these companies.

Among the Islamic banks, the practice of Taqwa Bank is of special relevance to support our argument. The scheme of the Taqwa Bank is known as ashum imtiyaz qabilatah lil istirdhadh (redeemable preferred shares). An evaluation of this financial instrument is not the purpose of the present chapter.

---

38 al Amin (1990) discusses several of these issues from the sharia'h perspective.
Neither, our purpose is to advertise the particular financial instrument. We however, simply aim to highlight that the sharia'h board of Taqwa Bank (which also included prominent scholars such as al Shaikh Yousuf Al Qardawi), must have evaluated the prospectus of this typical financial instrument. Which implies that redeemability of the PLS funds has been approved in principle.

The contemporary practical cases of the redeemable PLS have in fact opened a new dimension in the field of practicing Islamic principles of financing. There are numerous cases, where in fact, such a redeemable nature of financing is of paramount importance. The redeemable techniques of financing have also been suggested as probable Islamic mode of financing for Awqaf properties as well as for Islamizing the capital structure of the companies.

6. 5.4 Role of the Government

In the proposed and practical cases of redeemable PLS outlined above the principal amount of the finance is almost guaranteed. An objection may be raised against such an arrangement. If the principal amount is guaranteed, the contract would be a qard (loan) contract. In such a case, there is no justification for the financiers' share in profits. Provided that there is no third party guarantor such an objection is a valid one. But, a third party (a party having no stake in the enterprise) guarantee for the re-payment of the principal amount of a PLS fund is visualized and legitimized by the Islamic scholars. Such a guarantee of the principal amount does not transform the character of the contract from sharing to qard. If the principal is re-paid as guaranteed, in most contracts, it would be re-paid only in installments.

---

39 For more details see BenDjilali and Khan (1995).
41 IDB (1994).
Due to the third party guarantee, the use of this redeemable financing by large enterprises may be more feasible compared to smaller enterprises. But the actual problem of the elimination of interest also requires an alternative mechanism which can be used by the common people and millions of sole proprietorships. In the absence of any such mechanism, the common people do not have any investment opportunity. Lack of investment motivation can have adverse effects on their savings. Whatever, small savings are made, in the absence of direct investment opportunities, these savings are deposited in the banks. It is well known that these small deposits constitute major sources of the banks' deposits. But on the other hand it is also well known that the banks rarely provide financing to smaller enterprises. Thus, a wide scale use of the mechanism may really revolutionize the process of elimination of interest from the economy.

Both, the cases of the *Muqarada* bonds and PTCs, and for that matter, all bonds require a trustee to protect the interests of the bond holders. Moreover, with the same objective, the bond prospectus, determines the bond indentures. The bond indenture covers various aspects of the bond contract in a comprehensive manner so that no party should be harmed. The trustee guarantees the enforcement of the bond indenture. In the case of the *Muqarada* bonds the Ministry of Awqaf, representing the Government acts as a trustee. In case of the PTCs the Banker's Equity, a public sector, investment bank, representing the Government acts as a trustee. In any case, in the final analysis, the final arbitrator between parties to a contract is always the legal system of a country. In case of the *Muqarada* bonds, the Ministry of Awqaf, not only guarantees the principal amount, but also guarantees to re-fund, the outstanding principal amount when ever so desired by the bondholders. For all practical purposes, the Banker's Equity almost functions in similar manner.

To conclude this section, it may be re-emphasized that the concept of *Muqarada* bonds, PTCs, practices of *mudharabah* companies, deposit side of Islamic banks, redeemable shares of the Taqwa Bank have consciously been developed to replace the interest-based financing with suitable Islamic
alternatives. These experiences suggest that provided the calculation of capital growth is possible, the practical departure of parties of a PLS contract, does not require factual liquidation of the entire enterprise. Moreover, all these arrangements lead to one basic conclusion: that subject to the profitability of the enterprise, the principal of mudharabah and musharakah funds can be repaid in installments. In other words, a redeemable profit and loss sharing financing mechanism is possible. Since a redeemable financing mechanism does not interfere in the long-run ownership structure of the enterprise, it can serve as a comprehensive financing mechanism as defined in Section Two of the chapter. Thus, it has the potential to be a real substitute to interest-based financing.

6.6 ELEMENTS OF GROWTH OF AN ENTERPRISE

In previous sections of the chapter it is argued that it is possible to visualize a comprehensive financing mechanism in Islamic economics, which can meet the cash requirements of firms without causing any unwanted change in their longer-run ownership structure. The present section intends to argue that such an arrangement is also inevitable for the growth of enterprises under the PLS system.

6.6.1 Growth: Relationship with Retention and Rate of Return on Equity

Major potential of an enterprise is reflected from its success as an ongoing concern. The most reliable indicator of the success of an ongoing enterprise is its growth over time. The growth of an enterprise is similar to the growth of an economy, seen as one enterprise. As the growth of the economy depends on savings, and efficient utilization of these savings, the growth of an enterprise also depends on two important variables: i) the amount of retained and re-invested resources and ii) the efficiency in utilizing these resources.

Retention is important because the capital base of the enterprise depends on it. In particular, retention is vital for the growth of smaller firms.
The reason is simple: There must be some balance between equity and borrowing at all stages of operation and size of a firm. As more funds are needed overtime, all these cannot be met by borrowing without any equity base. But small firms do not always prefer and cannot raise equity easily. For such firms, therefore, profit retention is the sole equity base.

The more an enterprise retains and reinvests, the greater is its capital base, the higher is its potential for growth. Given the capital base, the higher is the rate of return on this capital, the higher would be the growth rate of the enterprise. Growth \((g)\) of an enterprise is thus defined as: percentage of earnings retained \((R)\) times return on equity \((ROE)\); i.e., \(g = R \times ROE\). If \(R=0\), the capital base of the firm will remain constant, whatever the ROE may be, the growth of the firm would be constant. In the same manner, the ROE is extremely important. If it is zero, \(R\) cannot be positive, naturally the growth of the enterprise would not be positive.

Traditionally, there are two methods to look at the ROE: the operational side of the enterprise and its financial policy. The first method uses the operational side of the firm to define the ROE. It implies that the return on equity can be improved, either by producing more - increasing the equity turnover (using the equity more efficiently) or by increasing the enterprise's net profit margin by arranging to become more profitable. Both the two relate to the operation of the enterprise. By using this method, higher ROE will lead to an increase in capital base, only if a non-zero fraction of it is retained and reinvested in the enterprise. This way of looking at the ROE is related to the operational side, such as production and marketing policies of the firm.

The ROE however, increases the capital base of an enterprise in a more direct form through its financial policy. The second method expresses the ROE as a result of the financial policy of an enterprise. The ROE can be increased by increasing the capital base of the enterprise by asset acquisition through borrowing. In the traditional sense, therefore, increasing the financial
leverage of the enterprise i.e., by acquiring more assets through borrowing, the ROE can be improved.

As this way of expressing the ROE is related to the capital structure of the enterprise, it is related to the financial, rather than the operational policy of the firm. In the same manner, the decision of profit retention is a matter of the capital structure and financial policy. Thus, being both related to the capital structure of the enterprise, profit retention and this interpretation of the ROE, are consistent with each other - both directly add to the asset-base of the enterprise.

6.6.2 Relative Variability of Retention and Gearing-based Growth

Retention and financial policy component of the ROE (financial leverage of the enterprise) are important factors contributing to the growth of an enterprise. Nevertheless, retention-based growth is more stable compared to debt-based growth. As retention expands the shareholders equity in the enterprise, this leads to the conclusion that equity based growth is more stable than debt-based growth.

Khan (1995) provides mean, median and standard deviation values for self financing, ROE and gearing for various sectors of the Pakistani economy for the 1980-91 period. Based on this data the growth and variability of growth is calculated for the sectors in question. Some observations must be made on this data: i) By definition, industries grew either by high retention, or by high leverage or by both - growth industries such as, the chemicals sector relied less on debt but retained a substantial part of its earnings, paper industry relied more on debt than on retention, sugar depended on high rate of retention. Zero growth industries - textiles and transport borrowed substantially, but their ROE was very low suggesting operational losses, ii) In average, transport, textile, paper and cement industries which relied more on debt experienced unstable growth. Energy is the only sector which relied more on debt but experienced a stable growth, an explanation to be seen in the stable demand for the products of this sector, iii) In general, therefore,
industries relying more on debt experienced unstable and lower growth, whereas, industries relying more on retention (shareholders' equity) experienced stable and higher growth.

6.6.3 Effect of Redeemable PLS on the ROE

An important advantage of mark-up based debt financing is the acquisition of assets, which in turn, strengthens the ROE of an enterprise. On the other hand, the important disadvantage of debt financing is its adverse consequences for the financial risk of the enterprise. Whenever, debt financing is considered, bankruptcy is always possible. So, even if debt financing enhances asset acquisition, at the time of forced liquidation, these assets can only be auctioned at throw away prices. In addition, bankruptcy entails other costs. All these costs are the result of opting for debt. But debt-financing shifts these to the owners of the enterprise rather than the owner of debts - exposing the enterprise to more and more financial risks.

So, the fault of debt financing lies in its separation of risks from ownership and concentrating them on the capital base of the enterprise. A mechanism, which can help enterprises to acquire assets but at the same time can minimize their financial risks can be superior to debt. The proposed redeemable PLS arrangement ensures asset acquisition by the enterprise in the same manner as the mark-up does. But unlike under the debt financing mechanism, under the redeemable PLS, financiers will not have any fixed claims on the acquired assets. Thus, the question of bankruptcy and the related costs will not arise. Hence, the redeemable PLS arrangement has the capability to ensure asset acquisition, i.e., expand ROE, but without increasing the financial risk of the enterprise.

6.6.4 Effect of Redeemable PLS on Profit Retention

Retention of profits promotes self financing, thus, in general, enables enterprises to stand more on their own as ongoing entities. In the traditional musharakah-mudharabah contracts, capital contribution by parties and the
resultant profit sharing ratios are defined once for all. The typical example is mudharabah in which all funds are provided by one party. If total ownership of an enterprise is designated as O, where entrepreneur shares O₁ and financier O₂. In the general case of pure mudharabah, by definition, O₁ is always zero, so that O₂ equals one - the enterprise is wholly owned by the financier. For simplicity, let us rely on this general case. This is due to the fact that in its most common practice, the mudharabah has been a one transaction business enterprise. At the conclusion of the transaction, growth in the initial capital is calculated for distribution as agreed on pro rata basis. In other words, it is very rare to find historical practical evidence of mudharabah as an ongoing enterprise, despite its theoretical possibility.

One great difficulty with the application of the one transaction notion of the mudharabah to an enterprise which is ongoing in nature is the fact that due to its ownership structure, single transaction nature and the underlying concept of capital growth, retention of profits is neither relevant nor feasible.

The proof of this assertion is quite simple. First, to make the question of retention relevant, the enterprise itself must be made an ongoing activity. Second, through tandhid al hukmi (hypothetical presumed liquidation), the exact cash value of the enterprise must be calculated, capital growth identified, and literally another mudharabah enterprise established, with negotiations on profit sharing ratios etc. Each time if retention is considered, the procedure must be repeated. Each time the size of O₂ will increase as a result of re-invested profits but O₁ will remain zero as implied by the mudharabah contract.

There may be entrepreneurs who may not be interested in investing their share of profits in the enterprises managed by them - they may like to deposit it in the Islamic banks. But, the economic and financial rationality of this decision of the entrepreneur can be justified only if they had a free choice to invest or not to invest their savings in the enterprises managed by them. In the absence of this free choice and in the presence of the implied imperfection,
entrepreneurial decisions under the prevalent notion of *mudharabah* can best be seen as sub-optimal.

Suppose, the entrepreneur is allowed a free choice to re-invest his savings in the enterprise under his management. Suppose it is a rational decision for him to retain profits and share ownership in the enterprise. Once profits are declared, the entrepreneur must have non-zero share in the enterprise implying a positive $O_1$, consequently $O_2$ would become fractional. The *mudharabah* is thus transformed into another form of enterprise - *musharakah*. If the process continues, at the extreme, the enterprise will transform into sole proprietorship owned by the owner-manager. Redeemable PLS incorporates this vital consideration and allows for profit retention by the entrepreneur.

It is argued in Section Two that together, the profit sharing and sale principles as substitute of interest are comprehensive principles. Following the same point of view, it may be argued that when a single transaction business activity is in question, the *mudharabah* enterprise must be used. But when an ongoing enterprise is in question, invoking the *mudharabah* enterprise is an injustice to the enterprise itself. In the ongoing enterprises, which are newer than the *mudharabah* enterprise, where required, the profit sharing principle and the sale principles need to be invoked jointly as in the case of redeemable PLS.

Under *musharakah* however, the retention of profits becomes a management decision. This is analogous with the case of joint stock companies. Under these circumstances, profit retention by an enterprise can be enhanced by designing financial mechanism which is biased in favor of retention rather than high distribution of dividends. By definition the redeemable PLS mechanism enhances retention of profits.

---

43 For arguments on the efficiency signaling role of dividend payments, the reader may like to refer to the voluminous literature on the subject of dividend policy of the firm. However, in the present chapter, we are using the premises which argues for profit retention.
It is argued in this chapter that capital participation in enterprises is possible only through the *mudharabah* and *musharakah* modes of Islamic financing. To enhance participatory capital in enterprises, a redeemable form of PLS financing which is more flexible in relation to ownership structure of enterprises is proposed in previous sections of the chapter. The present section aims at discussing the prospects of enhancing the cash flow of Islamizing enterprises. This exercise is also valid for enterprises which look for resource mobilization from the markets in consistency with the *sharia'h*.

Depending on their attitude to risk, some financiers may prefer capital participation, and others avoid it and resort to mark-up and other fixed return investments. There must also be a wide spectrum of investors whose risk profile require investment opportunities between the two extremes. Moreover, for the purpose of capital participation, some financiers would like to wait and see the outcome of an attempted effort at Islamization of the capital structure of an enterprise. If these propositions are true, there is a need for financial instruments which can meet the preferences of the wide group of investors. Hence, enterprises can also attract more participatory capital from financiers by attaching incentives with their requests for the installment purchase mode of financing.

While the argument is valid in general, it can be clarified better by taking the case of a joint stock company. Suppose a joint stock company has been in the stock exchange or over the counter market for sometime. The current market value of its share is dollars 9 which is depressed compared to the prices of similar other companies and its own previous prices. The enterprise needs a major re-structuring, including the replacement of interest-based debts, for which substantial finance is required. Provided the re-structuring is undertaken, the growth prospects of the enterprise are high. The expected growth if achieved will lead to an increase in the value of the enterprise i.e., its
stock prices will increase in the future. However, given its prevailing circumstances, the enterprise cannot raise funds by selling more stocks. As its prices are already depressed, it cannot issue more stocks as such an action will put more downward pressure on the prices. Moreover, there is an interest-based debt in its capital structure which drives away the Islamic investors.

The enterprise can however raise finance by deferred or more specifically installment purchase arrangements. This mechanism relieves the enterprise's presently available funds for more urgent uses improving its cash flow conditions indirectly. The more flexible the re-payment schedule, the better its implications for the cash flow of the enterprise. Hence, in general, enterprises bargain on prolonging the re-payment period as it improves their cash flow conditions. It is natural that the longer the re-payment period, the higher the mark-up is expected to be. Thus it is natural for enterprises to seek installment purchase financing for a longer period but at the lowest possible mark-up.

In its prevailing depressed circumstances the typical enterprise cannot also raise installment purchase financing at a suitable mark-up. In fact, the enterprises need long-term funds. Suppose, the enterprise can be made profitable if installment purchase worth dollars 10 million can be made available at 6% mark-up with a maturity of 15 years. The financiers are willing to provide the required financing with the required time of maturity, but only at 11% mark-up.44

How to raise the financing which is required to make the enterprise profitable? Or more specifically, how to motivate the financiers to provide the required amount at the required mark-up for the required time? In order to secure the required funds, two flexible options among many possibilities may

44Among other things the mark-up rate can depend on the re-payment time. For example, in the IDB the mark on finance provided under the Import Trade Financing scheme where the repayment time ranges between 9 to 24 months, the mark-up ranges between 6-6.5%. While under the installment sale scheme, the where the repayment takes up to 12 years, the mark-up ranges between 7.5-8.5%. Whereas, under both schemes a rebate of 15% is given out of the
briefly be discussed here: i) An offer to purchase the common stock of the enterprise by the financier and ii) An offer to convert the liabilities of the installment sale into common stock of the enterprise.

7.7.1 The Option to Purchase Common Stock

To get the required finance at the required conditions, the enterprise can bargain with the financiers. As a part of this bargain, the enterprise may offer an open option to the financiers to purchase the common stock of the enterprise in future at a price specified at present (the time of the contract). As the present market value of one share is dollars 9, it will be specified in the contract that if he so desires, the financier can buy a specified amount of common stock from the enterprise at suppose, dollars 12 per share during a specified future date. It may be noted that The OIC Fiqh Academy Resolution concerning Muqarada bonds permits some form of future promise, provided it is binding on only one party. In the present case, the option to purchase is not binding on the financier, but the promise to sell is binding on the enterprise. Thus the proposed contract, in spirit, does not seem to violate the resolution.

There are several justifications for putting the future offer price higher than the present market price. First, the owners of the enterprise have the right to fix the price of their property. Second, by raising the asset base of the enterprise with the responsibility for the dollars 10 million installment purchase liabilities, the future price of the enterprise must be higher compared to the price prevailing prior to the addition of this amount. Lastly, the financier is at its free will to purchase or not to purchase in the future.

Both the parties are expected to benefit from this arrangement. The enterprise urgently needs the funds for improving its efficiency. It receives the required finance for the required period. Moreover, it has the benefit to sell its stocks at a higher price. It is noticeable that without the offer, the sale of stocks would have further depressed the value of the enterprise, but with the offer, the outstanding mark-up for quick repayment (See IDB Brochures on the two schemes, both dated September 1993).
stock has the possibility of sale at a higher price. Moreover, till actually purchased, the offer does not carry dividend claim. Furthermore, till the stock is actually purchased, the offer also does not claim votes for the control of the enterprise. In addition, these relieve the enterprise from corporate income taxes. Hence, the offer arrangement has several clear benefits for the enterprise.

By considering the offer as an investment avenue, the financier considers an opportunity to invest in a real project. The expected growth potential of this enterprise is high. The stock which the investor will buy at dollars 12 may thus be sold at further higher prices in the future. Moreover, by buying these stocks, the financier will actually be pumping more cash into the enterprise, improving the prospects of the enterprise to pay the installment purchase liabilities more efficiently. The financier would also avoid the dividend taxes which he must pay in case of outright purchase of such stocks which announce dividends. The financier can also motivate the firm to replace interest-based debt from its capital structure, thus enhancing Islamic investment opportunities.

7.7.2 The Option to Convert Liabilities into Common Stock

The second point at which the enterprise can bargain with the financier for favorable conditions of financing is the option to convert the installment purchase liabilities into common stock of the enterprise. Again, at the time of the initial contract, the enterprise may offer to the financier that at his own will the financier may convert a specified part of its liabilities into the common stock of the enterprise at a specified higher price compared to prevailing market price.

It may be noted that this proposal resembles a situation where debt is considered as a principal in mudharabah/musharakah. The sharia'h scholars have discussed this issue in detail. All shari'ah scholars reportedly do not agree with this arrangement. However, if it is said that "collect that debt and do mudharabah with it", it is reportedly acceptable to the Hanbalites and Hanfites.
Some Hanbalites even went to the extent that the indebted person can collect the debt from himself and do mudharabah with it\textsuperscript{45}. The concern of the scholars who disapprove this arrangement is understandable in case the indebted person is an individual and his net worth is not clearly known. But in case of an established enterprise with a known asset base, an enterprise to which the financier itself has sold on installment credit, the flexibility of the scholars who permit the arrangement seems to be more useful.

Our point can be further strengthened by developing a different scenario. Suppose the financier finances the purchase of an asset on installment purchase or istisna' basis. As a result, the user of finance owns the asset and the financier owns the resultant debts. Assuming that after making 40\% of the debt payments, the owner approaches the financier to buy the remaining 60\% against the outstanding debts. If the financier buys, the resultant new enterprise would be a 60:40 musharakah. As debt can be used as a price in a spot transaction, this arrangement is expected to be fully acceptable to all shari'ah scholars. A brief comparison of this situation with the general case discussed by the shari'ah scholars is provided in Exhibit 6 (c). It is clear that the debt created by deferred sale has at the same time transferred ownership which can be verified easily. The other debts may do not necessarily transfer assets. This is an important difference between mark-up based debt creation and other means of debt creation.

\textsuperscript{45}See \textit{Al mausua' al fiqhiyah}, Kuwait: Ministry of Awqaf and Islamic Affairs, Introductory Publication, Vol. 10 pages 24-25.
### Exhibit 6 (c): Causes of Indebtedness, Counter-Value of Debt and Possibility of Using Debt as a Capital of Mudharabah

<table>
<thead>
<tr>
<th>Causes of indebtedness</th>
<th>Resultant asset of owner of debt</th>
<th>Resultant assets of the indebted person/party</th>
<th>Control of Counter Value of Debt</th>
<th>Possibility of using debt as a principal of mudharabah or musharakah</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bay’ (Sale)</td>
<td>debt</td>
<td>physical asset or services</td>
<td>always possible</td>
<td>In general, debt cannot be the principal of mudharabah/musharakah.</td>
</tr>
<tr>
<td>Qard (Loan)</td>
<td>debt</td>
<td>money or goods</td>
<td>not always possible</td>
<td>Largest Hanafis and Hanbalis, debt in responsibility to collect from others can be collect that debt and do mudharabah with it. For a few Hanbal scholars the indebted person can take responsibility of collecting the debt from himself.</td>
</tr>
<tr>
<td>Taking responsibility to collect debt from others</td>
<td>debt</td>
<td>debt or goods</td>
<td>not always possible</td>
<td>For Sha’fiis and Malikis debt cannot be the principal under any condition</td>
</tr>
<tr>
<td>Taking responsibility to collect debt from oneself</td>
<td>debt</td>
<td>debt or goods</td>
<td>not always possible</td>
<td>For Sha’fiis and Malikis debt cannot be the principal under any condition</td>
</tr>
<tr>
<td>Others</td>
<td>debt</td>
<td>debt or goods</td>
<td>not always possible</td>
<td>For Sha’fiis and Malikis debt cannot be the principal under any condition</td>
</tr>
</tbody>
</table>


The benefits of our proposed arrangement for the enterprise are the same as in the case of an option to purchase the common stock of the enterprise, except that this arrangement does not improve the cash flow situation directly. But since it improves the equity base of the enterprise, the enterprise can raise more financing easily. Hence, cash flow of the enterprise is indirectly improved. The advantages for the financier are almost the same as discussed in the previous case.

Since, both parties are likely to benefit, the society as a whole will be benefited from the arrangements. Moreover, the arrangement has also introduced a certain degree of risk sharing into the installment sale financing. Furthermore, it opens a flexibility for capital participation by the Islamic investors. An Islamic bank which provides the installment sale facility, before utilizing the options can wait and ensure the abolition of interest-based debts from the capital of the enterprise. Indeed, these considerations offer many interesting possibilities which can only be postponed for separate studies.

The above considerations wait careful evaluation as the area of options is not yet properly discussed in the Islamic economic literature. While the two options apparently do not appear problematic, both have several unknown implications. Some of these unknown implications are raised here, whereas, the full discussion of these issues may require separate research chapters.

First, both the two methods are prone to generate markets. For, example, instead of utilizing the option for actually purchasing the stock, the financier may be prompted to sell the option. It must be noted that according to an OIC Fiqh Academy resolution, an option is not negotiable. Could there be such a market? How to regulate it?

Second, for several reasons, the enterprise may be prompted to call back the two options. At what price and conditions?

Third, how to determine the actual conversion prices, in particular, if a market for such options is restricted.
Fourth, in both the two options, the stock prices may exceed the prices which can maximize the value of the enterprise. Therefore, enterprises are prompted to split the stocks (e.g., if the price of a share is $80 which is considered very expensive by many investors, the enterprise will split one share into two $40 each) so that many investors can buy the shares and maximize the value of the enterprise. What will be the effect of this on the two options?

Fifth, similarly, many growth oriented enterprises (like the one in question) for the same considerations of high stock value, offer additional stocks in place of dividends. The effect of such decisions on the two options are not known.

Sixth, many enterprises (in fact a rapidly growing number of them) often decide to re-purchase their own stock to invest the retained earnings. Such arrangements in fact support the stock price and may not directly harm the interests of the option holders. Nevertheless, this is a decision, if known to the financiers in the beginning, could have effected their financing decision.

These and other consequences of the two options are unknown. Despite that these considerations are of significant importance for easing the access of enterprises to various flexible and efficient financing arrangements, at the same time, enhancing the participatory financing arrangements. Traditionally, to meet the preferences of investors in various risk categories portfolio diversification is adopted. Portfolio diversification eliminates risk aversion, pushing the rate of return on the portfolio (the cost of capital) up, hence leads to inefficiency from the macro perspective. Compared to portfolio diversification strategy, the above considerations for meeting the preferences of various investors seem to be more efficient as the fixed return financing is subordinated to participatory financing.

Nevertheless, these and related issues which constitute an important aspect of the Islamic corporate finance are yet undiscovered in Islamic economics. The prohibition of interest, and in its place, the evolution of a real
Islamic substitute requires a thorough investigation into these and related areas of corporate finance.

6.7.3 Managing Accounts Receivables

Firms are not pure financiers but for expansion of their sales cannot also avoid credit sale. The cash conversion process thus effects the cash-flow and liquidity position of the firm. It has an implication for the growth opportunities of the firm as summarized in Exhibit 6 (d).

Exhibit 6 (d) Growth Possibilities Without External Financing

<table>
<thead>
<tr>
<th>(1) Firms</th>
<th>(2) Inventory conversion period (numbers per year)</th>
<th>(3) Receivable collection period (numbers per year)</th>
<th>(4) Payable deferral period (numbers per year)</th>
<th>(5) Cash conversion cycles (2+3-4)</th>
<th>(6) Net profit margin (%)</th>
<th>(7) Growth possibilities without external financing (5*6) %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2.25</td>
<td>1.75</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>

Exhibit 6 (d) shows that growth possibilities with no external financing depend on cash conversion cycles of the firm and its net profit margin. Given the firm's net profit margin, growth possibilities can be enhanced by making the firm's cash conversion efficient. This can be done by reducing the average annual time of the firm's inventory conversion and receivable collection periods on one hand and increasing the time of its payable deferral periods on the other. These three periods can be managed directly as well as can be used as a basis for generating additional funds to improve the firm's cash flow.
Narrowing the Cash Conversion Cycle by Financing

The average time for the inventory conversion and accounts receivable period can only be narrowed within the limits of certain constraints. In addition, firms use inventories and accounts receivable to mobilize additional funds to enhance their cash flow. Both inventories and accounts receivables are part of the firm's assets in place. As such, often these are either sold or used as pledges to borrow additional funds.

Exhibit 6 (e) shows the growth possibilities with and without the transfer of accounts receivables. Suppose the firm has SR 5 million accounts receivable with a cash conversion cycle of 2 per year. The net profit margin is 4%, hence possible growth in the next year is 8% (2*4). We assume that the receivable are transferred to a financier at an amount of SR 4.75 million instead of SR 5 million. Assuming that this arrangement enhances the cash conversion process to 2.3 per year from 2, but at the same time reduces the net profit margin to 3.75% from 4%. The new growth possibility with the transfer of accounts receivable would then be 8.63% (2.3*3.75) as compared to 8% without the transfer. In this case, growth possibilities of this firm are increased by .63%. The transfer process, although may reduce the net profit margin, but would enhance growth possibilities by improving the cash conversion process. This would not only offset the reduction in net profit margin, but would also accelerate future growth by the investment multiplier process.

Exhibit 6 (e): Growth Possibilities With the Involvement of a Financier

<table>
<thead>
<tr>
<th>Presence of the Bank</th>
<th>Value of accounts receivables (million Riyals)</th>
<th>Yearly Cash Conversion Cycles</th>
<th>Net profit margin %</th>
<th>Growth possibilities %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>With</td>
<td>4.75</td>
<td>2.3</td>
<td>3.75</td>
<td>8.63</td>
</tr>
</tbody>
</table>

A Proposed Islamic Scheme for Managing Accounts Receivable

We start with a normal case where a client makes orders to the firm for shipment of goods, suppose worth SR 5 million. We assume that as a normal case, the orderer does not pay in advance, rather asks invoices for payment.
The payments will be made upon receiving the invoices and consignment. After making the shipment, the invoices are entered in the accounts receivable of the firm as assets. But, it would take time for receiving the cash against the invoices. Considering the fact that most sales of the firm take this pattern, given the level of sales, the cash conversion cycle is a crucial consideration for the firm.

The firm benefits from shortening the time lag between the actual shipment and invoice date and receiving the cash - reducing its cash conversion cycle. One effective method of managing the accounts receivables to reduce cash conversion is factoring. As factoring involves dealing in interest, a shari'ah observing firm has to find an alternative for factoring. We suggest that as soon as the purchase order for SR 5 million is received, the selling firm approaches its bank and offers the same goods at 4.75 million on the condition that the bank will immediately transfer the cash in the firm’s account.

As a result, the firm will receive cash and there would be no accounts receivable for this sale. The relationship between the bank and the purchaser is irrelevant as for the cash flow of the firm is concerned. However, it is useful to make some observations on this relationship too. If the purchaser holds an account with the bank, the invoices may be charged against that account and there would also be no accounts receivables for the bank for this operation. Normally, the operation must require such an account. However, if the purchaser has no such account with the bank, the SR 5 million will be recorded by the bank as accounts receivables. The purchaser will owe the bank the SR 5 million.

We understand that this arrangement can be institutionalized so that the three parties know each other’s obligations. For example, the bank can be chosen with the consent of the purchaser so that the goods are in fact sold to him.
Trade-Off Between Profit And Growth Opportunities

The proposed scheme to manage accounts receivables from an Islamic perspective is open to an important criticism - by selling at SR 4.75 million to the bank, instead of at SR 5 million to the orderer, the firm is actually reducing its net profit margin proportionately. On its account, this criticism is valid. But such a decision of the firm can also be rationalized under normal operational conditions as noticed from Exhibit 6(b) that there is a trade-off between growth opportunities and net profit margin.
CHAPTER 7
PROFIT-LOSS SHARING IN RETROSPECT:
OPEN ECONOMY CONSIDERATIONS
WITH SPECIAL REFERENCE TO PAKISTAN
7.1 INTRODUCTION

In previous chapters we discussed the relative significance of PLS vis-à-vis mark-up as well as the market performance of PLS. In chapter six we also introduced some flexibility in the PLS within the framework of a firm. But, in the present day markets firms cannot be isolated from the external sector of the economy. Particularly, most Muslim-countries (MCs) are net-importers of capital as well as technology intensive services. A large majority of these countries has already accumulated huge amounts of foreign debts. Many of these have started facing "debt-crisis" - a situation in which all new borrowings are utilized to service existing debts.

One proposed solution to overcome the problem is to resort to non-debt-creating PLS types of financing. The liberal socio-political setup in many MCs, has to a certain extent, embraced this line of thinking as evidenced by their respective privatization and economic liberalization policies. However, a significant critical argument in this regard cannot be safely overlooked: That, if interest-based financing is replaced by the PLS and similar arrangements, foreign control of national resources in the MCs will increase. This control is inconsistent with the growing Islamist and nationalist sentiments in many MCs\(^1\). Since these sentiments have adverse implications for the foreign investment environment in these countries, even liberal governments are expected to face difficulties in mobilizing external resources through the interest-free means. Thus, a departure from the existing interest-based external resource

\(^1\)Apart from the emotional rhetoric from political platforms, one can find sentiments against foreign control in academic works too. See, e.g., Kahf (1996).
mobilization strategies will have an adverse implication for capital accumulation and economic development in these countries.

This proposition cannot be objectively ruled out without proper analysis. There may be a number of alternative strategies to address the challenge. Some circles call for self-reliance and a number of MCs have adopted self-reliance policies. A policy of strict self-reliance could cause an autarkic situation. In such a situation, a country cannot specialize in the lines of its comparative advantage and cannot improve its competitiveness and welfare. A more realistic approach is therefore, one in which the MCs should be ready to participate and derive benefits from the competitive structures of the globalizing markets. Moreover, economies cannot be Islamized meaningfully in isolation of the world financial markets.

The objective of the present chapter is to explore the potential of the PLS vis-à-vis the mark-up mechanism as an alternative to interest for mobilizing the much needed external resources in the MCs in general, and in particular in Pakistan. We take the case of Pakistan due to experience of the country with Islamization of the economy.

7.2 FINANCIAL FLOWS AMONG M.Cs: AN OVERVIEW

Since MCs have common Islamic institutions like the IDB, it is logical to initiate the discussion with an Intra-MC scenario. In the broader framework of economic cooperation among MCs, the phenomenon of financial flows is a significant one. Historically, most MCs are net capital importers. However, till the late eighties, some MCs were also clearly classified as net capital exporters. This structure of resource endowment of the MCs was widely accepted as an area of complimentarities and basis of meaningful economic cooperation. The establishment of the Islamic Development Bank, a number of regional and national Arab development funds, bilateral joint ventures, and
Islamic multinational banks during the seventies, was a clear manifestation of economic cooperation based on this particular complimentarity.

These institutions were established in a global economic and political environment, when foreign private investment was generally discouraged in a number of MCs and was shy. Therefore, it is not surprising to note that except the multinational Islamic banks, most of these institutions were established in the public sector. Compared to the seventies and even late eighties, at the present, the global economic atmosphere has drastically changed. As a result of ambitious privatization programs, many economies are transforming and rapidly converging. New realities are emerging quickly. The same countries that discouraged private foreign capital a few years ago, are now fierce competitors for it. In such an emerging competitive and converging economic environment, both private and public capital flows ought to be less easily accessible. Given the rising need of foreign resources for many MCs, the increase in the significance in capital flows among them is therefore, natural.

Owing to this significance of capital flows among MCs Khan (1992e) studied the subject matter. Some relevant conclusions of this study are presented here.

7.2.1 Salient Features Of Financial Flows Among MCs

Financial flows are measured either in gross or net terms. Gross flows are total volume of cross-border financial transactions - inflows and outflows of funds in a balance of payments accounting year of a country. Net flows reflect the difference between inflows and outflows usually during the same accounting period. For the same country gross financial flows may be high during a particular period, yet, net flows may not even exist.
Significance of Net Capital Flows

The volume of gross financial flows between countries depends on the level of financial integration among them. Gross flows are more useful measurement of financial flows, if short-term trading in financial assets among countries is common. An example of such a case is the Organization for Economic Cooperation and Development (OECD) countries. Capital markets are developed, integrated and free in these countries. Financial markets in MCs are nascent. Trade in financial assets among MCs and between them and the rest of the world is almost nonexistent. In majority of the MCs, capital flows are subject to a chronic deficit in the balance of current accounts rather than short-term placement of funds by portfolio managers. In such cases, one way capital flow, i.e., an inflow could be expected to be predominant. Therefore, in individual cases of the MCs, the difference between net and gross flows may not be of any significance.

Under these circumstances, gross flows are not much useful measure of financial flows. Moreover, due to their short-term nature and heavy concentration on capital markets, gross flows may not create net resource transfer between countries. Therefore, net flows become more relevant measure of financial flows in case of the developing countries. Net flows are also useful indicators of resource transfer between countries.

1Financial integration between markets is considered to be high if the transactions cost in trading in assets is low and citizens are indifferent between financial assets in local money or foreign currency. See, Golub (1991) and IMF (1991).

2Data on financial flows for the developing countries is provided by three organizations, viz., Organization for Economic Cooperation and Development (OECD), International Monetary Fund (IMF) and the World Bank. In the OECD data, net financial flows include all external resources, transferred to developing countries excluding worker's remittances. For the World Bank (data used in the paper is drawn from STARS of the World Bank), net financial flows include loan disbursements, less amortization payments on long and medium-term debt plus net foreign direct investment plus transfer payments. The IMF's consideration of net financial flows is expressed in terms of net resource balance (NRB). NRB is the difference between a country's domestic saving and domestic investment or the balance of export of goods and non-factor services. Negative NRB implies that domestic investment exceeds domestic saving - the absorption of real resources exceeds output. Conversely, if the NRB is positive i.e. domestic saving exceeds domestic investment, a part of domestic output is transferred abroad. The net flow of financial resources explains the external contribution to the domestic saving - flow of gross external resources.
Encouraging Over-all Trend of Net Capital Flows

The over-all availability of capital for the MCs as a group, from the MC sources could be assessed by the balance of their net capital flows as a group. For the 1970-1990 period, their net capital flows almost balanced - capital outflows (surplus) of the MCs as a group matched capital inflows (deficit) of the MCs as a group. An encouraging conclusion is derived from this fact; that for the MCs as a group, availability of capital has not been a problem during the past 20 years. Moreover, in terms of percentages of their GNP, some MCs have been the highest contributors to global official development assistance.

Predominance of Public Flows

Financial flows among the MCs are predominantly caused by clearly identifiable public sector activities. These activities were engineered by MCs' aspiration for, "development cooperation". As a result of the establishment of a number of multilateral and bilateral development financing institutions', considerable disbursements of official development assistance was made during the past 20 years. These disbursements were substantially high during the seventies. However, during the eighties, disbursements have drastically declined. As a result, during the late eighties, the net flow of funds among the MCs became less significant. Some bilateral joint ventures among MCs established during the seventies are also noticeable.

Significant Inflow of Direct Investment from Non-MC Sources

There is no significant evidence of any flow of direct investment among the MCs (except in case of the Republic of Turkey). However, the net flow of

saving. In this manner NRB explains the contribution of external resources to domestic capital formation. Although the data provided by the three institutions differ, this difference does not reflect any major discrepancy. See IMF: World Economic Outlook 1991, pages 60-1. World Economic Outlook 1989, also contains more conceptual details on the subject.

'The sources of these flows are development financial institutions of the MCs such as the IDB, OPEC Fund, Arab Fund for Economic and Social Development, Arab Bank for Economic Development in Africa, Saudi Fund for Development, Kuwait Fund for Arab Economic Development, Abu Dhabi Fund for Arab Economic Development etc.
foreign direct investment from non-MC sources into the MCs is significant for the 1970-90 period.

Significant Outflow of Indirect Investment

Conversely, there has been no significant net inflow of indirect investment in portfolio equities into the MCs either from the MC or non-MC sources. The net outflow of such investment from the MCs to the non-MC destinations is substantial.

Growing Significance of Islamic Flows

During the seventies and eighties, Islamic financial institutions have become active in promoting the flow of funds between MCs. These flows are composed of the flow of funds generated by the operations of the Islamic Development Bank and contribution to the equity capital of local Islamic banks by the al Barakah and Dar al Mal al Islami groups of Islamic financial institutions.

7.2.2 Non Sustainable Intra-MC Public Financial Flows

Data about financial flows among MCs was available only up to 1989. The pattern of resource flows among these countries for the 1970-89 period is given in chart 7(a).
Using the concept of net flow of financial resources, an attempt was made to see any evidence of financial flows among member countries. Total net flows for the OIC countries as a group were compared for the 1970-89 period. It is interesting to note that for the period in question, total outflows and inflows for the OIC countries as a group have almost exactly matched. This implies that for these countries as a group, availability of finance was not a problem for the period in question.

It is logical that, countries having a capital outflow, may have contributed directly or indirectly to the domestic capital formation of countries having a capital inflow. However, for the OIC countries as a group, market has not been effective to allocate financial resources. Nevertheless, substantial, but, slackening recently, contribution to inter-MC capital flows has been made by the multilateral and national development financing institutions as well as bilateral sources. In fact, some MCs have made highest contributions to global ODA as a percentage of their GNP. These activities are affected by non-market considerations such as aspiration for "development cooperation". The substantial public financial flows during the latter half of the seventies could not be sustained afterwards. Particularly, during the latter half of the eighties, the
net flows turned into negative for the capital importing MCs as reflected from chart 7(a). Some explanations for the non-sustainability of the intra-MC flows need to be provided.

Non-economic Motivations

In general, the motivations underlying public financial flows are social rather than financial in nature. Yet, two types of economic considerations having financial implications cannot be separated from these flows. These are: i) public flows originate from public properties. The protection and proper management of these flows is therefore, in the general public interest. It could enhance future flow of funds. For this reason, even though, donor governments may not exactly behave like the market, they should be expected to ensure the safe return of at least the principal amount and ii) although, there may not be a direct material benefit for the donor country, nevertheless, indirect benefits are always associated with the flow of funds. In bilateral cases, these benefits include diplomatic goodwill, promotion of trade links and in the multilateral context, promotion of favorable global economic environment.

Compatibility of donor and recipient interests can be gauged from two aspects. It is rational to assume that efficient utilization of funds by the recipient countries will improve their debt servicing capabilities. Thus, it contains a strong incentive factor for the suppliers. However, experiences show that such a utilization is often not possible. To ensure better utilization of their funds foreigners may like to intervene in decision making process of the recipients. But, for a number of reasons, it is difficult to secure the consent of the recipients.

Recipients always prefer free-hand in the utilization of funds as this enables the governments to allocate resources according to their national priorities. Often, these priorities are ill defined. Consequently, borrowed money is either spent on consumption and other less productive uses or illegally transferred abroad as flight capital.
Adverse Incentives

Public financial flows have predominantly taken the form of interest-based debt financing. Debt liabilities as well as their interest arrears remain the ownership of the foreign donors. This ownership structure creates a serious incentive incompatibility problem. The lending mechanism does not arrange for the transfer of ownership. Individuals and institutions have no obvious material incentive to productively utilize the borrowed money, pay the principal as well as its interest services. In contrary, by less efficiently utilizing or by declaring bankruptcy, these institutions can ultimately decline the payment of the principal as well as interest services. This situation further worsens by the phenomenon of sovereign dominance. Governments can always procrastinate debt services or even unilaterally declare insolvency.

Whether from private banks or public sources, lending is exposed to moral hazard. Under alternative debt management strategies, debt forgiving and debt service forgiving etc. are used as remedial measures. Therefore, it is valid to ask: under such socio-economic environment, isn't it prudent for the donors to provide grants rather than debt finance? For donors debt forgiving has the same financial implications as providing grants. But for the recipients, grants avoids the incentive problem which is mentioned in context of debt finance. The fact is that grants transfer the ownership of the resources in the beginning. As soon as local public and private parties get the ownership, they are motivated to utilize their property efficiently. By avoiding the incentive

1Before the debt crisis, this type of incentive incompatibility was considered to be the problem of equity financing. Discussing the dominance of debt financing and FDI and lack of equity investments in international financial flows, it is suggested that (see IMF 1991) the former are not exposed to incentive problems, while the latter is exposed to moral hazards. The debt crisis confirmed the phenomenon that lending can equally be hazardous. As soon as this was realized international bank lending drastically reduced.

2For the past, there is no significant quantifiable evidence of any debt forgiveness for the OIC MCs. But recently, substantial debt of Egypt owning to OIC MCs and Western sources has been forgiven. GCC countries have also announced a debt forgiving program for some African countries.
compatibility problem and by offering material incentives, grants are more efficient in context of the developing countries rather than loans and equities\(^1\).

**Disincentives of Existing Debts**

Countries unable to initiate internal debt management strategies for a longer period, are likely to confront severe liquidity and investment disincentive problems\(^2\). Many indebted countries, at present face lack of liquidity to meet domestic consumption and investment needs and at the same time meet their debt obligations. This is reflected in their export earning/debt service ratios and position of foreign exchange reserves. As a result of lack of liquidity, governments' borrowing increases which suppresses private investment. The share of consumption in GNP increases and investment declines overtime. The trend of the MCs consumption/GNP and investment/GNP ratios are not yet very discouraging in general. Yet, for a number of countries a negative investment/GNP ratio and for a few other, a declining trend in this ratio could be identified.

This situation, seen along with the changing pattern of official reserves of MCs, suggests that in fact a large number of the OIC MCs have already confronted the liquidity problem. These are Algeria, Bangladesh, Sudan, Mauritania, Yemen, Jordan and several small African countries. Under circumstances of the recipients' domestic economy where consumption is pressing and the diversion of a part of the borrowed money away from investment is foreseen, creditors loose their incentive for providing additional funds.

On the other hand, since the recipients are certain that a particular proportion of future output will be used to service future debt obligations, they loose incentive in adopting present austerity measures. Investment incentives are shattered. Under these conditions the interests of both the lenders due to

---

\(^1\)See e.g., Lachler and Kemp (1987).
\(^2\)See Clacsseus and Diwan (1990) for formal models regarding these problems.
debt default and the creditors due to drying out of additional flows are bound to suffer.

7.2.3 Non-Existence of Intra-MC Private Capital Flows

No significant market-based capital flows existed among these countries. This is an important observation particularly, in view of the fact that there has been a substantial inflow of foreign direct investment from non-Muslim country sources as well as an inflow from the Islamic banking sector which is also market oriented.

Some explanation for this phenomenon is available from the overview of motivations underlying international private investment. In this regards different theories have been presented as well as empirically tested to determine the motivations and incentives which cause foreign direct investment. These theoretical and empirical studies are summarized in Exhibit 7(a). From this brief summary of the incentives and motivations underlying foreign direct investment we can derive some important conclusions.

i) It cannot be expected that a particular theory (which concentrates on particular factors) provide complete explanation about the determinants of foreign direct investment. Rather, in general terms, all of the identified factors and most likely a number of unidentified factors may determine foreign direct investment. Perhaps, therefore, it is more appropriate to classify these factors into three categories: a) resource seeking, b) efficiency seeking, and c) market seeking1. Resource seeking investment is induced by the expected profit from the exploitation of comparatively cheaper raw materials abroad. Market seeking investment has dual functions namely: it is prompted by the market for its R&D intensive services abroad as well as it is simultaneously encouraged for capturing foreign product markets.

1See Lessard and Williamson (1985) for this classification.
On the other hand, efficiency seeking investment may combine all these considerations to produce at lower marginal cost abroad than at home. This type of consideration has induced the manufacturing of components in various parts of the world market particularly by sub-contracting and production offsets.

ii) Although, foreign direct investment is considered as a desirable form of foreign capital, yet, the incompatibility of incentives of foreign investors and local parties are often prohibitive. An incentive incompatibility arises due to the open ended of the foreign direct investment in terms of ownership, penetration of local economy and risks. In many developing countries, a nationalistic opposition to foreign control of national resources through conventional foreign direct investment has been voiced. This has increased the non-commercial risks from the point of view of the foreign investors.

iii) To overcome this incentive incompatibility problem, the different elements of the traditional internalized foreign direct investment are separated and then externalized. The new forms of the traditional foreign direct investment take the structure of joint ventures, licensing, sub-contracting, production sharing, profit sharing, etc. Since ownership related sensitivities are solved in these forms, incentives of local and foreign parties become consistent.

1For a profile of these investment relations see Khan (1991b).
An explanation for the non-existence of any FDI flows among MCs can be derived from this discussion. FDI is undertaken by motivated multinational companies having comparative advantages in R&D intensive services. MCs do not home any such companies. Therefore, there are no intra-MC FDI flows or more generally no outflow of FDI from MCs as a group.

Foreign indirect investment in portfolio equities at present is an insignificant source of capital flows for the MCs, except for the Bahrain, Turkey, Malaysia, Pakistan and Indonesia. No systematic data is available even for these countries. But owning to the level of financial market facilities and particularly privatization schemes, the financial markets in Bahrain, and stock market in some of other countries have recently attracted some foreign capital. However, compared to these expected inflows, the observed outflows can
safely be termed as massive. These incentives for portfolio investment are also covered from the summary of the considerations presented in the above table. The three inter-related incentives in portfolio equity investments for the owners of funds are, liquidity, security and minimization of risks by portfolio diversification.

Liquidity of an asset depends on the quality of the asset reflected in the currency in which the asset is held, the economic conditions underlying the currency, exchange rate risks, and marketability of the asset. Security implies exposure of the asset to non-commercial risks, transfer problems, sovereign dominance and other non-diversifiable i.e. systematic risks. When risks are non-systematic or diversifiable, there is an incentive for the diversification of portfolios over assets whose return do not vary together. A riskier asset must offer higher return. A portfolio composing of many risky assets whose return do not vary together, is therefore, more liquid, secure and high yielding. Given other conditions, the greatest motivation for portfolio investment is therefore, maximization of return on financial asset by diversifying the asset structure of the portfolios.

Although short term trading in financial assets does not directly contribute to net flow of resources, yet, it improves the overall liquidity situation of the host economy. The incentive for the host country in a foreign portfolio investment is this liquidity effect of the resultant financial flow. However, portfolio investment implies an ownership of domestic financial assets by foreigners. Thus, it poses the same incentive incompatibility problem as foreign direct investment.

An explanation for the massive outflow of portfolio investment from the MCs as a group and no significant inflow of such investment into the MCs can be derived from the above discussion. The flow of portfolio investments depends on security, liquidity and stability conditions. MCs in general do not fulfill these vital conditions. In search of these conditions there is an outflow of
portfolio investment from the MCs as a group or more generally, there is no intra-MC portfolio investments.

7.2.4 Risk Sharing Versus Debt Finance

At least, a partial explanation for the non-sustainability of public financial flows can be found in the non-economic motivation underlying the supply of these funds in addition to their debt creating nature. The linkage of the supply of funds with productive activities and physical projects is generally expected to harmonize the motivations and incentives of their suppliers and users. A number of factors are expected to ensure the compatibility of fund suppliers and users' incentives under the risk-sharing financial flows.

Linkages of Liabilities with Abilities to Pay

Other than grants, all forms of inflow of foreign financial resources is a liability for the host country. This liability under the risk-sharing modes of financing is not fixed as under the interest-based modes. Under interest-based financial flows, the recipient country is bound to pay a certain fixed liability irrespective of the fact that even the principal amount of this liability may have been lost. But under the risk-sharing flows, liabilities arise only if a net financial return is accrued to the financial flows. The macro-economic implication of this fact for the resource structure of the recipient country is expected to be positive. In real terms the recipient country's economic objectives are served better by this type of financial flows.

This benefit is obviously associated with a higher return to be paid to the owners of funds for the higher risk they take. Hence, the above mentioned benefit is incompatible with the high cost of finance particularly, if low cost debt finance is available as a substitute. This incompatibility is insignificant compared to the advantages of linking the financial service obligations with the ability to pay. Such an arrangement ensures a proper dispersal of service obligations over time, a properly diversified currency composition, risk-sharing
between owners and users and finally the funding sources become diverse, which ensures the stability of supply of funds\textsuperscript{1}.

Mutuality of Interests

A greater degree of compatibility of interests of the two parties is achieved if their interests are tied-up with a common indicator. Under risk-sharing, this common indicator is the financial outcome of the enterprise which uses the funds. This fact highlights more crucial incentive considerations.

Financing through risk or profit inherently promotes common interests of the two parties (financier and entrepreneur) as they share the outcome of the project. So, there is no cost of capital for only one party as under the interest-based system.

Under debt finance, due to incompatibility of the interests of owners and user of funds, a fictitious concept viz. credit worthiness has replaced a more scientific concept i.e., financial and economic feasibility. Consequently, feasible projects cannot be undertaken because credit goes to the so-called credit-worthy borrowers. Under profit and risk sharing arrangements this situation will not arise. It is in the interest of the supplier of funds to study the feasibility of the project before providing finance. Only efficient projects will get finance and risks will be spread over a number of good projects\textsuperscript{1}. This will diversify the risks and create financial stability.

Implications for Economic Environment

An improvement in the economic environment of the recipient country ensures better prospects for future reverse financial flows as payment of service obligations. Risk-sharing flows promote domestic institutions, while debt financing doesn't. Because, under interest-based debt financing, money is borrowed from international markets and paid directly without involvement of

\textsuperscript{1}Caesseus (1990). Earlier, this idea was discussed in all the classical literature on Islamic economics.
local financial infrastructure viz., stock markets, capital markets, financial intermediaries etc. On the other hand, the success of the risk-sharing flows, the promotion of these crucial local institutions is vital.

Once these institutions are promoted, a better intermediation between saving and investment could be achieved. Shares of projects could be traded (as a result, liquidity position of the economy improves). Feasible projects could be identified and risks spread over these projects (as a result, the financial system will stabilize) and the overall economic conditions of the economy improve. Moreover, reliance on public borrowing decreases and private investment is encouraged. A better integration between money and goods and services market is ensured. Consequently, compatibility between the interests of the suppliers and users of funds is achieved.

Putting these considerations together, it can be concluded that in the general framework of the risk-sharing flows, the interests of suppliers and users of funds are more compatible compared to the interest-based debt finance.

7.3 RISE OF CONTRACTUAL INVESTMENTS AND ITS RELEVANCE

A change in the relative resource positions of countries could be partially attributed to their international economic relations and the resultant resource transfer. The market related mechanisms of inter-country transfer of financial resources can be classified into three broad categories: debt finance, indirect investments in portfolio equities, and direct investments. From the perspective of the recipient of finance, the advantage of the debt-based finance is the fact that, financiers do not interfere in the use of finance. During the seventies and eighties developing countries have relied heavily on this form of finance.

1See Zarqa (1985).
2It is widely accepted that, in case of debt-finance, this apparent advantage has caused gross allocative inefficiency. See, e.g., Lessard (1985).
But unfortunately, due to its inefficiency, the contribution of debt finance to resource transfer to capital importing countries has almost been negative. This has decreased the repayment capabilities of the borrowing countries thus causing the debt crises. As a way out of the debt crises, a consensus has built up to promote the flow of risk capital as an alternative to debt finance.

In context of direct investment, at least four approaches can be identified to put the profit maximizing behavior of international investors into the perspective of international private resource transfer. These are i) market internalization theory, ii) eclectic theory, iii) triple distinction theory and iv) cooperative intermediation theory. These four approaches can be classified into two basic categories viz., market internalization and market externalization.

Market Internalization

The common basis of the first two approaches is the hypothesis that, since the international markets for intermediate products are imperfect, profit maximization requires the internalization of all the market related activities in the framework of a multinational enterprise. According to the market internalization theory, the market internalization process of the multinational causes its R & D activities which creates information as well as integrated team of skills. This entire process is the basis of the multinational's comparative advantage over the local firms.

However, according to the eclectic theory the comparative advantage of the multinational enterprise depends primarily on factors such as ownership advantages, the relative efficiency of market internalization (direct production and marketing) over market externalization (e.g., licensing) and the degree of dependence of market internalization on ownership of external resources.

Market internalization is the underlying feature of FDI. The essence of market internalization is the acquisition, protection and exploitation of

---

1For details please see, Ozawa and Kojima (1984).
ownership of R & D intensive resources, right to resource utilization in the host countries and often protected markets. Moreover, during the previous decade, the return earned by foreign investors on FDI was estimated to be 2 1/2 % more than the average rate of interest in the international market¹ (i.e., the average return earned on FDI projects was at least 18%). This is obviously, too expensive from the point of view of the host countries.

Market Externalization or Cooperative Approach

An alternative strategy for private international resource transfer may be found in the cooperative approach or theory of market externalization². This is by itself an extension of the triple distinction theory (TDT). The TDT suggests to make a distinction between the inter-dependent but different behaviors and functions of three different entities: firm, industry and market. Due to their single control and coherent plans, firms are subject to direction. But since, the industry emerges as a result of two or more independent organizations agreeing in advance to match their related plans, the basis of industry is cooperation rather than direction. The market ensures global coordination through spontaneous interaction of demand and supply.

The cooperative intermediation approach suggests that, if left to the will of multinational corporations under planned and directed objectives of profit maximization, international private resource transfer cannot be beneficial for global development.

The basis of the cooperative intermediation approach is the recognition of the fact that developed economy countries, as suppliers of R&D intensive services and capital, and developing countries as sources of market for the above resources as well as cheaper raw materials are always interdependent. Historically, through the channels of foreign direct investments (FDI) (of the

¹See, IMF (1985).
developed countries in the developing countries), these complimentarities were utilized.

Despite all its advantages, FDI is over exposed to the phenomenon of "reciprocal fear": host countries risk the control of their resources by the foreigners consequently, foreign investors fear high non-commercial risks. The result of the interdependency of developed and developing countries on one hand, and the limitations of FDI as an international real resource transfer mechanism on the other, was the growth of non-conventional substitutes to the traditional FDI (viz., management contracts, production sharing, revenue sharing, production-in-hand contracts, turnkey contracts, subcontracting, licensing, franchising, international leasing, joint ventures, offsets, buy-backs etc.).

Through these channels, the developed countries are able to sell their technical and financial resources (even to those economies which are dominated by public sectors) at the same time avoiding the sensitivities associated with FDI. On the other hand, developing countries are able to take benefit from the technical and financial resources of the developed countries with a minimum risk of foreign control on their national economies - unlike FDI. Thus, the "new forms" or contractual forms of international investments are demanded by both parties.

A cooperative approach is therefore, in the common interest of the international investors and their host countries. The strength of this hypothesis is found in the growing trend of "externalization" - the growth of the contractual forms of international investments rather than "internalization" of markets.

The relevance of the above mentioned propositions of international private resource transfer for Islamic economics can be viewed from two perspectives. From the ideological and academic perspective, Islamic scholars emphasis justice and equity as fundamental criteria for the acceptance of any economic relationship. For the efficient and just operation of the market
mechanism the Islamic scholars have emphasized "cooperative competition" rather than "perfect competition". The concept of cooperative competition is reflective of the emphases by Islam on mutual agreement/understanding in the trading activities.

From the policy perspective, the importance of a cooperative approach to international resource utilization is not only hailed by the World Bodies like the UN, but also the growing recognition of this philosophy is reflected in the behavior of foreign investors. The preference of the host countries' for this approach is reflected in the growing acceptance of these arrangements in the developing countries.

From the perspective of resource transfer to the host countries, the implication of these investment relations can be seen from the evidence that the average rate of profit earned by the firms on contractual investments is reported to be 1-3 % in most cases. Whereas, interest based borrowing (at an average rate of 16%) and FDI (at an average rate of 18%) are much more expensive for the host countries. Therefore, from the perspective of the host countries, under contractual arrangements, the price of importables are considerably lower compared to both import financing through interest based commercial credit or internalized domestic production through FDI.

Moreover, contractual investments are designed to transfer ownership rights to the host countries during a specific time period. As a result, the transfer of resources to the host country becomes certain. In a reasonable period of time the economy may become an exporter. For the foreign investors, the arrangements ensure economies of scale due to expanded markets and access to cheaper raw materials. Through investments in deferred sale of R&D intensive resources, the foreign firms acquire crucial market information for the development of advanced production processes and further expand their sale based investments.

1See, Kahf (1978) and Siddiqi (1973).
2See, Ozawa and Kojima ibid.
On the other hand, the philosophy underlying the market internalization approach is simply to explain the motivation for the multinational to do business in a foreign country. This approach is not concerned with the relative resource position of the host and home countries as a result of the multinational's activities.

In view of the above considerations, it could be concluded that compared to interest based borrowing and FDI, contractual investment relations ensure the transfer of resources on more equitable basis. Therefore, these arrangements are more relevant for Islamic economics.

Consistency with Islamic Modes of Financing

To be relevant for Islamic economics any financial and economic relationship must be consistent with the general theoretical and practical framework of the Islamic modes of finance. In this regard the following considerations need to be reviewed.

Interest-Free Nature: The interest free nature of a financial or investment relationship is a fundamental consideration for its acceptance in Islamic economics. Naturally therefore, the relationship should be based on any of the alternative arrangements to interest viz., pricing, gross income sharing, net income sharing or sharing-cum-pricing.

Exhibit 7(b) classifies the contractual investment arrangements on the basis of the underlying principles and compares them with the Islamic modes of finance. It is clear from the information that by their nature, the contractual investment relations are interest free. Thus, these arrangements are either based on net income sharing, gross income sharing or pricing/fees. However, a single arrangement may often involve different considerations, e.g., technical components of a buy-back arrangement may be sold to the local parties by charging a fee, instead of adjusting it in the buy back price.
### Exhibit 7 (b): Characteristics of Contractual Investments & Islamic Modes of Finance

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mudharabah</strong></td>
<td></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Musharakah</strong></td>
<td></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Muzara’</strong></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Musaqqa’</strong></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ijara’</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Istisna’</strong></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ju’ala</strong></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Durable Asset Participation</strong></td>
<td>yes</td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Investment Auctioning</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Diminishing Participation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Leasing</strong></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Management Contract</strong></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Turnkey Contract</strong></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Franchising</strong></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub-contracting</strong></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Build-Operate-Transfer</strong></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Production-in-Hand Contract</strong></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Production Sharing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Offsets</strong></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Buy-Back</strong></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Revenue Sharing</strong></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Equity Joint Ventures</strong></td>
<td></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Contractual Joint Ventures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Specific Considerations: The interest-free nature of an economic and financial arrangement is a necessary, but not a sufficient condition for its acceptability in Islamic economic framework. Although, in general interest free, each of the Islamic modes of finance also has specific conditions e.g., goods cannot be the principal of *mudharabah*; in all sharing arrangements no party can claim a predetermined share; a debt cannot be sold for debt; risks related to an asset cannot be separated from its ownership rights and passed on to the second party. There are several other such specific considerations underlying the Islamic modes of financing. Each contract has its own specific conditions. But in general, the fundamental principles could not change.

Some general considerations for the distribution of risks in each case of the contractual investment arrangements are summarized in Exhibit 7 (c). It can be seen from this information that the motivations for the foreign parties to
participate in the contractual investment relations are, in general, related to the utilization of their R&D intensive resources, sale of equipments and acquisition of cheaper intermediate inputs. The motivation may also be pure financial, as in profit sharing or revenue sharing contracts.
<table>
<thead>
<tr>
<th>Contracts</th>
<th>Description</th>
<th>Benefits and Risks for Foreign Investors</th>
<th>Benefits and Risks for Host Countries</th>
<th>Underlying Principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Franchising</td>
<td>Use of brand names, patents etc., for production purposes.</td>
<td>Benefit: MAR Risk: PRS</td>
<td>Benefits: FIN Risks: None</td>
<td>Pricing</td>
</tr>
<tr>
<td>Turnkey Contracts</td>
<td>Construction and transferring over to a local party by a foreign party an</td>
<td>Benefits: MAR Risk: TR, DD.</td>
<td>Benefits: FIN TEC Risks: SS</td>
<td>Pricing</td>
</tr>
<tr>
<td></td>
<td>investment project for a specified price.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Contracting</td>
<td>Production of parts and components by an agent for a principal on order.</td>
<td>Benefits: AS Risk: SS</td>
<td>Benefits: MAR Risk: CE.</td>
<td>Pricing</td>
</tr>
<tr>
<td></td>
<td>Parts to be used at the exclusive risk of the principal.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contracts</td>
<td>the project itself is bought by the host party.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production in Hand</td>
<td>Foreign firm delivers on commercial basis a production unit producing a</td>
<td>Benefits: MAR Risk: PF, DD, TR</td>
<td>Benefits: FIN TEC Risks: SS</td>
<td>Pricing</td>
</tr>
<tr>
<td>Contracts</td>
<td>known quantity and quality of particular output.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit Sharing</td>
<td>A joint venture in which the accrued profits and losses are shared by the</td>
<td>Benefits: MAR Risk: TR</td>
<td>Benefits: FIN Risks: None.</td>
<td>Net Income Sharing</td>
</tr>
<tr>
<td></td>
<td>parties.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production Sharing</td>
<td>Sharing of output of a project by the local and foreign parties in return for</td>
<td>Benefits: AS Risk: PF, TR</td>
<td>Benefits: FIN TEC Risks: None</td>
<td>Gross Income Sharing</td>
</tr>
<tr>
<td></td>
<td>capital, technology etc., by the foreigner.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leasing</td>
<td>Sale of use rights of assets for a specified price (rent) and time.</td>
<td>Benefits: MAR Risk: AR, DD</td>
<td>Benefits: FIN Risks: PF</td>
<td>Pricing</td>
</tr>
<tr>
<td>Offsets</td>
<td>Suppliers manufacture components locally or assemble them locally.</td>
<td>Benefits: MAR Risk: None</td>
<td>Benefits: FIN TEC Risks: None</td>
<td>Gross Income Sharing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>apportioned output at lower price.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notations: TEC: Technology PRS: Prestige. Also see, Exhibit 3 (a).
The risks involved in such contracts for the foreign parties, are mostly related to debt default and transfer of their share in output, revenues or profits. Though, minimum compared to FDI, political risks too cannot totally be isolated from these investment arrangements. However, most of these risks are ensured by national, bilateral and multilateral investment guarantee agencies.

The motivation of the host (developing) countries for such investment arrangements is primarily the acquisition of more advanced and efficient production processes. Through contractual investments this acquisition becomes effective. On the other hand the risks for the home parties are mostly related to the quality of the imported plants. Moreover, at the early stage, the host country is usually not involved in the import and establishment of the plants and ultimately, the foreigners will not be there to maintain the projects. The quality may be faulty, or the requisite know how may not be revealed by the foreigners. These risks can however, be managed by the developing countries as discussed bellow.

Relevance for Islamic Financial Institutions

The relevance of the contractual investment relations for Islamic economics should also be viewed in perspective of the Islamic financial institutions. In this regard two points are worth mentioning:

Financing Social Utility Projects: As discussed in section two, Islamic financing arrangements are fundamentally based on two principles: pricing and sharing. Due to the non-tangible nature of return in case of certain social utility projects, the sharing principle of Islamic financing may not be a preferred basis of investment in such projects. So far, the sale-based principle of Islamic finance has only been used in financial intermediation, it has not been applied.

1It should be noted however, that revenue sharing has been successfully used in some similar projects.
to the infrastructural projects. On the other hand the sale based contractual investment relations have been used in such projects successfully.

The involvement of foreign investors in such projects can only be on the basis of a deferred sale relationship. The foreign firm will bring plants, install them and establish the projects on the basis of an agreed upon fees or price to be paid on deferred basis. Typical examples of this relationship is the turnkey or production-in-hand contracts. In case, the transaction involves R&D intensive services of intangible nature, again the pricing principle (as in franchising or management contracts) can be utilized. Similar is the case with leasing, where services of durable assets are sold or sub-contracting where some work is done on the basis of agreed upon price.

Financing the Sale of Output of Sharing Projects: It is a reality that trade financing is a salient feature of contemporary Islamic financing. By financing the purchase of intermediate inputs, this mode of finance effectively contributes to economic development. Trade financing also supports producing units by financing the sale of their output. Therefore, this mode of Islamic finance utilized to promote the sale of output of projects established on the basis of the sharing principle.

To start with, on order of a member country, an Islamic bank or trading company could deal with a foreign investor to install an industrial plant (e.g., a car plant) in the member country on the basis of gross income sharing. Assuming that the plant will annually produce 30,000 cars and the agreed gross income sharing ratio between the member country and the car manufacturer is 50:50, the car company, will thus annually own 15,000 cars from the plant. The trade financing mode of the Islamic bank may be utilized to finance the sale of these 15,000 cars for the car manufacturer. Thus, an Islamic

1Zargha (1990), presents a case where financial certificates can be developed to finance such projects on the basis of the sale principle.
2The question, why should the car manufacturer opt for gross income sharing rather than net income sharing has been discussed in section 3.3 below.
financial institution will effectively contribute to economic development and real resource transfer while at the same time being self-supporting.

7.4 CHALLENGES OF EXTERNAL RESOURCE MOBILIZATION OF PAKISTAN: THE CASE OF AN ISLAMIC IDEOLOGICAL COUNTRY

Pakistan being an ideological state, the abolition of riba (interest) has from the very beginning formed an integral part of State Policy as enshrined in her constitution. In this connection, the Council of Islamic Ideology has frequently been called upon to delineate the true meaning of riba and to elucidate the verses of the Holy Qur'an pertaining thereto. The Council has all along expressed the view that the term riba encompasses interest in all its manifestations, irrespective of whether it relates to loans for consumption purposes or for productive purposes, whether the loan are of personal nature or of commercial type, whether the borrower is a government, a private individual or a concern and whether the rate of interest is low or high.

The Council of Islamic Ideology Pakistan; Report on Elimination of Interest from the Economy

Despite the above cited awareness about riba, at the present, Pakistan is posed to face a real debt crisis: All new foreign borrowings of the country are exhausted in servicing existing riba-based debts. Total internal and external outstanding public debt of the country is equivalent to about 90% of its gross domestic product, servicing this debt yearly requires 3.2 billion US dollars, making it the first largest expenditure item of the nation's fiscal year 1996 budget. In March 1996, the Governor State Bank of Pakistan warned that his country is likely to enter the "debt-trap"; Pakistan may accumulate riba arrears, and continuously request for debt re-scheduling.

Pakistan - a nation committed to eliminate riba, during 1996, will spend more on servicing riba-based debts than even on its national defense! This is the predicament of a country where a lucid definition of riba in the form of the above quotation has long been known, where the goal of replacing the riba-based financial transactions with some alternatives consistent with the Islamic law has always remained in the national agenda and where political will in this regard has always remained visible throughout the process of forming a national consensus on constitutional issues.
Justice Tanzil-ur-Rehman one of the most prominent policy makers committed to eliminate riba from the economy of Pakistan contends that the present (1973) constitution unequivocally aspires for the clearance of the economy from riba. However, in 1976, the constitution was put in abeyance on the rationale that the then government (which had the credit of giving the nation a constitution consistent with the Islamic law) was in itself antipathetic towards implementing Islamic provisions of the constitution.

The new government thus, made apparent and pronounced institutional efforts to cleanse the banking and financial sector from riba. During 1976-86, the period when the constitution remained suspended, cleansing the economy from riba, apparently, remained an active part of the agenda of economic reform. However, it is also paradoxical that most of the present public debt, which is the source of the current burden of riba on the nation, also accumulated during the same period.

In retrospect, the economic urgency of reducing the cost of riba on the economy highlights the rationale of the ideological opposition to riba. Nevertheless, riba cannot be eliminated in isolation of the realities related to the country's reliance on external resources. Particularly, during the past five years, the Pakistani economy has been widely liberalized, exposing it to external shocks. Thus, the task of elimination of riba, in isolation from the world economy, apparently seems to be an uphill task. However, the policy objectives of liberalizing the economy, narrowing down government borrowing, and a conscious plan to reduce the cost of interest payments on the economy, are in fact, consistent with each other. The objective of this paper is to assess the prospects for Pakistan to reduce its reliance on interest-based international borrowing by increasing the use of interest-free alternatives.

---

7.4.1 Challenges Of Islamizing The External Sector: An Overview

The 1973 constitution of Pakistan guarantees the full implementation of Islamic laws in the country including abolition of riba. However, practical efforts of Islamizing the economy started in October 1977 after suspension of the constitution, when the Council of Islamic Ideology (CII) was asked by then Chief Martial Law Administrator, General Mohammed Zia-ul-Haq to prepare a blue-print of an interest-free economy. In November 1977, the CII appointed a Panel of Economists and Bankers to undertake the preliminary task of preparing the blue-print of an interest-free economy. The Panel submitted its third report (which deals with the elimination of riba from the economy) in February, 1980. The report was evaluated by a group of sharia'h scholars appointed by the CII and finally adopted in June 1980.

The CII Report on the Elimination of Interest from the economy of Pakistan is a valuable work on the subject and can rightly be termed as the only one of its kind. In general, the alternatives suggested for Islamizing the economy are also relevant for the purpose of external resource mobilization. Moreover, Islamization of the overall structure of the economy must have implications for external resource mobilization. However, in some places, the report directly deals with issues related to external resource mobilization. An review of the CII recommendations directly dealing with the issue of mobilizing external resources is in order.

A. While dealing with foreign transactions of banks involving interest, the report mentions two cases: i) foreign transactions of Pakistani banks, and ii) local transactions of foreign banks. The CII recommended that both these "would also have to continue on the basis of interest until alternative arrangements conforming with sharia'h are evolved in regard to these transactions". However, the CII also recommended that in order to avoid merger of interest and non-interest income, the administration of foreign branches of Pakistani commercial banks may be entrusted to a separate
corporation. The foreign currency deposits held with commercial banks should also be transferred to this corporation. These recommendations were never implemented.

B. The CII report also deals with Islamization of the capital structure of specialized financial institutions², namely, Pakistan Industrial Credit and Investment Corporation (PICIC), Industrial Development Bank of Pakistan (PIDC), National Development Finance Corporation (NDFC) and Agricultural Development Bank (ADB). In case of PICIC³, the CII recommended that:

   i) As the capital of PICIC contains foreign ownership, any Islamization of the capital of PICIC should be undertaken in consultation with the foreign owners. If the owners do not agree with the proposed Islamization, they may be offered to divest their stakes in the PICIC gradually,

   ii) Foreign currency loans obtained by PICIC on the basis of interest would be guaranteed by the government⁴,

   iii) PICIC has to pay interest on certain foreign loans, which is recommended to continue till appropriate sharia'h consistent alternatives are made available and

   iv) Since PICIC borrows from the World Bank, Asian Development Bank etc., on the basis of interest, it was recommended by the CII that, "the corporation may continue to obtain it (the credit) on the basis of interest until viable alternative conforming to sharia'h is available". The CII repeated the same recommendations in case of the remaining institutions⁵.

¹See, Ahmad et. al eds. 1983 p 149.  
²Pages 150-156, ibid.,  
³PICIC was established in 1957 to provide long and medium-term debt and equity capital to private sector industrial projects, issue and purchase of debentures and act as underwriter, trustee and guarantor of public issues of shares, debentures and loans. PICIC is a public limited company, 65 percent owned by the local private sector, and 35 percent by foreign investors including the IFC. Both its liabilities (foreign loans) and assets involved interest. See, CII ibid.  
⁴It is important to note that PICIC is a private sector organization, the government as a third party can provide such guarantee but only for the principal amount of the loan.  
⁵See ibid, p 153 for IDBP, p 154 for NDFC and p 156 for ADB.
C. Concerning government external borrowing on the basis of interest, the CII again recommended to continue the practice until suitable Islamic arrangements are available. However, the CII, in a brief paragraph of its Consolidated Report on the Islamic Economic System, Islamabad: CII 1983, urges the government to ask Pakistani banks working abroad not to deal in interest-based transactions, and to urge the foreign governments and institutions to deal with Pakistan on the basis of the Islamic alternatives.

D. During the 1980-84 period, a number of legislation were introduced in Pakistan to initiate an Islamic financial system. On April 10, 1991, the Parliament passed the shari'ah Act which reinforces the constitutional provisions which make the shari'ah as a supreme source of law of the land. These laws provide the general framework for undertaking economic activities. However, specifically in relation to mobilization of external resources these laws are also silent. The only exception is the historical November 14, 1991 judgment of the Federal shari'ah Court on 20 different laws of the land dealing with interest (riba) and banning interest from all public and private transactions involving the people and government of Pakistan. On the appeal of the government, this judgment is however, still under consideration of the Supreme Court. It should be noted that the government is constitutionally bound to the ban on riba but is seeking time for finding alternatives particularly, for mobilizing resources to meet the needs of the public sector - external resources constituting a bulk of these.

The shari'ah Court judgment has also covered the issue of elimination of riba in view of the domination of international economic, commercial and financial transactions by interest.

First, the learned Court identified murabahah-based trade financing as practiced by the Islamic Development Bank and other Islamic banks worldwide, as a substitute to interest-based trade financing.

\[1 \text{ ibid. p 180.}\]
Second, the Court also found that foreign direct investment should be encouraged, as for attracting portfolio investments, Pakistan cannot compete with other markets.

Third, as far government borrowings are concerned, it was ruled that the government of Pakistan must stop borrowing on the basis of interest and instead seriously consider to evolve a profit and loss sharing system.

Fourth, the court noted that after the international debt crisis, the international community is also seeking an alternative mechanism and

Lastly, international practices of the Islamic banks have in fact provided the alternative to interest-based debt financing. The court thus observed that the delay in the elimination of interest for fear of difficulties with international transactions is unjustified.

F. As a follow-up of the sharia'h Act, 1991 an Islamization Commission was appointed by the government to study the process of Islamization of the economy and suggest recommendations. A report was submitted by the Commission on Islamization of Banks and Financial Institutions. As with other reports, the general recommendations of this report are relevant for the external resource mobilization as well, but the report does not contain any specific suggestion for mobilizing external resources.

7.4.2 Reliance On Foreign Resources

In current prices, the external resource requirements for the 1989-92 period have been about Rs. 70 billions per year. The figure for 1993 was at a peak level of Rs. 75 billions as the government budget deficit increased to 8% of GNP, the rupee depreciated significantly against the US dollar and inflation remained in the two digit level. The government plans to cut the deficit expenditures to 4% of GNP and the rupee exchange rate has not so far stabilized. Moreover, keeping in view the GNP growth objectives of 6%-7% for the future, drastic improvements required for uplifting the social sector, public
utilities and infrastructure, the need for more external resources is inevitable to supplement domestic resources i.e., tax revenues. The projected resource gap is given in chart 7 (b). By the year 2000, the country will yearly need an estimated amount of US dollars 6 billion inflow of foreign resources, about 4 billion of these will be needed for yearly servicing *riba-based* debts.

**Chart 7(b)**

![Projected External Resource Requirements (billions US dollars)](chart)

<table>
<thead>
<tr>
<th>Years</th>
<th>Resource Balance</th>
<th>Foreign Resource Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>1995</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>1996</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>1997</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>1998</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>1999</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

Source: Derived from Stars (World Bank Data Diskettes)

The major source of external funds for Pakistan has remained public long-term debt from multilateral institutions and bilateral sources. Chart 7 (c) presents information on yearly outstanding long-term external public debt of Pakistan for the 1970-94 period and projects for the year 2000. It can be seen that since 1980, the debt has accumulated sharply. The long-term outstanding public (non-defense) debt of Pakistan in June 1996 is estimated to be over 25 billion US dollars. It is projected with a 0.97 $R^2$ that this amount will reach 35 billion dollars by the year 2000.
Although, historically, Pakistan has relied on official development assistance, since 1988, it is also resorting to private sources of credit in the international markets. Although, at the present, the yearly outstanding debt is about 120 million US dollars, it is expected that this type of debt will increase in the future. In addition, the trend of increased reliance on private capital is likely to continue as Pakistan intends to mobilize funds from the international bond markets, attract foreign portfolio investment in local stock markets, direct investment in projects and foreign currency deposits in the banks. If the ability to pay did not improve simultaneously, an in the reliance on conventional private capital will drastically increase the foreign liabilities of Pakistan.

Pakistan's total debt service and interest payments as a percentage of exports is given in chart 7 (d). In 1971, Pakistan was paying about 7% of its total export earning as interest on foreign loans. This percentage has increased to 13% in 1994. Whereas, the allocation of export earnings for debt servicing increased from 17% in 1971 to 27% in 1994.
Pakistan has a considerable potential to attract foreign direct investment (FDI). FDI has remained low in Pakistan. The peak yearly inflow of US dollars 1000 million may be achieved during 1996 as during the first 9 months an inflow of 600 million dollars was reported by the government.

For a number of reasons, Pakistan’s external debt situation apparently does not indicate any seriousness compared to other low income developing countries. For instance, so far, Pakistan has no interest arrears outstanding, it has not asked for any re-scheduling, its debt service as a percentage of exports has remained stable. However, the real signal for alarm underlies chart 7 (e). With annual GNP growth targets between at 6 - 7%, annual inflation at 8%, budget deficit at 4% of GNP, external account deficit of at 3% GNP, and if the present export and import performance is sustained, from 1995, an outward real resource transfer has started from Pakistan. The total inflow of debt must have fallen short of total debt services by about yearly 500 million US dollars, indicating the beginning of a real debt-trap. By the year 2000, this shortage will increase to 1.5 billion US dollars stabilizing around 1 billion and 1.5 billion dollars after the year 2000. This means that total mobilization of foreign
conventional funds will fall short, net outflow of resources will take place by an estimated 1.5 billion US dollars yearly.

Chart 7 (e)

Pakistan: Net Flow of Total Long-term Debt (000 Dollars)

Source: Derived from Stars (World Bank Data Diskettes)
7.4.3 The Case For Interest-Free Alternatives

Given the above mentioned scenario, if interest-based borrowing continues, Pakistan will inevitably develop interest arrears, ask for rescheduling its debts and confront more problems on its credibility on the criteria of financial risk. These factors, if accumulated will adversely effect all types of flows to Pakistan, making external resources even more costlier and adversely effecting its export competitiveness. Although already late, Pakistan also has an alternative to develop a long run strategy to increasingly rely on a set of interest-free alternatives for external resource utilization.

There are at least three separate but inter-related aspects of such an alternative strategy. First, how to meet the requirements for short-term funds for the balance of payments considerations? As for as the liquidity requirements of the economy are concerned, there is no better alternative to the accumulation of foreign exchange reserves. Recently, Pakistan's foreign exchange reserves have remained unstable only during periods of political instability. Whereas, under normal circumstances, the foreign exchange reserves could well be maintained over and above the safe range of 5 month's import requirements. Once these safe limits are attained and maintained, the need for liquidity for contingency requirements will not remain critical.

Second, what could be done with the existing debt stock which is estimated at US dollars 23 billion in June 1996. If interest-based borrowing is avoided, how the existing debt will be serviced at the June 1996 rate of US dollars 3.2 billion per year? Lastly, how to tackle the need for additional long-term funds? The remaining paper deals with the last two considerations.

7.4.3.1 Managing the Exiting External Debts

We estimate in chart 7 (f) that during 1997, Pakistan will need to repay 1.2 billion dollars in principal amount and 700 million dollars of riba, servicing its long-term public debt. So far, Pakistan has little interest arrears if any. The US dollars 700 million annual payments of riba is basically a matter of concern
for the *shari'ah* scholars. A *shari'ah-based* policy in this regard is not clear. The resultant uncertainty has been instrumental in coining the concept of the so-called "*shari'ah risk" - Pakistan's country credit risk factor associated with the possibility of declining the yearly payment of *riba*.

**Chart 7(f) Servicing Pakistan's Long-term Public Debt**

![Chart showing long-term principal and interest payments](chart.png)

Source: Extracted from *Stars* (World Bank Data Diskettes) and Trend Line Fitted.

Many developing countries which have confronted the debt crisis have adopted debt transformation programs. These programs commonly aim at reducing debt servicing difficulties of the indebted countries by linking their present to future foreign exchange liabilities and at the same time link these with foreign exchange earning capabilities. The most common form which has been adopted by several countries is the conversion of debt into equity, mostly with an encouragement by the World Bank particularly, the International Finance Corporation and Multilateral Investment Agency.

At times there were optimisms about the benefits of the programs. These programs were presumably seen as a reliable source of reforming the domestic sectors of the concerned economies. Moreover, it was expected that

---

1See, World Bank Report No. 11590-PAK. Some researchers suggest that in the Hanafi *fiqh* dealing with a non-Muslim on the basis of *riba* in not as strictly prohibited as in other schools of *fiqh* (see, Saleh (1986)). We understand that the continuation of *riba-based* external resource mobilization in Pakistan has not been accepted permanently as such; rather, it has been temporarily accepted as a necessity.
by linking external financial liabilities with the ability to pay, the programs will ease the external account restraints of the indebted countries. Furthermore, the programs were also expected to give impetus to the development of domestic financial markets.

Nevertheless, there were many apprehensions too. These apprehensions directed policy makers to ensure that otherwise potential foreign investment is not diverted towards these programs. Naturally, therefore, many programs became overcautious in this regard and the resultant regulations have made many programs ineffective. Moreover, a certain level of increase in the M2 in many countries and the resultant high inflation is allegedly due to the liquidity released by the programs. Pakistan, so far has not considered the debt conversion option. Soon, Pakistan may be compelled to adopt some drastic debt management strategy including interest re-sheduling, and over-all debt service re-sheduling on the basis of further negotiations on interest.

It is a practical experience of the developing countries that debt re-sheduling is a vicious circle. Countries which have once fallen into this circle have not been able to come out of it. As an alternative to debt re-sheduling, debt conversion can be considered as a lesser evil. The debt conversion option is also consistent with the ongoing process of privatization. A certain amount of external debt is owed to the privatizing companies through the specialized development financing institutions, and over 90% of the outstanding debt is in the public sector.

Some Islamic economic aspects of the existing debts can be explained with the help of Fig. 7 (a). The Fig. is drawn on the assumption that there is given amount of interest-bearing debt and contracting such new debt is ceased. However, new debt will be created through deferred purchase.

It is important to note that so far Pakistan has nominal interest arrears shown as pa in the Fig. Most external debt of the country is in the form of the
The principal amount shown as op in the Fig. The principal amount of the debt comes in the framework of the Qura'nic verse II-279 ...Ye shall have your principal sums...

One familiar possibility with regard to the principal amount of debt is its conversion into equities of the privatizing companies. This arrangement becomes similar to the use of debt as a principal capital of *mudharabah* or *musharakah* contracts. The acceptability of this matter is discussed in the Fiqh literature in detail. In general, such a use of debt is not accepted by the scholars. But the Hanafi's are said to allow such a use of debt if it is said that "collect such and such debt and do *mudharabah* or *musharakah* with it". It is reported that some Hanbalis went further by saying that an indebted person can collect a debt from himself and does with it *mudharabah*. Obviously, the flexibility of these scholars is valuable in considering conversion of the principal amount of foreign debt into equity.

Alternative ways of exchanging the principal amount of the for equity may also be explored. It is known that debt cannot be sold for debt, but debt can be treated as a price in a sale transaction. A sizable amount of Pakistan's external debt is owed by public sector corporations. These corporations can approach the owners of the debt, offering their existing shares (not new issues) in a sale for the principal amount of the outstanding debt. This would be equivalent to using the debt as a price in the specific trade which is not objected by *shari'ah* scholars.

In view of the political rhetoric against "selling the country", we suggest that in both cases of possible conversions, the foreign participation must be declining and redeeming in nature rather than becoming permanent.

---

1See, Government of Kuwait, *mausu' al fiqh al Islamiyah*
2For a consensus opinion in this regard, see *ibid* Vol. 21, p 126 paragraph 58.
Thus it may be a good practical option for Pakistan to offer the equity of a number of public enterprises for the principal debt outstanding against these enterprises. It may also be recalled that the Council of Islamic Ideology, while giving its ruling on the outstanding debt on PICIC and other institutions had proposed the option of divestiture. Moreover, if any scheme can reduce the country's long-term reliance on interest-based financing, it may be proposed for consideration under necessity.

7.4.3.2 Interest-Free Long-term External Resource Mobilization

Long-term inter-free resource mobilization will have to take the form of either deferred trade, direct investment or capital participation. In this subsection, we will discuss different possibilities in this regard.

Financing the Acquisition of Goods

Export oriented production of commodities can be expected to remain a predominant strategy of international producers. Countries like Pakistan will continue to be importers of these products. Traditionally, Pakistan's own

---

1It need also be noted that the ad amount of debt is subject to deferred trade in real goods and services. Debt created as such is not expected to create problems as it will not cause capital
exports concentrate on cotton, cotton-based textile products, rice, leather, leather products and rugs. Imports concentrate on petroleum and petroleum products, manufacturing and food items. Both the demand for importables and supply of exportables are chronically constrained by the shortage of finance.

With the prohibition of interest-based finance, the financial constraint on demand and supply need to be removed by creating a liability (dayin), respectively, through price deferred sale (PDS) and object deferred sale (ODS).

At the present however, on the demand side, due to lack of sufficient reserves, an important part of payments for advance or spot transactions is effected by international borrowing. This process involves two distinct transactions; the credit transaction and the purchase transaction. Instead of this, in the PDS based import trade financing arrangement, e.g., as practiced by the IDB, the credit is created by the market in question through postponement of the payment of price for the future.

Whether a good is acquired or supplied, there could be a situation where, the stock of the commodity in question does not exist or yet to be produced. If the non-existence of the stock is due to a financial constraint on supply (for example the presence of an underutilized export potential), buyers could be expected to offer advance payment through ODS to secure the acquisition of commodities in the future. Combinations of such ODS and PDS contracts is given in Exhibit 7 (d).

flight, unproductive use of resources and other leakages as caused by conventional debt finance.
Exhibit 7 (d). Elements of Sale-based External Financing

<table>
<thead>
<tr>
<th>Contracts</th>
<th>Resultant receipts and payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inward-Salam: sale of commodities; sale of use-rights of assets; sale of combination of skills and assets on the basis of advance receipt of the price</td>
<td>Pakistan receives advance payments for its goods and services</td>
</tr>
<tr>
<td>Outward-Salam: purchase of commodities, services, use-rights of assets, skill-asset combinations by advance payment.</td>
<td>Pakistan pays in advance to acquire assets and services</td>
</tr>
<tr>
<td>Inward-Mu'ajjal: purchase of commodities, services, use-rights of assets, skill-asset combinations with delayed payments</td>
<td>Pakistan receives goods and services but defers payments</td>
</tr>
<tr>
<td>Outward Mu'ajjal: sale of commodities; use-rights of assets; services; skill-asset combinations on the basis of deferred payments</td>
<td>Pakistan supplies goods and services but receives payments on deferred basis.</td>
</tr>
</tbody>
</table>

The General Role of Credit-Purchase

One of the crucial determinants of financing imports through deferred sale is the condition that demand should strictly be related to a specific object of sale, which must already exist. In other words, the notion of financing through deferred sale could be realized, only, if a specific object and its demand simultaneously exist. As, in general, supply financing requires advance payments, and demand financing implies delayed payments, for the capital importing countries, import financing takes precedence over export financing. Moreover, production of exportable commodities depends on an initial minimum amount of imports. Using the sale-based method, imports could be financed in different ways. Assets are imported either for end-use or re-sale purposes. In case of asset acquisition for end-use purposes, credit purchase on the basis of the mark-up principle is the only capable means to avoid interest-based credit.

7.4.3.3 Istisna': Deferred Trade In Skill-Asset Combinations

International producers, on account of their investments in research and development accumulate comparative advantages in technical skills, product designs and techniques etc. Since, investment in these resources have already been made, the enterprises have the opportunity to expand their revenues by
selling these resources through various means. Countries like Pakistan, in certain cases have to prefer the acquisition of these resources, produce internally instead of importing. The reasons for preferring such acquisitions is diverse. Some of these reasons are mentioned in course of the following discussion.

The Istisna' Contract and its Relevance

Deferred transactions involving skills can be put in the broader framework of istisna' (translated by some as contract of manufacture1). Istisna' is defined as, "A contract through which the immediate purchase of something subject to manufacturing is effected. The manufacturer takes the responsibility to manufacture the object using his own material and subject to specifications for a specified price and deliver it during a specified time"2. The potential of this contract in financing projects in the contemporary Islamic world are encouraging. There are a number of ways of utilizing this contract for mobilizing external resources.

Banks as Contractors: It is common to suggest that the banks will directly take istisna' contracts from the promoters, construct the projects and hand over according to their mutual agreement. Direct implementation may be an effective way of utilizing the contract. But, the Islamic financial institutions are specialized in financing rather than building projects, therefore, will hesitate to opt for such an arrangement. As such, the prospects of direct utilization of the contract by the Islamic banks is limited.

The Islamic banks can however play a crucial role in financing the istisna' projects. In this case, the promoters will undertake all the necessary ground work: undertake technical and financial feasibility studies, collect competitive bidding from competent constructors, decide on the total cost of

---

2Mustafa Zarqa, The Istisna' Contract, paper presented at the IRTI Lecture Series of Eminent Sharia'h Scholars, held in IRTI, during Ramadhan 1414H. (Translated from Arabic).
the project and then approach the banks for finance. Suppose, the cost of a project on the basis of competitive bidding has been determined to be 200 million dollars. The promoters sign the contract with the constructors and then approach the financiers to buy the project for them for, say 250 million dollars, the price to be paid in installments.

This last possibility creates a trilateral relationship (promoters, contractors, financiers) and assigns responsibilities on the basis of specialization, thus could be convenient to the financiers compared to the first option. This option could also be more efficient because of the specialized work of the contractors. However, acceptance of this requires that a more fundamental question must be answered: Can an istisna' contract be traded before its completion? If the Islamic financial institutions have to finance the istisna'-based investments, this question needs to be answered.

**A Comparison Between Salam and Istisna'**

No discussion on this specific question is available in the literature. However, a similar question has been discussed in context of the salam contract. Apart from the Hanafi scholars (who, reportedly, do not consider istisna' as binding, thus do not object to delaying the price in the istisna' contract) most other scholars, consider istisna' as binding and as a special case of the salam contract; the price must be paid in advance (see, Zarqa ibid). Thus a close comparison between the two contracts is useful and in order.

Hamad (1994) reports that including the Hanafi scholars, most other scholars do not consider the sale of an object of salam (practically, the salam contract) before taking possession of the good as lawful. Nevertheless, we also have important exceptions. Maliki researchers along with Ibn Taimiyyah and Ibn al Qayyim, consider the sale of the object of salam as a valid transaction. Ibn al Qayyim is reported to allow such a sale even to the party which has undertaken the responsibility of supplying the good. Whereas, the permission of the Maliki scholars is restricted to non-food items only (see, Omar 1991).
To benefit from the flexibility of the last group of scholars, we suggest to extend the analogy of *salam* to *istisna*. For this purpose, it is important to highlight major economic differences between the *salam* and *istisna* contracts. It is important to note that perceptions towards risk and its implications matter differently to different people. The above mentioned difference of opinion is merely an example of this difference in human perception about risk. The underlying risks of the two contracts can be compared to some extent.

First, *istisna* is used for supplying by production of such commodities whose qualitative and physical features are controllable by the supplier's efforts; such as production and supply of shoes, clothing, carpets, crafts, jewelry, or any of the modern means of production like, industrial plants etc. The features of the object must be specifically mentioned by the orderer. For example, a shoe factory might already be producing shoes for the market. Shoes having the general features of the product produced for the market cannot be the object of *istisna*. Only specially designed shoes, which are not in the market, if ordered by a buyer will be the object of *istisna*.

The specially designed goods may also be sold in the market. But the fact that the manufacturer has not produced the product for the market may be due to several reasons. There is a possibility that the manufacturer did not get the idea related to the design of the product, which may itself involve research expenditure; the manufacturer had an idea about the design but considered that it has no market; the manufacturer may already be manufacturing the object but due to high costs, only on the basis of orders; the manufacturer may be considering that the object has good market, but its production requires finance, guarantees and other institutional support etc. So, there are several factors due to which certain objects can only be produced on order.

Whereas, *salam* is used for the supply of commodities whose qualitative and physical features are not fully in the control of the supplier such as agricultural commodities, goods already being produced or manufactured for
the market using known processes such as wheat, tomatoes, tomato pastes, jewelry, clothes, shoes, cars etc.

As agricultural commodities cannot be identified with unique features which can be controlled by the producer, these cannot be the object of *istisna*'. Thus all such commodities the control of whose features is either not required or not possible, are the object of *salam*. As all agricultural commodities are subject to natural calamities, the *salam* contract in these commodities is also exposed to these risks. On the other hand, the production condition of non-agricultural commodities is relatively more controllable by human efforts. Thus *salam* in agricultural commodities is more riskier than *salam* in non-agricultural commodities. Moreover, as *istisna* is not related to production of agricultural commodities, it is a less riskier contract compared to *salam* contract. Therefore, the sale of the object of *istisna* prior to taking its control may be seen even more favorably by those who agree with Ibn Taimiyyah, Ibn al Qayyim and the Maliki scholars, regarding their acceptance of selling the object of *salam* prior to taking its control.

Third, except for the Hanafi scholars, who do not object to delaying the payment of price in the *istisna* contract; majority of scholars, favor advance payment of the price. The Hanafi position has the advantage of making the *istisna* contract as a mode of project financing. Countries like Pakistan cannot make advance payments. If the Hanafi position is adopted, projects can be established and the payment can be delayed for latter days. As projects become operational, the price can be paid from the revenues of these projects.

Nevertheless, the difficulty is that the permission of delaying the price is due to the fact that the respective scholars do not consider *istisna* as a binding contract. The orderer has the option to take charge of the manufactured product or decline it. This is practically not possible in the modern times. For example, Pakistan orders a foreign contractor for the establishment of a manufacturing project in the country. The foreign contractor will never accept a condition which bestows a veto power to Pakistan to accept or reject the
project once it is established. Even, if the specifications are not fully met, such a project cannot be dismantled or removed and taken away after its establishment. As such projects are irreversible, they require binding orders.

Fortunately, we do have an intermediate approach too. Reportedly Abu Yousuf follows his teacher Abu Hanifa as for delaying the price, but goes along the rest as for the binding nature of the contract is concerned (see, Zarqa ibid). This sounds an efficient course of action.

First, delaying the payment of price till inspection of the object can be helpful in enforcing the specifications of the contract. If specifications are found to be met fully, the price will be paid as contractually agreed. The producer will have the thread-based incentive to keep control on quality as contractually agreed.

Second, delaying the price also creates efficiency in the sense that if specified qualities were not met, the parties can re-negotiate on the price and the product will not be refused for qualitative reasons. Moreover, the contract, particularly, in the contemporary context can serve as a mode of financing by delaying the payment of the price.

Finally, capital importing countries like Pakistan will no doubt prefer delayed payments, but the supplier of projects, for several reasons frequently ask for at least partial payment of the price in advance. Thus, in general, we must expect that there would be a financial constraint on implementing an istisna' contract. This implies that the istisna' contract will by itself need financing. This partially reverts to the more rigid position which calls for making advance payments which has beneficial implications.

7.4.3.4 Modern Variants of Istisna'

Despite the financial limitations, the istisna' contract has a great potential for the mobilization of external resources for a country like Pakistan. However, within the framework of contemporary Islamic financing, the practical
experience with the contract is very limited. Nevertheless, some possible variants of the contract are being used in a number of developing countries, including some Muslim countries such as Malaysia, Indonesia, Algeria etc. (see, exhibit 2 for the description of these variants). These experiences are discussed in the following with an emphasis on their relevance for interest-free external resource mobilization.

It is possible that certain projects may not be suitable for direct investment. This may be either due to the fact that the government does not want a permanent ownership of certain projects by the foreigners. Or it may also be due to the fact that certain projects though crucial for home countries are simply not attractive for foreign investors. These considerations will create a number of different scenarios as far the istisna' contract is concerned.

*Istisna': Modern Variant -1*

The host country places an order on a basis of a pure istisna' contract. The contractor will build the project according to specifications and the payments will be made as agreed, most likely, in installments to be completed till a few years after completion of order. Some payments will even be made along with the order. This is popularly known in many countries as a turnkey contract.

A turnkey contract is an arrangement whereby a foreign party involves in a contractual investment in the host country for the construction of a project. The constructor becomes responsible to build the project, make it operational and turn-over the ownership of the project to the host party. The contract may also specify the responsibility of the contractor for some preliminary training to the local party to operate the project.

Where this pure istisna' contract can be utilized for the construction of all types of projects, the best candidates are however, projects which do not generate substantial revenues. Therefore, despite their economic needs, the projects are not feasible financially. Or projects, whose ownership needs to be
transferred soon. These are usually, buildings, roads, bridges, airports, seaports, and similar other projects.

Istisna': Modern Variant -2

In this case, host parties may be interested in the establishment of the projects, but not interested in getting ownership soon. This may happen due to a number of reasons. The hosts may try to lure foreign investors by offering permanent ownership of projects. The host may consider to control quality of projects in a longer-run scenario. The host country is not capable to take the administrative and managerial control of the project due to technical or financial reasons, etc.

In this case, the foreign investors may not be willing to undertake the project, unless, the market for the output of the project is ascertained. Thus, to benefit from the external economies of the project, the host will have to consider to purchase the output of the project at a price acceptable to the investors. In this case, the istisna' contract is undertaken to support the market of the specific project. In addition, to the price support, the contract may further be made attractive for the investors, by allowing them an exit window. After the completion of the project, whenever they desire, the investors shall be able to sell their stakes and leave the project.

One special variant of this istisna' contract, known as built-operate-transfer (BOT) is also popular in the projects mentioned above. The important terms and conditions of the BOT contract are the public sector guarantees to purchase: i) the product of the project and ii) the project itself, whenever so desired by the contractor(s). If the host desires the contractors to sell their interest, it may have such options specified in the contract.

Istisna': Modern Variant - 3

Another special case of istisna' contract is known as production-in-hand contract and is more applied in the manufacturing sector. In certain cases it is
required that not only the project be developed on the *istikna' basis, but the constructors should also develop local technicians and management to take over the control of the project at a time when the project reaches a production stage as specified by the contract. In this way, the foreign investor takes the risk of making the project successful in the hands of the local manpower. The contractor "undertakes to deliver on a commercial basis and within a set time, a production unit that has produced a specified result - a given quantity and quality of output, with a minimum amount of local managerial staff. It, in fact, assumes all the investors responsibilities with regard to the smooth running of a project up to the planned cruising speed".

*Istisna': Modern Variant - 4*

Another important case of the *istikna' contract will emerge, if the orderer specifies the choice of input and the location of the project. In certain cases suppliers of goods are required to either manufacture components of the goods locally, or purchase the components from a local producers, or/and assemble the goods locally. Most defense productions are suitable candidates for such arrangements known as offset contracts.

*Istisna': Modern Variant - 5*

Countries like Pakistan where labor, raw material and utilities are cheaper compared to the developed countries as well as the newly industrializing countries, can also acquire orders on the basis of *istikna' particularly, for the production of components through international sub-contracting. Since the acquirers of the products would be relatively capital abundant industrialized or newly industrialized countries, they may even make advance payments. Even if the payment is made in the future, the investments will generate employment, and enhance future export earnings. According to UNIDO, "A sub-contracting relationship exists when a firm (the principal) places an order with another firm (the sub-contractor) for the manufacture of parts,

\[\text{1 See Abdullah (1984) p 19.}\]
components, sub-assemblies or assemblies to be incorporated into a product which the principal will sell. Such orders may include the treatment, processing or finishing of materials or parts by the subcontractor at the principal's request.  

The principle of sub-contracting has several important implications for organizing production and services in the domestic as well as the external sectors of the developing economies. The process of organization may generally take any of the following forms: i) Pure form of international sub-contracting takes place between independent units located in different countries for the manufacturing of finished products either via the subcontractor or directly by the principal, ii) Within border sub-contracting takes place between a subsidiary of a multinational and a local firm, both of the two units are located in the same country for the production of either finished goods (commercial sub-contracting) of components (industrial sub-contracting) and iii) Sub-contracting may take place between the subsidiaries of multinationals located in the same country or in different countries for finished products or for components.

The idea of sub-contracting can also be used in another sense. An Islamic bank may undertake to supply projects on istisna' basis. Since, the bank is not a constructor, it will appoint sub-contractors. However, the bank will remain responsible for meeting the conditions of the contract with the buyers of the projects.

Proxy Istisna Variant - 6

The Council of Islamic Ideology had suggested investment auctioning as a new mode of project financing. Under this scheme, the private sector or consortium of commercial banks was suggested to establish industrial projects, run and make them successful and then sell these projects to the highest bidders. The price could be paid in installments.

1 See Germidis (1980).
However, the details of this proposal were never worked out. If the projects have to be developed on the basis of orders from public sector or private parties, the contracts would include conditions which will make this arrangement similar to the arrangements discussed above. Without orders and proper guarantees, in general, it is hard to expect that such projects will be developed with the objective of selling their ownership on installments. Therefore, for all practical purposes, if implemented, this proposal will take any of the above discussed forms.

Modern Variants of Istisna': Related Considerations

Another matter which deserves consideration is the importance of trade marks, patents and copy-rights which emerge out of the investments in research and development, innovations and entrepreneurial risk taking. The design and specifications which an orderer may place, may be the result of research findings on which he has already invested resources. Once the order is placed with specifications, the manufacturer virtually controls the innovations underlying the design. The orderer bears the entrepreneurial risk for the new design, whereas, the manufacturer controls the design. In the international context, these are important considerations. This could lead to disputes and other situations which are disliked by the shari'ah.

Such problems could be overcome by selling the patents, copy rights and brand names as is done in the international franchises. In the international business, the franchisee uses brand names, trade marks, patents, etc. and engages in the production, exchange and use of the goods or services of the franchiser. In return, the user pays either fees or a part of the profit generated from the business to the grantor of the franchise as stipulated in the contract. These consideration can be incorporated in the contract, while negotiating the price of the contract.
7.43.5 Pros and Cons Of Modern Variants of Istisna'

For any recipient country, there are obvious advantages and disadvantages of the above mentioned variants of *istisna*. The obvious advantages are:

i) Private interests are associated with projects which used to be traditional concern of the public sector. This could ensure better operation of the enterprises,

ii) The involvement of the public sector in economic activities is reduced to a supervisory role, economizing resources of the public sector which is crucial to curtail the public debt,

iii) These schemes compromise between the considerations of host and foreign parties regarding the optimal control of ownership,

iv) The transfer of technology becomes more systematic and smooth,

v) The projects contribute to net capital formation without resort to foreign aid and other interest-based financing,

vi) Cash flows of the economy gets improved, as substantial current funds can be relieved and future export earnings will be enhanced,

vii) These arrangements create debt, but the servicing of this debt is much easier as the projects are certain to generate income, and

viii) Certain aspects of risk-sharing between local and foreign parties is inherent in these arrangements.

On the other hand, the recipients of projects need to become careful about a number of problems related to these projects: Which often include,

i) Many countries have experienced that, in general, international contractors specify designs with specific import requirements
particularly, in terms of capital and skill intensities. The general framework of the designs of the projects are kept the same irrespective of the climatic, geographical and economic realities of different countries and regions. Seldom the project designers take into account local realities. Consequently, the projects prove to be unsuitable in many cases,

ii) In general, these arrangements are unique in the sense that during the design and construction phases of projects, local parties are not involved. When the project reaches the operational stage, the actual constructors leave the projects. As a result, achieving proper operation of the projects and their maintenance becomes a real problem. To overcome this difficulty, a management contract is signed by the two parties, incurring additional costs but without solving the basic problems,

iii) Other negative aspects are related to the regulation of the so-called priority sectors, and imperfections created as a result of incentives policies,

iv) The obligation of the foreign party often ends with an inconvenience for the respective projects in terms of operational and maintenance difficulties,

v) many problems on the operational side of these arrangements are related to performance requirements, guarantees and bargaining strengths of the contracting parties. In general, foreign firms are reluctant to performance obligations. They do not provide guarantee of their performance. Guarantees usually range from 5 - 10 percent of the value of the contract which does not match any mishaps in the project. In some cases it may even mean complete project failure. Yet, in most negotiations the foreign firms always keep an upper hand.
For the foreign contracting parties, the schemes have again several clear advantages. These advantages are related to the sale of technology, and entrepreneurial services as well as profits from the operation of the projects. The foreign firms which undertake to establish the production relationship enjoys the independence in decision making. The decision of purchasing the products and projects by the local authorities if and when taken with mutual understanding, protects the foreign party against many apprehensions.

However, the contractors could have many apprehensions too. Their fears could relate to transfer risks, pricing of the output of projects, contract frustration caused by sovereign position of governments and expropriation etc. From the contractor's point of view, the prevailing national, regional or international guarantee facilities do not give sufficient coverage to these important investment activities. So, in situations of calamities or any other wide ranging threat to the projects, responsibilities for risk are disproportionately borne by the contractor.

*How to Finance an *Istisna' Contract?*

As delayed payment of obligations enhances cash flows of the recipient, it is beneficial for an acquirer of assets (importer) to bargain for a longer maturity structure for the payment of its obligations. Similarly, an advance payment for the country's exports will also enhance its present cash flows. A typical example of such flows is the advance payment of a consortium of some Islamic banks for the Pakistani rice and cotton. Thus, Islamically acceptable finance *only* takes the form of deferred sale, more exactly, deferred payment and deferred delivery, respectively in the two cases. Consequently, for the acquisition of assets for *end-use* purposes, irrespective of whether investment or consumption, as importer of goods and services, in the final analysis, Pakistan's options for external resource mobilization are restricted to purchase with delayed payments. However, as briefly discussed above, these arrangements can provide a comprehensive framework for interest-free investment financing.
How the *istikna* contracts could be financed remains to be an important consideration. When the mark-up based Islamic financing was initiated, a client and a financier dealt with each other on a one to one correspondence. Then the concept was developed into syndicated installment sale, leasing and *murabahah*, in which several financiers jointly finance one client on the basis of the mark-up by sharing the cost plus according to the proportion of the finance provided by them. With the same logic, numerous financiers can come together to provide the *murabahah* finance and share the mark-up in accordance with their contribution of finance. Each financier will hold a certificate of debt say, $106 ($100 principal finance and $6 as the mark-up) to be redeemed, say, in five years.

These certificates can only be redeemed not traded. However, it may be declared by the promoters of the project that during a certain period, the certificates can be converted into common stock of the project if so desired by their holders. With the conversion possibility, these debt certificates would represent some form of convertible warrants as used in many developed countries.

7.4.3.6 *Acquisition of Skill-Asset Combinations by Participation*

Incorporation of an ownership stake for the foreign suppliers in the above mentioned arrangements will enhance efficiency of the projects. Foreign suppliers may be offered to share in the output or profits of the respective projects with a declining nature of participation instead of the deferred sale mechanism. Accordingly, on the orders of the host party a foreign investor establishes an industrial facility in the host country as a joint venture. Profits or output could be shared on *pro rata* basis. Moreover, the host undertakes to gradually buy the ownership share of the foreign party in the project.

In addition to traditional forms of durable assets (land in *muzara* and trees in *musaqa*) new forms of durable (rentable) assets can also be given over on the basis of output or revenue sharing. Ibn Taimyyah, is reported to
have preferred such an arrangement over renting on the basis of equity. In a broader sense, the gross income (output/revenue) sharing arrangement could thus be used for the utilization of all possible real assets, in addition to land and plantations.

*Output Sharing: Modern Variant - 1*

In the development of natural resources, particularly, oil, and other precious commodities, the production sharing arrangement has been widely used. In this arrangement, the foreign party shares in the production of the project rather than the profits. In context of Pakistan, exploration of oil, coal, mineral resources and agro-business are good candidates for outright production sharing.

A major operational problem in production sharing arises due to risks associated with the sale of output which effects supply, prices and ultimately revenues. Thus, the amount of production under this contract becomes a sensitive issue in the relationship of the two parties. These sensitivities are only a matter of negotiation and identifications of contractual responsibilities.

*Output Sharing: Modern Variant - 2*

As production sharing is related to commodity producing sectors, revenue sharing is relevant to public utility generating projects, such as roads, bridges, energy, telecommunications, airports, sea ports etc. These sectors generate revenues, which can be shared by local and foreign parties.

In this regard, the Turkish experience is worth exploration. Since 1986, Turkey is using the concept of revenue sharing bonds to mobilize resources for the Public Participation Fund (PPF). Through the mechanism of Revenue Sharing Bonds (RSB), the private sector participates in infrastructural services such as bridges, dams, power plants, highways, telecommunication etc. The proceeds of the RSBs are not guaranteed but are calculated annually on the basis of equity.

---

1 Siddiqi (1991) and al Masri (1986).
basis of the revenues accrued to these infrastructural projects. The concept of the RSB could have long lasting contribution to the socio-economic development in countries like Pakistan, and Turkey which have marketable and large publicly owned infrastructural projects.

In Pakistan, the financial resources to be allocated to the infrastructural sector can be enhanced by privatizing at least partially some of the infrastructural projects including perhaps seaports, civil airports, major highways, bridges, irrigation channels and other revenue generating projects.

The outstanding debt on Pakistan has partially been created by these infrastructural projects. The revenue generated by such privatization schemes can be partly used to retire the outstanding debt and partly for avoiding additional borrowing for the development of infrastructural projects. This will also have a sustained positive effect on the overall economy.

The incorporation of private interests in the projects will also introduce a discipline on the utilization of funds in more rigorous cost effective manner. This will ensure avoidance of problems associated with cost over-runs particularly, of the huge infrastructural projects and quick improvement in the highly needed infrastructural services. The overall competitiveness of the national economy will improve.

In addition to these inherent advantages of the scheme, it is flexible for policy changes, to suit different objectives of national economic policies. For example, in Turkey, part of the revenues from the RSBs are invested in the remote parts of the country in labor intensive schemes. The funds can also be spread out with public funds, thus can have efficiency effects on such public funds. Therefore, the general validity of the RSB scheme for economies where infrastructural facilities are underdeveloped is obvious. However, it may take perhaps many years of familiarization before the lesser developed economies are convinced to implement similar initiatives. It also seems to be linked to a
reasonably developed capital market as well as a responsive private sector to make the scheme more successful.

\textit{Output Sharing: Modern Variant - 3}

Supplier of equipments can also provide them with the contractual agreement that a part of the production generated with the use of the particular equipment will be apportioned for the supplier. The receiving party uses the equipment for specific production purposes determined by the contract. Pakistan can consider contracting with manufactures to install plants in Pakistan on the basis of this arrangement. As an example, we may mention the huge market inside Pakistan and its surrounding countries for automobiles and personal computers. The foreign manufacturers can produce in Pakistan, share output and market it into the Central Asian countries.

This arrangement has several advantages for both parties. For the foreign party, it is a form of investment in the sale of equipment. The supplier of the equipment expects that on one hand he can market his technology and machinery and on the other hand, he can receive the production of his choice. The portion of the production brings him several advantages over other forms of investments. For example, he shares the advantages of low cost production in producing in a country abundant with raw material without being involved in any economic and political sensitivities. Economic as well as non economic risks associated with direct investment are thus minimized.

For Pakistan, the contract serves the function of risk finance. The supplier shares the risks involved in the process of production, technology is effectively transferred, and the problem of foreign marketing is overcome to certain extent. It is obvious that the buyback arrangement does not entail any significant amount of secondary finance as is the case with many other types of contractual investment relations.
Output Sharing: Related Considerations

In production sharing contracts three major risks are involved and shared commonly by the two parties: i) Uncertainties regarding recoverable reserves, ii) The price of the commodity (mostly oil and other minerals) in international markets; and iii) The operating costs of the field. Risk sharing would, therefore, relate to any of these or other risks specifically or all of them in common. There may be a formal contractual arrangement, "in which the contractor is paid some multiple of the costs it has incurred, if a commercial field is discovered. However, the concept can also be extended to a payment of a fixed fee per barrel (unit) or even a share of the value of the oil (product) produced".

A risk sharing contract is mostly used in the mining sector. One form of the risk sharing contract for example, would be payment of foreign firms' shares not in kind but in cash, where another form of the contract may be the guarantee provided by the foreign partner of the contract to sell a part of the product at an agreed price. In the previous case, the local party of the contract takes the risk of selling the output where in the latter case the foreign partner takes up this responsibility. In some contracts the case of risk sharing may be even more different. The foreign firm sinks its resources into the exploration process risking the failure of the project. All the costs of production would then be received back through the revenues of the project.

74.3.7 Musharakah Joint Ventures

Pakistan has to exploit the accumulated experience of its well developed specialized institutions, namely the national development financing and investment promotion institutions, skills in contracting and building, experience of trading corporations etc., for venturing into inward and outward oriented joint ventures and various types of *istikna* contracts as highlighted above.

---

1 Lessard (1986).
As external resource mobilization involves the process of facilitating local requirements and external financial, entrepreneurial and technological resources, both equity as well as contractual joint ventures are an effective source of encouraging the inflow of foreign investment. Pakistan has a reasonable experience of some public sector equity joint venture with Saudi Arabia and some other Muslim countries. As these joint ventures are being privatized, establishment of similar joint ventures in the financial and non-financial private sector is being encouraged by Pakistan.

It may be noted that the degree of industrial specialization in Pakistan is considerably high. The organization of investment projects by local managers and entrepreneurs is possible compared to other developing countries. However, proper institutional support also needs to be provided by the government in order to bring together local resources, foreign capital and technology.

It can be noted that foreign capital can be provided by multilateral organizations, Islamic banks, other institutional and private investors. Technology can only be provided by multinational corporations. Whereas, local organizations such as national development financing institutions (NDFIs) can play a crucial role to intermediate between local investment opportunities and external resources. Thus in most cases, a trilateral joint venture between, a) NDFI representing local parties, b) foreign financiers and c) Multinational corporations as suppliers of technology would be an effective organizational form.

7.4.3.8 Foreign Direct Investment

For attracting foreign direct investment, Pakistan is directly competing with China and India. Pakistan, has however, recently offered maximum incentives to foreign investment in the energy sector, including power generation, exploration of coal and natural gas and related production. The present government has signed memorandum of understanding with foreign
investors for about US dollars 20 billion. Most of these projects are expected to be completed by the year 2000. Even if half of these targets are achieved, there would be an additional average annual inflow of foreign direct investment in the power sector of US dollars 2 billion for the period. If the expected 1 billion dollar net inflow for the year 1995 is maintained, the year 2000, Pakistan's average net inflows would reach US dollars 3 billion on yearly basis which would be an increase of 400% over the 1990 period.

Apart from the energy sector flows, Pakistan's prospects to attract FDI are bright in general. However, in an FDI vis-à-vis istisna' scenario, one needs to look at the implication of the political rhetoric of “the country being sold” and the associated sentimental opposition to FDI and its impact on investors' confidence in a longer term perspective. With this consideration in view, istisna' is superior to FDI as it does not lead to foreign control of national resources. Similarly, a joint venture with declining foreign participation would also alleviate the fears of foreign control and improve the investment climate.

We therefore, understand that by incorporating these consideration in the investment policy, the climate for foreign investment can be improved. This will imply that the foreign investment should be based on istisna' whenever possible and in most cases the possibility of a systematic exit for foreign investors from projects must be provided. This will alleviate the pressure of the opposition to foreign investment and enhance mutual confidence between home and host parties.

7.4.3.9 Financial Instruments

*Mudharabah* (PLS) bank deposits and certificates the two prime Islamic financial instruments. A number of factors are expected to strengthen the demand for PLS deposits. In a recent supplement on Islamic banking the *Wall Street Journal* estimated that during the next ten years 50% of savings of the Muslim people (which at the present is estimated about 100 billion US dollars)
will be handled by Islamic banks. A number of factors are expected to support the market for mudharabah-based financial instruments. Foremost important among these is the fact that the general awareness about the Islamic requirements for investment has been growing for more than three decades. Moreover, due to the revolutionary breakthrough in the field of technology, information about investment opportunities is becoming more easily accessible.

These developments are conducive for an investment environment where investors do not like to involve in the management of the enterprises. To attract the potential demand, the general principle of mudharabah financing (i.e., separation of management and control of ownership) could therefore be effectively utilized.

PLS Foreign Currency Accounts

PLS foreign currency accounts offer a potential source to attract the savings of a large segment of expatriate investors. The only foreign currency account (FCA) offered now is interest bearing. The return on this account reflects LIBOR plus a little margin guaranteed by the banks which are mostly public sector enterprises. Ironically, Pakistan does not offer foreign currency PLS accounts to attract the savings of the Islamically conscious investors.

The PLS accounts are not new for Pakistan. Pakistani banks have acquired experience in the operation of these accounts. If PLS FCAs are introduced, it is expected that a large number of non-resident Pakistani investors and non-Pakistani investors who avoid interest will also be attracted from the Gulf region and other countries.

Modaraba Certificates

Modaraba Certificate is another Islamic financial instrument issued by Modaraba companies since 1984. At the present, there are over 52 companies with a total subscribed capital of about 9 billion rupees listed in the local stock

1 See Wall Street Journal April 9, 1996).
markets. However, the Modaraba as a sector is under tremendous market pressure and has lost substantial value during the past three years\(^1\).

One of the serious problems of the Modaraba companies has remained their relative disadvantageous position as compared to their competitors in terms of availability of liquidity. Leasing companies and banks compete with the Modaraba companies in the business line. But leasing companies have been mobilizing funds thorough certificates of investment as well as from the sources of conventional credit. Banks have also been using their resources in competing with Modaraba companies in the leasing business. However, till recently, the Modaraba companies have been relying on only one instrument: the Modaraba certificates.

There Modaraba certificates have two primary limitations. First, these are non-voting but non-preference shares. Obviously, as compared to both the common and preference stock of other companies these certificates are inferior assets. Second, these are part of the permanent capital of the companies and cannot take care for the function of temporary capital of the companies.

Perhaps, due to these limitations some financial innovation has been introduced in the Modaraba companies, namely, a) International Finance Corporation's Income Notes (IFC-INs), b) *Musharakah* Certificates and c) Redeemable *Musharakah* Certificates (RMCs). The *musharakah* certificates are an equivalent of the common stock of other companies. The IFC-INs are equivalent to redeemable preference shares with conversion options. Whereas, RMCs could be compared with the defunct participation term certificates.

The fundamental problems of the companies is however related to their dominant asset i.e., Modaraba certificates. The new arrangements are steps in the right direction, but cannot solve the problem of the Modaraba certificates as dominant assets of the companies. To overcome the problem of these assets

\(^1\)For a comprehensive study of the sector see Khan (1996).
these should be brought at par either with common or preference stocks of other companies.

More, most companies manage their assets in the trading and leasing activities. This has put these companies at a relatively disadvantageous position compared to the more specialized leasing and trade financing institutions. The exercise is however, one of a success. These institutions can be vitalized by appropriate policies including easing the burden of double regulation by the Corporate Law Authority and the State Bank of Pakistan and by providing appropriate tax structure.

In addition, the activities of the companies need to be diversified. There is a potential to establish capital market Islamic funds to lure Islamic investors from outside Pakistan to invest in the country's stock markets. At the present, no such facilities are available. The activities of the Investment Corporation of Pakistan (ICP) are seen by many investors suspiciously. The portfolio of all the ICP issues are two liberal as the ICP remains indifferent with respect to the capital structure and business activities of companies while selecting their stocks. Islamic unit investment funds can cater to this genuine demand of the investors.

Another potential area for the expansion of the activities of these companies is the area of syndicated financing. Syndicated Islamic trade financing, installment sale, and leasing are being practiced by the Islamic banks for a number of years. In fact, Pakistan has benefited from this type of Islamic financing to market rice and cotton as well as procuring assets for some energy sector projects. However, the mudharabah companies have not been involved to any significant extend in such financing activities. A working relationship between these companies and Islamic banks can contribute to the enhancement of inflow of foreign capital.
New Sources of Resources

The mudharabah companies are mostly relying on shareholder's equity. These companies have the potential to expand their activities and return on equity by opting for installment purchase to finance their trading and leasing operations. Such financing may be readily available with the Islamic banks which are looking for investment opportunities.

The mark-up mechanism has so far been utilized by the Islamic financial institutions for asset management. The use of the mark-up principle in resource mobilization is not common. Initially, the Islamic financial institutions had an excess liquidity problem. Therefore, the need for mobilizing additional resources was not an urging matter. But, financial as well as non-financial enterprises always require additional funds for expanding their operations and enhance their rate of return on equity.

The mark-up is irrelevant for deposit mobilization, because, the Islamic law does not recognize money as an object of sale. Individuals, households and firms need money not for its own sake, but for the fact that money enables its holder to have a command on goods and services. In this way money plays a crucial role in the market economy. To play this role efficiently, money has to be neutral between goods and services and not compete with them as an object of sale. If money changes its neutral role and starts to play the role of an object of sale like goods and services, markets will lose their efficiency and consequently the society will suffer.

Trading in money for money, is thus prohibited in Islam. Interest-based deposit mobilization, in fact implies that the depositor sells his current amount of money on deferred basis to receive a higher amount in the future - with 10% annual rate of interest, a dollar deposit is sold now, for 1.10 dollars a year from now! This constitutes riba. For this reason (for the prohibition of sale of money for money), the mark-up is entirely irrelevant for deposit mobilization.
However, deposit mobilization is not the only source of resource mobilization. As mark-up based financiers, Modaraba Companies and other Islamic financial and non-financial institutions acquire ownership of assets and then lease or sell these on installment basis to their clients. In all cases, the these institutions pay to the sellers of these assets in lump sum, but they receive from their clients on installments. This must cause a mismatch in the two sides of the balance sheet as well as impose a cash flow constraint on the operations of these institutions.

The liabilities of Modaraba Companies at the present comprise only of permanent equity (share-holders' capital and Modaraba certificates). In this way, these are 100% equity-based. Similar is the case with Islamic banks. As a matter of fact, the conceptual foundations for resource mobilization through deferred purchase are yet to be developed.

Even if these institutions can adopt a policy of 20% mark-up based leverage, by avoiding up-front and lump-sum payments and resorting to installment purchase, they can mobilize substantial resources. The case of Islamic institutions is different compared to conventional banks. Islamic institutions are involved in deferred trading. The assets financed by them make their clients more solvent compared the clients of conventional banks where the use of funds is often not possible to monitor. Hence, the assets' side of the Islamic institutions is comparatively more stable. Moreover, Islamic institutions do not have any fixed obligations on the liability side of their balance sheet at the present. Thus, they have a better potential to take the burden of a suitable amount of leverage.

Enhancing Capital Participation

To attract Islamic investors, Pakistan needs to provide investment opportunities in existing enterprises. In this regard the position of the OIC Fiqh Academy resolution discouraging investments in enterprises having interest-
based assets and liabilities needs to be noted. A three-tier policy is needed to promote investment opportunities in the framework of this resolution.

First, and foremost important matter is the cleansing of interest from the capital structure of existing companies. This should be the concern of a conscious policy. Since a lot of financial re-structuring is going on in the economy, the atmosphere for such a policy is ripe in Pakistan.

Second, many enterprises may not be having any interest in their capital structure such as owner-operated non-listed enterprises. National Development Financing Institutions (NDFIs) have the mandate to intermediate between small domestic enterprises and international financiers. Larger reliance on arrangements like line of equities, line of leasing and installment sale as used by the Islamic Development Bank with the NDFI's can enhance investment opportunities in this area.

Finally, a lot of management re-structuring is taking place in the framework of the privatization program. This is an opportunity for the Islamic investors to come forward and take the management of the enterprises and re-structure their capital in terms of Islamic investment requirements. The potential of this opportunity needs to be explored.
7.4.4 Coping With Risks

Many risks, thus opportunities are ahead to confront and exploit in the process of reducing the reliance on interest-based foreign resources. Some of these considerations are mentioned here.

Debt Management

The trade-based modes of financing also create debt. Therefore, it may be asked that what difference these will make compared to interest-based credits, for the debt profile of the recipient country. The difference between the two are several.

First, the sale-based arrangements transfer physical assets, R&D intensive services and technology to the host countries at the initial stages of the contract. Logically, therefore, so-called "urgencies" which divert funds under debt finance to consumption could not adversely influence resource allocation under sale-based finance.

Second, completion of the payment of deferred price of the equipments, consumption goods, research and development intensive services, finalizes the transfer process of ownership. This could be expected to work as an added incentive for the efficient operation of projects.

Third, the bias of sale-based finance towards investment is also expected to positively contribute to the overall performance of the economy. As a result, the issue of debt-default could not matter much in this case.

Finally, under sale-based arrangements, a greater part of foreign liabilities constitute projects equipments or other physical assets. If need may arise, ownership of these projects can be sold to amortize the debt. Such is essentially not the case under pure debt. Thus, management of debts created

1Payment of installments, is not necessarily a function of the operation of the projects. Yet, for an incentive advantage such an arrangement could be superior.
through sale-based finance could be much easier compared to the conventional debt financing.

Contract Enforceability

The success of any strategy based on the above outlines of the interest-free options will depend on how effectively the numerous contracts are going to be enforced from the perspective of both Pakistan and external partners. A failure of enforcing contracts forcefully has the potential risk to lead to riba and gharar. Islamic assigns great importance to fulfilling contractual obligations. The maturity of all deferred sale transactions involves time. Therefore, contract enforceability becomes a serious risk for both parties, such as sub-standard supplies and debt default, respectively, for importers and exports. The rights of all parties need to be protected by proper institutional arrangements.

Debt default is a threat to the interests of the owner of the debts. If it is serious, no credit could forth come. As interest-based debt re-shedding is not possible, default could be a much serious problem in an interest-free economy compared to an interest based economy. However, in accordance with Islamic injunctions, the following concepts may be developed to provide institutional arrangements to overcome the problem of default. First, if the seller feels that by selling on credit he may be exposed to the risk of default (particularly in a foreign country), he can ask for a material security as mentioned in the Holy Qur’an.

In case of default the owner of the debts will recover his money by selling the material security (if the market price of the security is higher than the debt, the excess amount will be returned to the owner of the security). Second, there is a specified share of the indebted persons (algharimin) in the zakah proceeds. If there is a debt default, some part of the zakah proceeds the share can be used to compensate the owner of the debts by the government. Third, the collection of penalties from the defaulters by the government is possible. Although, the proceeds of such penalties cannot be paid to the owners of the
debt, yet they can be channeled into a general organization such a the government's guarantee organization. Fourth, the transfer of debt from one's obligation (dhima) to another person's obligation (i.e., hawalah al dayin) is another important consideration with regard to overcoming the default problem. Two forms of hawalah al dayin are mentioned in the literature: In the first case the debt is in fact transferred from the original debtor to a new debtor (see, also the concluding section) and in the second case the debt is not transferred as such but a third party guarantees the payment of debt.

In the same manner, the domestic parties need to be protected against possible violation of specifications while supplying equipments, projects etc. Specifically due to the deferred nature of deferred sale, a particular level of general uncertainty may prevail regarding the quantitative and qualitative availability of information to both the parties in relation to the following matters: i) the existence of the object of sale and its price, ii) characteristics of the object of sale and its price (identification of species, quantities, future performance etc.,) and iii) control of the respective parties over the object of sale and its price. If excessive, this uncertainty may cause a loss to the buyer and is called gharar. In order to protect the rights of both the two parties of a transaction Islam calls for the elimination of such uncertainty by arranging just contractual arrangements and their enforcement.

To overcome these difficulties, the importing countries need to provide proper institutional arrangements, including guarantees. While, such arrangements can be ensured by bilateral agreements. Parties' rights to international contracts are also protected by relevant international conventions. In addition, the international guarantee facilities such as MIGA and the Islamic Insurance facility can be utilized to minimize the apprehensions of parties to such contracts.

---

1See, Saleh ibid.
2ibid
Hedging Against Price Fluctuations

Changes in international commodity prices, interest-rates and exchange rates pose Pakistan a risk on both the current and capital account. LIBOR is likely to increase to 6% in 1995 from 4% in 1994. This is linked to the Pakistani economy by the rates on the FCDs. To keep the FCDs at par, at least with the LIBOR, rates on the FCDs have to be raised to over 6% starting from 1995 from 4% in 1994. When and if international interest-rates are increased, Pakistan's interest services are bound to increase. The most effective way of dealing with this situation is to by-pass the market for interest-based markets by resorting to interest-free alternatives.

Even if Pakistan resorts to interest-free alternatives completely, a number of risks cannot be ignored. The existing outstanding debt is bound to pose challenges, which however, at present does not seem to be a serious problem. Most of this debt originates from official development assistance, contracted at a fixed interest-rate. An increase in the market interest-rate will however, effect Pakistan's private debt liabilities which are around US dollars 2 billion at present and are likely to increase in the future. These loans Pakistan has to avoid by stopping new contracts. Moreover, unless alternatives are developed, the new deferred sale contracts will also be based on the benchmark of LIBOR. But again, since rescheduling of debts under these contracts are not possible, no serious interest-rate risks are foreseen. The financiers may confront some risk, but as active players in the market they may even benefit from this risk by appropriate hedging.

As regards exchange-rate risks, Pakistan is not expected to confront any serious problems. Pakistan's existing debt is reasonably better kept as far currency composition is concerned. Moreover, Pakistan's export earnings are also well spread over countries of important currencies. Nevertheless, if the new direction of resource mobilization is adopted, Pakistan's hedging position could be improved overtime by making it a policy target. The central point of
this policy target would be to match the inward salam-mualjjal contracts with the outward salam-mualjjal contracts.

In simple terms this implies that for each one dollar worth of inward contracts Pakistan must try to build-up a corresponding outward contract, as for each one dollar of imports there must a corresponding one dollar of exports. Particularly, when liabilities in foreign exchange are deferred, an equivalent amount of assets in foreign exchange must be deferred to have a hedge against future uncertainties. In the traditional sense, imports are usually controlled, but in case of various inward contracts, the government should rather attempt to maximize the number of such contracts. The potential for Pakistan to export such contracts is also high. Pakistan's national development financing institutions, contracting institutions and investment appraisal capabilities, are matured compared to many countries, particularly, in the Central Asia. These institutions, private investors from Pakistan, trading companies and Islamic banks have the potential to work together for the export of contractual investments from Pakistan to many developing countries.

Most hedging activities are facilitated in the stock exchange and future markets by options and derivative trading. Pakistan has yet to develop these markets but from the technical, professional, institutional and shari'ah point of view, we researchers have to face the blame of ineptness towards the lack of understanding of these contemporary institutions and take the challenge to develop the Islamic conceptual framework in this regard.
CHAPTER 8
TOWARDS A CONTRACTUAL MODEL OF PROFIT-LOSS-SHARING
8.1 INTRODUCTION

We noticed in chapter two that the theory of the PLS assumes availability of full and equal information about actual profits to depositors, banks and entrepreneurs. Given this information each group asks for a minimum p/s ratio acceptable to it. As the central mechanism underlying the PLS system is the p/s ratio rather than the rate of profit, the model does ignore the possibility of losses. The existence or non-existence of an expected positive rate of profits (a positive NPV investment opportunity) determines the existence or non-existence of a PLS contract. On an ax ante basis, the PLS contract exists, because the expected profits of the underlying projects are not only positive but are also superior compared to competing opportunities. Thus there is only one possibility to start with a PLS project, i.e., a positive NPV investment opportunity. This consideration is so central to the model that Siddiqi explicitly emphasizes the point that banks as prudential institutions will almost ensure positive profits.

For defining the p/s ratio the assumption of a positive rate of profit is needed. However, as for the case of the PLS as an alternative to the interest mechanism is concerned, there are practical difficulties inherent in the PLS itself, which we discussed in previous chapters of this work. The objective of the present chapter is to recapitulate these inherent limitations of the PLS. The chapter also aims at summarizing and formalizing the proposed reform in the PLS mechanism.
8.2 A BASIC LIMITATION OF THE P.L.S. MODEL

The PLS is based on the concept of Islamic financial contracts, particularly, the MM. The MM are firm level arrangements. However, the PLS model derived from the MM contracts does not emphasize the firm level behavioral considerations. The model instead is more suitable to deal with the closed economy macro-monetary system. A monetary model does not require to be based on behavioral considerations. Therefore, most criticisms of the PLS are launched from the contractual and behavioral premises.

In the previous chapters we argued for changes in the PLS from a number of aspects. Fundamentally, the PLS should mold to meet the requirements of firms rather than asking them to confirm to its given structure. The most crucial implication of this consideration is in the area of ownership structure of firms. Considerations related to ownership structures are equally relevant within a firm in a closed or open economy and between foreign and local parties in an open economy context.

We reported that at least two studies, namely, Ahmad (1990) for Sudan (which is a capital scarce economy) and al Hajjar and Presley (1996) for Saudi Arabia (which is a capital rich economy) found that firms do not like to use the MM arrangements. The brief explanations in both the two cases is related to considerations for ownership structures. The two researchers asked their respondents: “Do you prefer the MM modes of finance?” We argued that the MM are more than modes of finance; these are in fact forms of enterprises. So strictly speaking, the implication of the question asked is, “If you need finance, will you prefer to change the ownership structure of your sole proprietorship enterprise and become a partnership in case of musharakah, or close your business and work as an agent in case of mudharabah?”

The central issue is therefore that, in the PLS, the availability of finance is conditional to the change in the firm’s longer-run ownership structure. From the firm’s perspective, this is a crucial behavioral consideration which the PLS model totally disregards.
8.2.1 A Proposed Reform in the PLS

The PLS can be re-structured and vitalized by incorporating the ignored behavioral consideration. By disregarding this consideration, the PLS has confronted the typical principal-agent problem. In a principal-agent relationship, the allegiance of the agent to the contract depends on whether cooperation or non-cooperation is more financially rewarding. If non-cooperation is rewarding, the agent will behave dishonestly. Consequently, the efficiency of an enterprise characterized by a principal-agent relationship largely depends on the implicit or explicit incentive mechanisms underlying the contracts.

We take up mudharabah as a pure financial contract based on sharing - a contract in which the financier owns the project but the entrepreneur manages it and the outcome is shared by the two and the entrepreneur controls all the information related to the operational results of the enterprise. The entrepreneur could have an incentive to report the enterprise as inefficient and keep for himself a larger proportion of the project's outcome. In a cross-country scenario the problem will be aggravated by many other considerations. Thus, from the perspective of the principal, efficiency of the enterprise is also restricted to the reporting by the agent in addition to its actual operational performance.

Some researchers argue that, for two reasons the above situation will not arise in an Islamic economy. Firstly, Muslims believe in the eternal concept of life, in which honesty is rewardable and dishonesty punishable. This is a non-material incentive for people to be honest. Secondly, if all financial operations are based on sharing (and a continuing rather than one time relationship is developed between financiers and entrepreneurs), honest entrepreneurs will force dishonest entrepreneurs out of the market. So there is also a financial incentive for being honest.

---

1Khan (1983b).
Strengthening Incentive Systems

The behavior of the entrepreneur could be checked by the principal by monitoring which could become too costly to be feasible. The other way to counter dishonest agent behavior is to design contracts in which honesty rather than dishonesty is rewarding.

Both the financial and non-financial incentives for cooperative and honest behavior mentioned above are implicit in the general framework of the Islamic economy. These are not contract specific. Therefore, by introducing certain contract specific incentive mechanisms, cooperative and honest rather than non cooperative and dishonest behavior can be made more rewarding.

But the incorporation of incentive systems in contracts is often difficult. However, one strong incentive for cooperative behavior, which could also be feasible to incorporate in the sharing contract, is the transfer of ownership of the project to the agent within a known time period. By linking the transfer of ownership with the declaration of profits, the agent can be prompted to declare higher profits.

To put the affect of this incentive mechanism on efficiency into sharp focus, two PLS contracts can be compared. In the first case, the principal perpetually holds the ownership of the projects as under the MM. In the second case, the contract ensures that the ownership of the project will be transferred to the agent after completion of certain payment. It is obvious that in the latter case, to complete the payment and get ownership, a rational entrepreneur will not only report honestly but would also work harder. This is not the situation in the previous case. Thus, it could be suggested that incorporation of the provision of sale of investment in the PLS contract may offer a very strong incentive for cooperative and honest behavior and incorporate efficiency elements in the PLS.
Incentives in Mark-up vis-à-vis Sharing

In international investments as soon as a sale element is incorporated in the sharing contract, the principal-agent positions are reversed. As the supply of finance, technology, and R&D intensive services is made on the order of the domestic public or private parties, these parties assume the role of the principal. Whereas the supplier, being working on their behalf acts as an agent.

In such a situation, the incentive structure underlying a particular contract will depend on the relative importance of the pricing and sharing elements. If the pricing element is overwhelming (i.e., if a pure deferred sale is adopted), the supplier may be prompted to maximize his profit by saving on quality; sub-standard equipment and methods may be supplied. But the observation of the behavior of some multinational companies suggests that in order to expand sales and control markets, these companies sell high quality resources at a low profit margin. Nevertheless, generally speaking, the risk of receiving low quality of resources will be high if the importing country is less developed and the objective of the transaction is the import of technology as in offsets, turnkey projects etc.

To the extent that the pricing mechanism is replaceable by the sharing mechanism, an incentive system can be developed to promote the importation of highly quality resources. This is because, under the sharing arrangement, the agent will have an incentive to supply good quality of resources with which higher output can be generated and shared.

The choice between a sharing and a pricing arrangement will depend on the objectives of the import policy. If transfer of technology is the main objective of the import of resources, then pricing arrangements will become inevitable. On the other hand if maximization of national output is the prime objective of the import policy, the sharing arrangement would become more relevant.
Transfer of technology and maximization of national output may not be conflicting objectives. However, the quantity of output to be produced by the imported resources can be verified in a relatively short period of time. Whereas, the quality of the imported technology can only be verified in the longer run.

Therefore, it may be appropriate for many developing countries to postpone their emotional considerations for technology transfer to the future and design contracts with foreigners for the maximization of present revenues. Once the resource-base of these countries is developed by increased productivity and as a result reasonable R&D expenditures are forthcoming, they can also be in a position to evaluate the technological component of the import of foreign resources. This implies that, for some time, some developing countries should give priority to pursue acquisition of projects on the basis of profit or output sharing instead of pure installment purchase.

Accordingly, an agreement will be reached by a host and foreign party for establishment of a joint venture project in the host country according to the specifications of the host. The host party will gradually and systematically purchase the ownership share of the foreign party out of his shares in the profits or output of the project. As national resources will not be permanently owned by foreign investors, this will alleviate the sentimental rhetoric against foreign control and its adverse effects on the investment climate.

Incentive Structures in Gross and Net Income Sharing

Output and profit sharing arrangements could be interchangeable and can be alternatively utilized in different circumstances. In this regard, some points about the suitability of output sharing are worth mentioning.

First, in the process of international resource transfer, due to the dominance of sovereign influence on the part of the principal, especial risks are confronted by the foreign investors. The most important of these are the
transfer risks e.g., changes in economic conditions and policies adverse to foreign exchange earning and payment of profit services.

In many cases, these risks can be managed better by adopting an output rather than profit sharing strategy. For example, in profit sharing, profits are calculated in the local currency and then the foreigner's share is remitted in foreign exchange. During the period of production, sale and profit remittances, exchange rate and exchange control policies may become adverse to the foreign investors. Output sharing is resistant to such risks as currency conversion process can be avoided.

Second, the general perception is that the incentive mechanism of profit sharing makes it more efficient therefore, preferable compared to output sharing\(^3\). However, this may not always be the case.

In Table 8(a) different cost scenarios have been presented facing four foreign projects A, B, C, & D. These projects are established on order of the host country which is their ultimate owner. Therefore, the host country assumes the role of the principal. However, since the foreign suppliers of these projects work on order, they play an entrepreneurial role.

**Table 8 (a): Efficiency Considerations in Net and Gross Income Sharing**

<table>
<thead>
<tr>
<th>Entrepreneurs</th>
<th>Gross Income</th>
<th>Variable Cost</th>
<th>Net Income</th>
<th>Share of Principal in Gross Income %</th>
<th>Share of Principal in Net Income %</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100</td>
<td>0</td>
<td>100</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>B</td>
<td>100</td>
<td>5</td>
<td>95</td>
<td>50</td>
<td>52</td>
</tr>
<tr>
<td>C</td>
<td>100</td>
<td>10</td>
<td>90</td>
<td>50</td>
<td>55</td>
</tr>
<tr>
<td>D</td>
<td>100</td>
<td>15</td>
<td>85</td>
<td>50</td>
<td>58</td>
</tr>
</tbody>
</table>

Assuming that the gross income (output) sharing ratio between the foreign investors in the four projects and the principal (i.e., the host country) is 50:50. The hypothetical data of Table 8(a) shows that investors in all the four projects, irrespective of cost structures of their respective firms, pay equal proportion of gross income as shares to the principal. But as a percentage of net income (profit), the inefficient agents pay more shares compared to the efficient agents. Since, for the determination of the enterprise's profitability, net

---

\(^3\)Lessard and Williamson (1985) p 64.
income is more relevant, the incentive structure underlying gross income sharing crystallizes the cost of inefficiency. Therefore, profit maximizing agents will see the indication that gross income sharing actually works as a tax on inefficiency.

Third, in output sharing compared to profit sharing limited variables need to be monitored, therefore, monitoring the cost would be much easier and

Finally, since the shares of the project in question in a particular time will be sold at the prices prevailing then, efficient projects will fetch more sale revenues compared to inefficient projects. This fact would also work another important incentive factor for the foreign entrepreneur /investor to provide good quality of resources.

8.2.2 A Model Of Redeemable Profit and Loss Sharing

We assume that the firm is interested in the acquisition of independent ownership. This assumption is reminiscent of the Islamic and nationalist sentiments in Muslim countries against foreign control as well as owner-managers' preferences as indicated in Ahmad (1990) and al Hajjar and Presley (1996). Moreover, it is conforming with the ethos of owner operated enterprises which seek funds for growth financing. It is also consistent with the reviving traditional theory of finance according to which firms prefer debt finance due to its redeeming nature and harmony with internal ownership. It is also compatible with the problem at hand: Firms desiring and being able of issuing equities will go ahead with the PLS. The problem is with the provision of that part of the needed funds for which firms are not able or willing to issue equities or offer PLS contracts.

We also assume that an entrepreneur unlike a typical manager prefers to invest his savings in the growth of his own enterprise rather than keeping these savings outside. If he keeps his savings outside, it means that those outside investment opportunities are superior to his enterprise and it will adversely

4This subsection is adopted from Boulem and Khan (1995).
reflect on his own efficiency. However, in the initial stages of the enterprise, the entrepreneur prefers some risk-sharing arrangement as it spreads the risk. Therefore, the promotive role of an Islamic financial institution is essential due to an infant entrepreneur's attitude towards risk. Gradual acquisition of ownership is expected to improve entrepreneurial risk profile. Redeemable PLS encourages entrepreneurial initiatives and ensures a systematic process for their promotion.

We assume that a redeemable PLS enterprise starts operation with a capital contribution by the entrepreneur equal to an amount \( B \), and a capital contribution by the financier equal to an amount \( K \). Compared to \( K \), \( B \) is a small amount. Hence, \( K \) can be re-written as \( K = NB \); \( N \) being a real number. Consequently, the project needs \( B + K = B + NB = (1+N)B \) amount of capital in each period.

With respect to profits and re-invested profits, we consider two cases. The first case represents a hypothetical case of a project which yields a constant stream of periodically (yearly) calculated profits. In the second case the profit yields are assumed to be different in different reporting periods.

**Constant Stream Of Profits**

We assume that the project yields profits equal to \( P \), for all periods. In period \( t_i \), the entrepreneur's share in profits would be

\[
Sh_i = \frac{P_i}{N+1}
\]

Similarly, if the joint nature of the enterprise is contractually agreed for 6 years, the share of the entrepreneur in profits in period \( t_6 \) can be written as

\[
Sh_6 = \frac{P_i}{N+1} \left\{ 1 + 5 \frac{P_i}{(N+1)B} + \frac{P_i^2}{(N+1)^2 B^2} + \frac{P_i^3}{B(N+1)^2} + 5 \frac{P_i^4}{(N+1)^3 B^4} + \frac{P_i^5}{(N+1)^5 B^5} \right\}
\]

\[
= \frac{P_i}{N+1} \left\{ 1 + \frac{P_i}{B(N+1)} \right\}^5
\]
Given this pattern, we can deduce that at period \( j \), the share of the entrepreneur will be

\[
sh_j = \frac{P_{1}}{N+1} (1 + \frac{P_{1}}{(N+1)B})^{j-1}
\]  

(1)

We assume that the share of the entrepreneur in total profits is entirely re-invested in the project for buying-out the ownership shares of the financier. If we denote by \( C_{j-1} \) the entrepreneur's capital contribution in period \( j-1 \) and \( sh_{j-1} \), the entrepreneur's re-invested profit-share in that same period, the entrepreneur's total capital contribution in period \( C_j \) can be written as follows:

\[
C_j = C_{j-1} + sh_{j-1}
\]

(2)

Similarly, \( C_{j-1} = C_{j-2} + sh_{j-2} \)

and so on. Hence, equation(2) can be rewritten to take the following form.

\[
C_n = C_1 + \sum_{j=1}^{n-1} sh_j
\]

(3)

where \( C_1 = B \). Equation (3) shows that the entrepreneur's capital contribution to the project in period \( n \) can be expressed in terms of his previous shares.

As the share of the entrepreneur in total profits increases and that of the financier decreases every year, due to the change in fractional share in ownership, the relationship between the profit \( P_1 \) and the period \( j \) is important. For the project to belong to the entrepreneur in period \( j \), the necessary condition is that his profit-share should be equal to the total profits of the project. In other word, we must have the following equality in period \( j \).

\[
\frac{P_{1}}{N+1} (1 + \frac{P_{1}}{B(N+1)})^{j-1} = 1
\]

\[
\frac{P_{1}}{N+1} \frac{1}{(N+1)B} = 1
\]
which leads to

\[ (j-1) \frac{B(N)}{\log(1 + \frac{P_i}{B(N+1)})} = \log(N+1) \]

Equation (4) shows that time needed for the entrepreneur to take over the project under redeemable PLS and under the profit conditions cited above is inversely related to the amount of profit yield. In other words, as \( P_i \) increases the time needed for the project to pass under the ownership of the entrepreneur decreases. In addition, computing the derivative of equation (4) with respect to \( P_i \), we get:

\[ \frac{d(j-1)}{dP_i} = \frac{-\log(N+1)}{\log(1 + \frac{P_i}{B(N+1)})^2} \cdot \frac{1}{P_i + B(N+1)} \]  

Equation (5) is negative which shows the inverse relationship between the time period \( j \) and the profit \( P_i \). As \( P_i \) increases, the time period needed for the entrepreneur to take over the project decreases less than proportionately.

Over time, the contribution of the entrepreneur increases, which of course, induces him to increase his effort level and increasing his productivity and consequently increasing the profits. This is so because the entrepreneur is taking more risk by investing by retention more and more from one period to another. This increase in profit as a result of the increase in productivity through the increase in entrepreneur-ship will have a positive effect in reducing the length of time \( j \) as shown by equations (4) and (5). As \( P_i \) increases as a result of an increase in productivity, the denominator of the right hand side of equation
(4) increases and hence the right hand side of equation (4) decreases, that is \( j \) decreases.

Depending on the motivation for acquisition of ownership, the entrepreneur is expected to improve his effort level, minimize the non-pecuniary expenditures (e.g., on expensive office furniture, attractive secretarial staff, Concord travels etc.), even report the project over efficient, improve his savings and may even seek to mobilize finance from other sources for quickly completing payments and getting ownership. Thus, it can be expected that the incentive for ownership will work as a deterrent against moral problems.

With the passage of time, the financier's capital contribution to the project diminishes so that the entrepreneur becomes the sole proprietor of the project with respect to the specific financier. As discussed in chapter six, the entrepreneur may have similar redeemable PLS relationship with other financiers too.

As the financier's ownership of the project decreases, its cash flow improves because, the bank does not only share in profits but also recovers its principal capital in somewhat an amortizing form. With recovery of its initial capital contribution and its own share of profits, the bank can start a new project with another entrepreneur. The financier therefore, becomes a source of generating new projects and a promoter of new entrepreneurs. Subject to conditions of equation (6), the financier's share in projects can be maintained until the entrepreneurs become self-supporting and be able to enter into competition.

\[
P_t = B(N+1)\left[\frac{(N+1)}{j-1}\right] - 1\]

Equation (6) shows the relationship between the profit \( P_t \) and the period \( j \) needed for the entrepreneur to take over the project entirely according to the principle of redeemable PLS and under the conditions cited above.
Different Streams Of Profits

In this case, we assume that the profit yield in each period is different, i.e., $P_1, P_2, \ldots P_j$ are different. The entrepreneur's capital contribution in period $j$ depends on his initial contribution ($B$) to which he adds a part of his profit-share of the previous period. In other words, we assume the following relationship between his total capital contribution in period $j$ and his profit-share in period $j$.

$$C_j = B + sh_j$$

(7)

Following this pattern, we can compute the capital contribution and the profit-share of the entrepreneur in each period.

In period 1: $C_1 = B \quad sh_1 = \frac{P_1}{N+1}$

In period 2: $C_2 = B + \frac{P_1}{N+1} \quad sh_2 = \frac{P_2}{N+1} + \frac{P_1P_2}{B(N+1)^2}$

In period 3:

$$C_3 = B + \frac{P_2}{N+1} + \frac{P_1P_2}{B(N+1)^2} \quad sh_3 = \frac{P_3}{N+1} + \frac{P_2P_3}{B(N+1)^2} + \frac{P_1P_2P_3}{B^2(N+1)^3} \text{etc.}$$

Following this pattern, we can deduce the following formula for the entrepreneur's profit-share in period $j$.

$$sh_j = \frac{P_j}{N+1} + \frac{P_jP_{j+1}}{B(N+1)^2} + \ldots + \frac{\prod_{k=1}^{j} P_k}{(N+1)^j B^j}$$

(8)

Equation (8) can also be rewritten as:

$$sh_j = \sum_{i=0}^{j-1} \frac{\prod_{k=1}^{j-i} P_{j+i-k}}{(N+1)^k B^{j-i}}$$
where S and P denote, respectively, the sum and product signs.

It is worth noticing that the entrepreneur does not reinvest all his previous capital contribution in the current period. For instance, in period 2, his contribution was $B + \frac{P_1}{N+1}$; and his profit-share was equal to $\frac{P_2}{N+1} + \frac{P_1 P_2}{B(N+1)^2}$; the new capital contribution in period 3 is equal to his profit-share in period 2 plus the amount $B$. Hence, the difference from his second period contribution

$$\frac{P_1}{N+1}$$

will be left to him to use it either for his own consumption, saving or to start another project etc.

As we can notice, it is difficult to get from equation (9) an exact formula that could help us know the length of time needed for the entrepreneur to take over the project. Given this difficulty, we assume that the profits yield in all periods are equal to $P_1$. From equation (9) the profit share of the entrepreneur in period $j$ becomes equal to:

$$s_{hj} = \frac{P_1}{N+1} \left\{ 1 + \frac{P_2}{B(N+1)} + \frac{P_1^2}{(N+1)^2 B^2} + \ldots + \frac{P_1^{j-1}}{(N+1)^{j-1} B^{j-1}} \right\}$$

$$s_{hj} = \frac{P_1}{N+1} \left\{ \frac{1 - \left[ \frac{P_1}{B(N+1)} \right]^j}{1 - \frac{P_1}{B(N+1)}} \right\}$$

(10)

Given the initial capital contributions of the financier and of the entrepreneur and the expected profit $P_1$, which is assumed to be the same from period one to period $j$; equation (10) gives us the ability to compute the profit share of the entrepreneur in period $j$. A necessary condition for the entrepreneur to own the project at 100% at the end of period $j$, is that his percentage profit share

$$\frac{s_{hj}}{P_1}$$

must equal to one. Hence, from equation (10), we get

348
\[
\frac{shj}{P_1} = \frac{1}{N + 1} \left\{ \frac{P_1}{B(N + 1)} \right\}^2 = 1
\]

which implies

\[
1 - \left( \frac{P_1}{B(N + 1)} \right)^2 = N + 1
\]

Simple algebraic manipulations lead to

\[
j = \frac{\log \left( \frac{P_1}{B} - N \right)}{\log \frac{P_1}{B(N + 1)}}
\]  

(11)

Equation (11) gives the length of time needed for the entrepreneur to get over the project. The length of time \( j \) depends on three factors, a) the capital contribution of the financier, b) the capital contribution of the entrepreneur and c) the expected profit in each period assumed to be the same across periods.

8.3 SOME IMPLICATIONS: RECAPITULATED

The present model of redeemable PLS uses the p/s ratio but introduces a number of important changes to the original model.

First, the present model is a firm level contractual model thus much closer to the premises of the MM contracts compared to the original PLS model where monetary implications have eclipsed contractual considerations. Since the present model is also based on a p/s ratio, the monetary implications of the model can be interpreted as in the original model. But two limitations of the p/s ratio must be mentioned as for using it as a monetary mechanism is concerned: a) Given the level of reliance on the mark-up by the Islamic banks, the p/s ratio
does not remain as viable a monetary mechanism as it was envisioned in the original model which perceived the Islamic economy as 100% PLS-based and b) in our model of the PLS, the p/s ratio is more a micro-economic phenomenon as it is individuated compared to the original model. However, we consider that the mark-up mechanism is more suitable instrumental variable as it can be more effectively controlled by the monetary authorities compared to the p/s ratio.

Second, our model introduces an important change in the PLS. As we interpreted the MM as forms of enterprises rather than as modes of financing, the redeemable PLS can serve as a financing mechanism within the framework of an MM enterprise. This conclusion is consistent with the introduction of two types of redeemable instruments by the modaraba companies in Pakistan. Funds are redeemed by a systematic and gradual withdrawal of the principal amount by the financier. This characteristic of the proposed PLS model takes it closer to the redeeming characteristic of mark-up based funds or even conventional debt finance. Due to its redeemable characteristics, finance will remain neutral to the longer-run ownership structure of the firm. This is most significant change in view of the ownership sensitivities between the financier and owner or between host and foreign parties of a firm.

Third, the present model allows the entrepreneur to retain and re-invest his share in profits to the extent of 100% internal ownership. We are aware that 100% internal ownership is an extreme case. However, this is only representative of a situation of such funds for which the firm is not ready to offer permanent ownership. Indeed, we intend to supplement rather than replace the permanent PLS funds. Our allowance for retention and re-investment of profits by the entrepreneur is expected to introduce efficiency in the firm. As the entrepreneur has the opportunity to re-invest in the firm, his decision to invest outside will signal the superiority of the outside investment opportunities. Thus, the entrepreneur is forced to invest in the firm managed by him. As his stake in the firm increases, he will have the incentive to work harder.
Fourth, the financiers' promotive role is enhanced in our model. In the original PLS model, once a contract is signed, the financier takes permanent stake in the firm unless it finds another buyer. In the present case, the financier systematically gets out from maturing projects and takes up stakes in infant projects. Thus the financier shares the risks of infant and gives up ownership stakes of projects which mature and become familiar with risk and acquire assets by re-investing their profits. Such a promotive role by the financial institutions is highly needed in the developing countries.

Finally, the proposed arrangement combines the prime merits of mark-up and PLS. The merit of the mark-up is that it facilitates the acquisition of assets. The prime merit of the PLS is that it links financiers' interests with the outcome of projects, thus introduces efficiency. The proposed redeemable PLS facilitates acquisition of assets i.e., renders the functions of mark-up, but through the PLS mechanism.
CHAPTER 9
CONCLUSIONS AND IMPLICATIONS
Chapter 9

CONCLUSIONS AND IMPLICATIONS

The emergence and rise of Islamic banking and finance is an important academic as well as practical development of our time. The driving force behind the Islamic banking and finance movement is the prohibition of *riba* and permission of *bai'* (trade) by God in the Holly Qur'an. The Holly Qur'an is the fundamental source of Islamic legislation.

The theory of Islamic finance evolved on the basis of the PLS which is the underlying principle of two participatory Islamic financial contracts, viz., the MM. However, the practice of Islamic financial institutions does not conform to the theory and overwhelmingly relies on the mark-up. The PLS is in striking contrast to the interest mechanism, but the mark-up is not. Yet, it is noticeable that the operations of Islamic financial institutions concentrate on installment sale which is based on the mark-up mechanism.

The Islamic banks seem to be satisfied with this situation, but Islamic economists and *shari'ah* scholars have shown interest in understanding the causes of this phenomenon\(^1\). This is a useful academic exercise as it relates to the understanding of Islamic bank's operations, the development of the discipline of Islamic finance and the evolution of an Islamic financial system. An attempt is made in the present research to offer some explanations about the dichotomy in the theory and practice of Islamic banking and its implications for the future of Islamic banking and finance.

\(^1\)In a recent seminar on *Problems of Islamic Banks*, organized by IRTI-IDB and the Fiqh Academy of the OIC, held in Jeddah during April 1993, Islamic economists and Islamic bankers presented papers on the theme of the seminar. It is interesting to note that Islamic economists, namely Siddiqi (1993) and al Qari (1993a) concentrated on the problems confronted in the application of the PLS modes. Whereas, on the contrary, the papers representing the position of Islamic banks ignored this issue and concentrated on the problems related to mark-up based operations.
9.1 CONCLUSIONS

In chapters two and three we discussed respectively, the evolution and economics of the PLS and mark-up. As for evolution of the theory of Islamic banking is concerned, our analysis suggests that it is based on an economic interpretation of the difference between *riba* (interest) and *bai* (trade). As conventional banking is based on interest which is characterized to be a fixed return on finance, its economic alternative must be strikingly different. The PLS-mechanism was thus offered as a distinct theoretical alternative to the interest-mechanism. The initial models of the PLS largely concentrated on the replacement of the interest-based macro (financial) system with an Islamic alternative. Thus the resultant models emerged to be macro-monetary models. Critics quickly attacked at the gaps in the basic model with respect to the micro behavioral considerations.

On the other hand, we conclude that the practice of Islamic banking is based on the legal interpretation of the difference between *riba* and *bai*. The Islamic law allows a higher rate of return in consideration for time in deferred trading. The mark-up is thus found to be a convenient alternative to the interest-mechanism in the operations of the Islamic banks. As the banking industry is based on risk aversion, to minimize risk, the mark-up has undergone substantial refinements. In many deferred trading operations the risk of ownership for the bank is completely eliminated. This also eliminates the financial and economic distinction between mark-up and interest. However, as the laws supersede economic theory, in the operations of the Islamic financial institutions the mark-up will continue to dominate the PLS. The mark-up is more than a mode of finance - it is a mechanism. As the interest mechanism is implicit in all conventional financial transactions, the mark-up has the same anchoring potential. It underlies all the deferred sale transactions and even the p/s ratio to a certain extent has to make reference to the mark-up.

In chapter four we tried to provide some alternative explanations for the subdued nature of the PLS and robust presence of the mark-up in the
operations of the Islamic banks. The existing research works concentrate on the role of Islamic banks in promoting the mark-up (or not promoting the PLS). In this chapter we looked at both demand (user of funds) and supply (bank) side considerations in understanding the subdued nature of the PLS in Islamic financing.

On the demand side, as the PLS spreads the risks of investment projects, it should have been very popular in the developing countries as the nascent entrepreneurial class can benefit from the risk spreading characteristics of the PLS. We argued that for tapping this potential benefit of the PLS, Islamic financial institutions need to follow entrepreneurial promotion activities such as undertaking new projects through the PLS modes. At the present, such policies are not common among the Islamic banks. Thus the potential demand for the PLS does not become effective. On the other hand, the Islamic banks prefer to deal with more mature companies. These companies are expected to have enough experience with the phenomenon of risk. Thus the risk spreading characteristics of the PLS are not as attractive for them as for the infant firms. Moreover, these companies are able to save and prefer to invest these savings in their own expansion. In such a situation, they depend less on external sources for long-term funds. Thus their demand for the PLS is expected to be weaker compared to the mark-up.

In addition, the demand for a particular form of financial contract must also depend on the nature of that contract. Three characteristics of the PLS make it lesser attractive: i) the provision for the entrepreneur to re-invest his savings in the project is not clearly defined in the PLS contract, ii) the entrepreneur cannot become the sole owner of the project under the PLS and iii) there is no provision in the PLS contract to conveniently raise additional funds. It is certain that by overcoming these limitations the PLS contract could be made more attractive for firms.

Moreover, as the Islamic banks are overwhelmingly using the mark-up mode, it naturally implies that the demand for financing is for the acquisition of
assets. Due to the size of the public sector, as well as credit facilities provided by the multinational corporations for financing re-sale trade, most of the asset acquisition through the mark-up is expected to be for end-use purposes. In such case, the PLS is not relevant.

On the supply side, if the PLS is beneficial for entrepreneurial development, why the Islamic banks do not undertake promotion policies? Promotion policies will require the banks to undertake new projects. The banks hesitate to involve in new projects due to the risk of adverse selection and longer-term involvement in projects. Moreover, despite the beneficial characteristics of the PLS for the economy, it seems that not much work has been done to promote the basic principles of the PLS. The advocates of the PLS contracts are pre-occupied with the application of the historically defined mudharabah and musharakah contracts. Little efforts have been so far made to design such PLS contracts which can suit the incentive and efficiency requirements of the contemporary diverse production processes. These production processes partly involve smaller enterprises and partly large, and even multinational enterprises. The financing needs of these enterprises are expected to be different. Similarly, the Islamic banks seem to have been trapped in the "conventional banking culture", which has its own traditions, conventions, terminologies, notion of risk-return trade-off etc.

Although the deposits of Islamic banks are raised on the basis of the PLS, yet these deposits are not traded in the market. Therefore, the evaluation of the market performance of the PLS through the experience of Islamic banks is not possible. But evaluation of market performance of the PLS is important, for, if the PLS has to survive, it must reward risk. Moreover, the PLS must compete in a market where sophisticated interest-based financial instruments exist side by side.

To evaluate the market performance of the PLS, in chapter five we analyzed the achievements of the Pakistani Modaraba Companies. The emergence and market significance of the modaraba companies can be cited
as an important outcome of the efforts made at the Islamization of the Pakistani economy. This experience is of general relevance for expanding the contemporary practice of Islamic financing particularly, in the non-banking financial sector. The MCos., with initial success have however, confronted some problems in growing, gaining value and improving the wealth of investors. In terms of a number of indicators, e.g., market valuation ratio and risk adjusted return, at the present, their performance in general, is found to be bellow the KSE average. An analysis of this phenomenon is useful in understanding and alleviating the problems confronted by the MCos. Chapter five dealt with these considerations and identified several reasons for the low performance of the PLS. Some of the reasons discussed in the chapter are critically recapitulated in the following:

It can be suggested that an over reliance on the stock markets is the origin of most problems confronted by the MCos. There has been no example of an unlisted Modaraba. Compared to this, most conventional companies, as well as LCos., start business as unlisted companies and get listed after attaining certain level of operational maturity. An infant MCo., exposed to stiff market competition with matured companies cannot be expected to be in a competitive position.

The ease in listing conditions has caused a premature over-spread of the Modaraba sector. The capital requirements for establishing a MCo., is very low; Rs. 5 to 7 million paid-up capital compared to Rs.100 million for the LCos. So, instead of establishing one LCo, with the same capital, 20 MCos., can be established! However, it must be noted that an average size of a MCo., is larger than a LCo., but, some MCos., are really small.

From investors' perspective, the numerical over-growth of MCos., resemble them with the collapsed cooperative and finance companies. As a matter of fact, the performance of MCos., has sharply declined after the collapse of the cooperative and the investment activities of some other companies (notably, the Taj Company) which were somehow linked to Islamic
sentiments. This unwarranted fear on the part of the public has however, motivated the CLA, Registrar MCos., and the SBP to increase their regulatory activities.

Initially, the Modaraba business was encouraged by the government through fiscal incentives. Companies paying 90% of profits in dividends were exempted from the payment of corporate income tax (it shall be re-called that the remaining 10% of the profits is the fee of the manager of the Modaraba). This implies that the tax encouraged dividend distribution at the expense of retention and re-investment. There are strong theoretical arguments backed by empirical research that retention and re-investment of profits has a positive implication for the future growth and acquisition of value (capital gains) by the firm. This argument may not be complete. But, in view of the lack of acquisition of value by the MCos., further exploration of the argument and designing conscious dividend policies seems to be in the interest of the MCos.

This crucial point may be clarified further with the help of an example. True, profit retention is not a feature of the traditional mudharabah. Probably, for this reason, the law does not encourage MCos., to retain and re-invest profits. Since retention and re-investment of profits enhances the growth of a firm and its value over time, MCos., not retaining any fraction of the profits, practically do not pursue any forceful growth strategy. This is certainly reflected in the depressed prices of the MCs.

Compared to this, we can consider a firm whose dividends are taxed and capital gains are not. Such a firm would have an incentive to maximize its retention for growth financing which would enhance its value and capital gains. In the longer-run perspective, the race would likely be won by the firm which retains and re-invests. If the firm faces cash flow problems, like most MCos., retention becomes even more urging. Certainly, there are economic arguments for and against dividend payments. These arguments, all relate to the decision on the degree of dividends vis-à-vis retention. There is no case to my notice,
where an economic argument may have been made for zero retention, particularly, by a firm facing cash flow problems.

The initial tax incentive was withdrawn by the government bringing the MCos., at par with other non-banking financial institutions. The government instead, introduced a tax incentive to encourage the leasing sector. Accordingly, 30% of rental expenses are made eligible for corporate income tax deductions. This naturally left the expectations of those MCos., which were established under the old tax structure unfulfilled. It is observed that some companies, which were not having any genuine interest in the modaraba business, but were only benefiting from the tax shield for raising cheaper Funds for their ongoing businesses had to adjust themselves. This sent an adverse signal to the investors and contributed to the weakening of demand for MCs.

MCos., are short of liquidity. They have to build a reserve with the SBP. They do not have recourse to any long-term credit lines and do not have any source to raise short-term funds. MCs., are the only source of their funds. Thus, the MCos., rely only on rights issues for resource mobilization and pay stock bonuses to save cash. Rights issues and stock bonuses, both put a downward pressure on the price of MCs., by simply increasing the number of MCs., in circulation. In addition, if the investor is in need of cash, neither rights issues nor stock bonuses can meet his requirements. The long-term consequences of this is the fall in trading reflected in the MVR and prices of the MCs.

Compared to the MCos., LCos., and investment banks are in a comparative advantage as far resource mobilization is concerned as these can utilize all forms of conventional instruments. Thus MCos., are under tremendous pressure as for the availability of Funds are concerned. The most serious problem confronted by the MCos., is the mobilization of diversified forms of Funds suitable for different uses, particularly, growth financing. No
single financial instrument can bring the facility for MCos., at par with the financing facilities available to conventional companies and the leasing sector.

Nevertheless, a common characteristic of all possible instruments would be redeemability as compared to the non-redeemability of the MCos. In this regard, recently the religious board has approved two different arrangements, namely, redeemable *musharakah* certificates for using in the local market and redeemable income certificates for dealing with the international investors particularly, the International Finance Corporation. These facilities will no doubt improve the cash flow of the companies, but these are in no sense comparable to the sophisticated facilities available to other competing sectors.

Our analysis has pointed out the relative vulnerability of MCos., vis-à-vis competing sectors such as LCos., and investment banks in the KSE. The reality that Islamic financial institutions will have to show their viability in a mixed environment competing with interest-based financial institutions need to be accepted. No single country, a single market or a single sector can survive in isolation from the rest of the world and the global market and other sectors of the economy. It therefore implies that the MCos., and similar other Islamic financial institutions must be equipped with appropriate financial instruments to confront, rather than escape the phenomenon of "globalization of financial markets". Ideological compromises on the acceptability of interest is not possible. Given this premises, it need to be kept in sight that there are over 30 interest-based financial instruments available, e.g., to the LCos. None of these are available to the MCos., - the MCos., have so far relied on one instrument only, the MCs!.

Even the MCs., cannot be considered superior assets compared to common and preference stocks of the more matured companies of the KSE. The MCs., simultaneously resemble common and preference shares. These are similar to common stocks as far entitlement to return is concerned, but similar to preference shares as the owners cannot interfere in the management of the company - MC-holders do not have voting rights. In this form, MCs., are
inferior assets compared to common stocks, as MCs., owners unlike owners of common stock do not have any control on the company's management. MCs., are inferior assets compared to preference shares due to the fact that preference share holders have preference over common share holders in entitlement to return. So, if investors have to decide between MCs., and common stocks or preference shares of conventional companies, both of the latter two will be preferred.

It can be argued that preference shares would be eliminated from the list of investment opportunities for Islamic reasons. Similarly, common stock of companies which do not observe the shari'ah fully, e.g., which have interest in their capital structure are also eliminated from the list of Islamic investment opportunities. These are important considerations to strengthen the demand for MCs. But it should also be noted that despite these considerations, common stock of many conventional companies are close substitute to the MCs. Moreover, in order to gain value, the MCs., have to attract a wide spectrum of investors which may not necessarily be conscious of the Islamic requirements. Such investors will simply look at the fact that by investing in the MCs., they will forego their voting rights without any benefits of the preference shares!

The Most important implication of our analysis is therefore, to evolve interest-free substitutes to the several instruments available in the market including common and preference stocks. The introduction of Musharakah Certificates by some MCos., is a step in the right direction. Musharakah certificates will be at par with common stock in the sense that these will also entitle the owners to direct the management by using their voting rights. The result of this instrument is yet to be seen. The willingness of the IFC to deal with the MCos., with Musharakah Certificates instead of MCs., is a clear indication of the superiority of the new instrument.

If the function of the conventional common stock is taken over by the Musharakah certificates, the function of preference shares will naturally be left
over for the MCs. But to be at par with the preference shares, the MCs., must be competitive in terms of return. The immediate concern is therefore, how to compensate the MC., owners for foregoing the voting rights which they can enjoy by investing in Musharakah certificates or common stocks of other companies? In other words, why should investors invest in MCs., if they can enjoy voting and control rights by investing in Musharakah certificates and common stock? Unless, there is financial rationale from the investor’s perspective, in the final analysis, MCs., will be considered inferior assets compared to Musharakah certificates; ultimately, MCs., will vanish and only Musharakah certificates will prevail. Given this trend the MCos., must be relieved from the crippling limitations of a solitary instrument, be it a Mudharabah or Musharakah Certificate.

It may be argued that not all investors are in a position and interested to participate in management by voting, e.g., the owner of Funds of the traditional mudharabah. We should however, keep three considerations in view: a) technology has made voting feasible for every investor; by using electronic mail, by the so-called process of “cybercasting”, voting rights can always be utilized, b) it is not necessary that each voter should vote; the possibility that each voter may vote works as a control mechanism on the management and c) most institutional investors, e.g., the IFC mentioned above prefer to have a say in the management of the MCos. Therefore, the issue at hand is not of introducing one more instrument. The challenge in fact is related to the evolution of a comprehensive system of shari’ah-based financial instruments.

Regarding the evolution of a comprehensive system of Islamic financial instruments, it is essential to understand the functions of the conventional instruments available, e.g., in the KSE, and how these functions can be taken over by different Islamic instruments. Most of these instruments have evolved over a period of time. Therefore, we can expect the evolution of alternative Islamic instruments over a period of time too.
Many efforts are underway to overcome the difficulties of *shari'ah* observing institutions related to the availability of financial instruments for resource mobilization. Some good ideas relate to securitization of leasing\(^2\), and installment sale which if approved by the *shari'ah* scholars may offer permissible, yet secured return to investors; some form of equity-debt hybrids ("dequities"), which if accepted by *shari'ah* scholars may offer alternative to preferred stocks\(^3\). Moreover, redeemable Islamic instruments are needed to take over the redeemability function of debt instruments. Financial instruments which can be redeemed without violating the *shari'ah* requirements are urgently needed by the MCos., to improve their cash flow and enable them to compete in the market.

The availability of various types of instruments will enable the MCos., to design appropriate financing as well as dividend strategies. Within the framework of prohibition of *riba*, the MCos., should be independent to design these strategies, particularly, when they have to compete with firms which have the relative if not absolute freedom to do so.

Our analysis suggests that there is a need for the enlargement of the base of PLS financial instruments to provide temporary equity to the Islamic companies as all needs for funds cannot be met by the permanent equity. The abolition of interest has increased the importance of such funds for the MCos., to bring the financial facilities available to these companies closer to those of their conventional competitors. One such proposed instrument is the Islamic warrants related to the mark-up based debts.

The preceding analysis indicates that the more cherished PLS principle of Islamic financing is neither much popular nor much efficient in practice. Given the environment, we suggested that the causes of this phenomenon must be searched for within the PLS arrangement. With this objective, in chapter six we looked more closely at the PLS focusing on some firm level

\(^2\) See, for example, Kahf, (1995).
considerations. This analysis also incorporates the constraint added by the OIC Fiqh Academy Resolution which bans participation in the capital of such companies which carry interest-based funds in their capital structure. The implication of this resolution, which is specifically related to the activities of the Islamic banks is generalized in this chapter. It is argued that in reality the resolution is not restrictive. Because, there must be hundreds of thousands of enterprises in the Muslim world which may not have interest-based funds in their capital structure. Many of these enterprises must be looking for funds in conformity with the *sharia'h* requirements. But due to their preference for strong internal ownership, these enterprises may be in difficulty to compromise with the ownership structure underlying *mudharabah* and *musharakah* arrangements. In addition, the emergence of *mudharabah* companies, for instance in Pakistan, can be cited as an example where capital participation in the framework of the resolution must be possible. By imposing the restriction, the Academy has in fact patronized the evolution and development of interest free enterprises.

Given this framework, the chapter suggested that the problem of capital participation in enterprises is in fact a problem of devising a comprehensive Islamic financing mechanism - a mechanism which can provide financial accommodation in the form of money, but simultaneously remain neutral to the longer-run ownership structure of the enterprise. Redeemability of profit and loss sharing Islamic financial instruments meet these requirements. Subject to the profitability of the enterprise, a redeemable instrument will facilitate the repayment of the principal amount of finance in installments and profits as agreed on *pro rata* basis. Thus, finance will remain neutral to the ownership structure of the enterprise in the longer-run.

In this manner, Islamic banks as well as individual savers will be able to participate even in the capital of the hundreds and thousands of sole proprietorship enterprises. Once a comprehensive Islamic financing

\[\text{3 See, for example, Khan (1995).}\]
mechanism is provided, the infant enterprises are expected to have a proper environment to avoid interest while financing their growth. On the other hand, in the absence of such a mechanism, generally only such enterprises would grow comparatively more which are indifferent to the form of finance. Once grown in such a manner it would always be relatively difficult for them to change their capital structure to conform to the elimination of interest.

Enterprises opting to operate in an Islamic financial environment can mobilize resources by offering participation in their over-all portfolio. Often such financing arrangements lead to non-financial considerations such as control of ownership. Resource mobilization requirements of the closely hold enterprises and some non-depository Islamic financial institutions are unique as these cannot compromise on the control of ownership. The present chapter argued that such conflicts between resource mobilization requirements and control of ownership can however, be overcome by issuing redeemable profit and loss sharing financial instruments. Various aspects of this proposal are discussed in the chapter.

Financial Islamization by a country in isolation of the rest of the world economies may not be feasible as most Muslim countries rely heavily on external financial resources. A good example of such countries is Pakistan. As a nation, Pakistan aspires for replacing interest-based financing with non-interest alternatives. This aspiration was incorporated in 1973 in the existing constitution. The lack of success of the experience of financial Islamization in Pakistan can partly be explained by the continuation of external resource mobilization on the basis of interest even during the peak days of Islamization.

Indebted developing countries including Pakistan have largely realized that they need to reduce their reliance on interest-based borrowing. In case of Pakistan this is reflected in an attempt to drastically cut the budget deficit. In addition, privatization is also consistent with a debt reduction strategy. Thus the prospects of replacing interest-based external resource mobilization with some interest free alternatives are significant.
In chapter seven we analyzed the potential of mark-up and PLS in providing Pakistan a viable alternative to interest for external resource mobilization. We particularly highlighted the potential of *istisna*’ types of arrangements. In this regard, two points need to be recapitulated. First, there is a criticism that the interest-free alternatives of resource mobilization will increase foreign control of national resources. This is inconsistent with public sentiments and to some extent with the popular political rhetoric. As such the investment climate for the interest-free alternatives will remain unfavorable making such alternatives inefficient.

We argued that such a criticism is not always correct as most modern variants of *istisna*, transfer ownership of projects to local parties. In addition, participation with redemption is possible which will not tie-up foreign investors with local projects indefinitely. In fact, the existence of an exit window for foreign investors offered by a declining participation will enhance the investment climate.

Second, for the immediate success of the interest-free alternatives it is essential to use standard known names instead of introducing names which are unfamiliar to international investors. Meanwhile, the Islamic concepts need to be properly popularized. This point is of particular relevance in the modern application of *istisna* and output sharing for external resources mobilization as there are many known variants of these arrangements currently being used in the process of international resource transfer.

The central concerns of any new strategy are its rationality, internal consistency and self-contentment. The rationality of the new strategy to rely more on interest-free alternatives are derived from the economic need and ideological commitment to reduce the cost of *riba* on the economy. The strategy is internally consistent, because, resorting to *riba*-based contracting is not inevitable for the mobilization of external resources. The proposed strategy must also be self-contented.
The two fundamental features of the strategy are: a) it will be based on deferred sale and sharing and b) even the arrangements based on sharing will be fundamentally non-permanent and redeeming in nature to alleviate the fears of foreign control of national resources and consequently to improve the investment climate.

The various modern variants of *istikna* will be dominant in an Islamic strategy for external resource mobilization. It was also explored that some of the modern variants of *istikna* may be based on profit or output sharing. For instance, Pakistan will order a foreign party for the construction of an energy project with specifications and may offer the foreign party to select a revenue sharing arrangement or a deferred price. This is not well fitted in the traditional definition of the *istikna*, but considerable flexibility is needed in designing comprehensive alternatives to the interest mechanism. For the same reason, Pakistan should also offer the foreign party a mechanism through which the party can systematically find an exit in case it chooses the revenue sharing arrangement. As revenue sharing will enhance efficiency by tying-up the foreign party's interests in the project, such an arrangement must be in the interest of Pakistan as well.

Whichever, course of action (pricing or sharing) is accepted, there would always remain the need for secondary finance. The alternative strategy must not scum to interest-mechanism by ignoring the inevitable need for such a finance. In this regard it need to be recapitulated that Islamic warrants must supplement *istikna* and sharing.

Chapter eight analytically recapitulates the central points of the research - in order to increase the prospects of profit sharing in Islamic finance the PLS need to carry the redeemable characteristics of mark-up or debt finance. This arrangement also has positive incentive implications and is expected to enhance efficiency.
It need to be emphasized that the mark-up and PLS have their own merits and demerits. The merit of the mark-up is that it transfers ownership to those who need it. The PLS cannot play this role. On the other hand, the merit of the PLS is that it ties-up financiers' interests with projects which is not possible with the mark-up. Thus in both arrangements some conflicts between the interest of users and suppliers of funds is natural and at the same time each one has inherent potential to minimize the sources of these conflicts. It therefore, implies that, by combining certain qualities of the PLS and mark-up new PLS contracts can be designed which can harmonize the interests of users and suppliers of funds.

Moreover, a provision for profit retention by the entrepreneur in the PLS contract will enhance the entrepreneurial incentives as we discussed in the context of the moral hazard proposition.Entrepreneurs must have the option to invest their savings in the projects they manage. In the presence of this option, if they are investing their savings in other avenues, this will send strong signals that those other avenues are superior investment opportunities compared to the project managed by the entrepreneurs. Thus an automatic discipline will be established in the market for funds, enhancing efficiency. If banks have an interest in better cash flows a PLS contract which allows for profit retention will replace banks' funds by internal financing overtime, improving cash flows, project financing and promotion capabilities of banks. Simultaneously, the considerations of enterprises for balancing internal and external ownership are tend to be fulfilled.

9.2 IMPLICATIONS

Our analysis in this research raises a number of interesting policy implications. It may be useful to discuss some of these in brief.

First, the present use of PLS and mark-up are disproportionate. There is a need to increase the use of the PLS principle. However, a word of warning is
in order. The demand for the mark-up is a segmented demand and is effected for the acquisition of assets either for end-use or for re-sale purposes. If the funds of the Islamic banks are diverted to PLS operations away from the asset market, the demand for the acquisition of assets will have no other option, but to resort to interest-based sources! Thus, given the nature of demand and the available funds, the mark-up mode of financing has a highly useful function to render. As the top economic priority of a Muslim society is the avoidance of interest, the first policy implication of our analysis is that without changing the nature of demand for funds, the existing funds of Islamic banks should not be diverted away from the mark-up. To re-emphasize this point an example can be given. Suppose the institutional requirements and parameters are such that the PLS is overwhelmingly used. Even in such an environment, if a company needs credit to replace an equipment, or a household requires credit to buy a car, the mark-up remains to be a convenient Islamic substitute to interest.

Second, the most crucial question of our analysis is: Should changing the nature of demand for Islamic bank's funds be targeted as a policy objective to promote the PLS? The apparent answer is yes. A large source of the demand for funds which has a bias for the mark-up namely, public debt is a target of macro-economic structural policies in many countries. For instance, the FY1996 budget of Pakistan aims at reducing public deficit to 4% of GNP from 7.9% in FY1993. Such policies, if implemented faithfully coupled with a transparent privatization program will improve the horizon for the PLS financing. Such austerity measures at individual levels can also be called for by invoking the religious injunction against israf (wasteful expenditures) - a big source of leakage of funds to weaken the demand for the PLS.

Apart from these considerations, our analysis implies that an attempt to change the nature of demand for funds from mark-up (which strengthens internal ownership) to PLS (which strengthens external ownership) cannot be rationalized in general. The aspiration of entrepreneurs to strengthen their internal ownership by profit retention is not only a legitimate one but is also
efficient. Moreover, consider the preferences of sole proprietors for funds. These enterprises have their licit right for sole ownership, but simultaneously the financial system should meet their need for funds. Unless, the external funds are redeeming, the demand for PLS implies a sacrifice of ownership for getting funds. Even if justifications are made, it is hard to rationalize an economy wide imposition of a financial contract against the rightful preferences of the entrepreneurs for sole ownership. Thus another important implication of our analysis: If the PLS has to improve its liking among enterprises, it should also be redeeming in nature in addition to being permanent and perpetual.

Third, since a resolution of the OIC Fiqh Academy prohibits participation in the capital of leveraged enterprises, it may be taken as an encouragement to perpetuate the very limited use of the PLS by the Islamic banks. Our analysis suggests that such an implication would be unjustified, as there may be hundreds of thousands of sole proprietorship enterprises which are not leveraged and which need Islamic forms of funds for growth. Capital participation in such small enterprises also is consistent with the philosophy of the Islamic finance movement.

Fourth, some issues are raised related to the need of profit retention and rate of return on equity for the growth of the firm. Implications of retention, self financing and ROE for growth are ignored matters in the literature on Islamic finance. Since Islamic finance basically concerns the avoidance of interest, the arguments raised in the research seek conscious policies to enhance retention and self financing by enterprises. For Islamic enterprises this strategy could work as a shield against interest. A mode of finance which allows retention will also enhance entrepreneurial incentives and efficiency.

Fifth, Islamic enterprises which purchase and lease or sell equipments can substantially enhance their cash flows by resorting to installment purchase instead of their present practices of lump sum payments. In this way, they can enhance their ROE - thus, use their equity more efficiently. In the same context, to subordinate any installment purchase to the PLS, Islamic warrants
could be issued with convertibility options. These options coupled with the desire for installment purchase, can be instrumental in mobilizing additional funds on the basis of capital participation.

Sixth, the redeeming PLS can be effectively used for the promotion of entrepreneurs and projects. Islamic banks can undertake projects with Infant entrepreneurs and gradually transfer their sole ownership to the entrepreneurs.

Seventh, the study has several research implications, particularly in the field of Islamic corporate finance. Most proponents of the PLS have been caught between two opposing approaches; to argue for the superiority of the PLS within the framework of the Miller-Modigliani propositions (see, e.g., Uthman 1994). According to the MM framework, the nature of finance is irrelevant for the efficiency of the firm. This broadly implies that there is a dichotomy between the real and financial sectors of the economy. Whereas, most works dealing with the PLS (see, e.g., Siddiqi 1983, 1983b and Chapra 1985) strongly argue that the PLS has favorable implications for the real sector of the economy. Thus, there is a need to review the Miller-Modigliani framework for analyzing the problems of Islamic financing. This will have implications for the debate on capital structure of the firm within the framework of Islamic financing. As suggested above, many Islamic enterprises can improve their present cash flows (thus efficiency) by resorting to for instance, installment purchase and at the same time offer capital participation. These and related policy considerations particularly, various options to subordinate the sale-based finance to the PLS constitute potential research areas. Moreover, the subject of growth, self financing, retention of profits, consequences of the ROE, the empirical dimension of the subject, all need in-depth studies using probably the data from stock markets of the Muslim countries.
BIBLIOGRAPHY


Ahmad, Ausaf (1987), Development And Problems Of Islamic Banks, Jeddah: IRTI

Ahmad, Ausaf (1993), Contemporary Practices Of Some Islamic Financing Techniques, IRTI.


Ahmad, Ausaf And Awan, Kazim Raza, Lectures On Islamic Economics, Jeddah: Islamic Research And Training Institute, 1992.


Ahmad, Qadeeruddin, "What Is Riba?" Journal Of Islamic Banking And Finance, Vol. 12 No. 1 January- March 1995

Ahmad, S. Mahmud (1947), The Economics of Islam, Lahore: Sh. M. Ashraf.


Ahmad, Ziauddin (1985) *Some Misgivings About The Islamic Finance Movement*, Islamabad: IIEE.


Al Amin, Hassan Abdullah (1990), "Mudharabah Al Sha'ra'a Wa Tatbiqatuha Al Haditha", Jeddah, IRTI.


Al Qari, M. Ali (1993a) "A'rd Li Ba'd Mushkilat Al Bunuk Al Islamiyah Wa Muqtarihat Li Mawajihatih" (Arabic), Paper Presented To The IRTI-OIC Fiqh Academy Seminar On The Theme, Held In Jeddah During April 1993.


al Sadr, M. Baqir (1961), Interest Free Banking in Islam (Arabic), Kuwait: Matbu'a al Asriyah.


Allais, Maurice (1993), The Monetary Conditions Of An Economy Of Markets, Jeddah, IRTI.

Annual Report Bank Negara Malaysia, 1993

Annual Report Bank Negara, Malaysia, 1994


Ariff, Mohammad (1982) Monetary And Fiscal Economics In Islam, Jeddah : Center For Research In Islamic Economics, King Abdul Aziz University.


Ben Djilali, Boulem And Khan, Tariquiah (1995), Economics Of Diminishing Musharakah, Jeddah IRTI (Unpublished)

Ben Djilali, Boulem, (1994), PLS Model For External Financing, IRTI


376


Choudhury, M. Alam (1986), Contributions To Islamic Economic Theory, London: Macmillan

CII - Council of Islamic Ideology, Pakistan (1981), The Elimination of Interest from the Economy of Pakistan, Islamabad: Council of Islamic Ideology.

CLA - Corporate Law Authority, Government of Pakistan, 1992 Annual Reports on the Modaraba Companies. So far, two reports have been released (1990-91 and 1991-92).


Duniyya, Ahmed Shawqi (1990) al Jo‘ala wa al Istisna‘ IRTI


Elias, K (1991), *Islamic Banking In Egypt*, Lund Sweden: Team Offset


Francis, J. Clark (1980), "Portfolio Analysis Of Asset And Liability Management In Small, Medium And large-scale Bank", In Francis (1980), Re-Print


Gulaid, M.A. (1990), *Effects Of Islamic Laws And Institutions On Land-Tenure With Special Reference To Some Muslim Countries*, Jeddah, IRTI


Homoud, Sami Hassan (1994) "al adwat a/ tamwiliyah li al sharikat al musahimah" IRTI, unpublished

Homoud, Sami Hassan, (1985), Islamic Banking, London: Arabian Information,


IDB - Islamic Development Bank, Annual Reports, various

IFA - Islamic Fiqh Academy, Resolution No. 5 Concerning Muqaradah Bonds And Investment Certificates Approved By The Council During Its Fourth Session Held In Jeddah, Kingdom Of Saudi Arabia During 8-2 Jumad Al Akhira 1408 H (6-11 February, 1988.)
IFA - Islamic Fiqh Academy Of The Organization Of Islamic Conference (1989) 
Islamic Fiqh Academy Resolutions And Recommendations, Jeddah.

IIBI - Institute Of Islamic Banking And Insurance (1995), Encyclopedia Of Islamic 
Banking And Insurance, London: Institute Of Islamic Banking And 
Insurance

IMF (1985), Foreign Direct Investment - Developing Countries, Occasional Paper 
No. 33.

IMF (1991), Determinants and Systematic Consequences of International Capital 
Flows, Occasional Paper No 77.

IMF (forthcoming) Manual of Monetary and Financial Statistics

IMF World Economic Outlook (Various Issues)

IPS - Institute Of Policy Studies (1994), Elimination Of Riba From The Economy, 
Islamabad: IPS.

Iqbal, Zubair And Mirakhhor, Abbas, Islamic Banking, IMF Occasional Paper No. 
49, Washington: International Monetary Fund, 1987

IRI - Islamic Republic of Iran, Islamic Banking Act, 1983


Court: Judgment on Interest (Riba), Translated re-print

IRTI - Islamic Research and training Institute (1987), Proceedings Of The 
Workshop On Organization And Management Of Pilgrims Management 
Fund And Board Of Malaysia, Jeddah: Islamic Research And Training 
Institute, 1987.

IRTI-OICFA, (1993), Seminar on Problems of Islamic Banks, jointly organized by 
IRTI and OIC Fiqh Academy, held in IDI, during April 1993.

Prime Minister's Secretariat, Kuala Lampur, Malaysia, Mimeoographed.


Kahf, Monzer (1989) "Sanadad Al Qirad Wa Al Daman...", *Journal Of King Abdul Aziz University*, 1989,


Khan, M. Fahim (1992) Comparative Economics of Some Islamic Financing Techniques IRTI


Khan, Tariquallah (1991b), Contractual Forms Of International Investment: Relevance For Islamic Economics IRTI

Khan, Tariquallah (1991c), Foreign Direct Investment: Overview and Implications for OIC Member Countries IRTI

Khan, Tariquallah (1992e), Incentive Considerations in Modes of Financial Flows Among OIC Member Countries, Jeddah: IRTI


Khan, Tariquallah (1995), Redeemable Islamic Financial Investment For Capital Participation, Jeddah: IRTI

383

Khan, Tariquillah, (1995b), "Demand for and Supply of PLS and Mark-up Funds of Islamic Banks - Some Alternative Explanations", *Islamic Economic Studies*, Vol. 3 No. 1 IRTI.


Latif, Bijan (1986), "Inflation caused by Monetary Functions in Islamic and non Islamic Banking System", paper presented to the Seminar on Islamic Finance and Banking, International University of Japan, Tokyo, November 1986.


Mahdi, Mohammed Mahmoud, *Shari'ah, Economic And Accounting Framework Of Bay Salam In The Light Of Contemporary Applications*: Jeddah: Islamic Research And Training Institute (Forthcoming).


Mirakhor, Abbas And Mohsin Khan Eds. (1987), *Theoretical Studies In Islamic Banking And Finance*, Texas, The Institute For Research And Islamic Studies


Mohsin, Muhammad, " Assessment of Corporate Securities in Terms of Islamic Investment Requirements, International Center for Research in Islamic Economics, 1983 Mimeograph No.16.


Naqvi, S. N. H., "Interest Rate and Intertemporal Allocative Efficiency in an Islamic Economy", in Ariff, M., ed., Monetary and Fiscal Economics of Islam, pp 75-106.


Oman, Charles, (1984), New Forms of International Investments in Developing Countries, Paris, OECD.

Oman, Charles, (1984b), New Forms of International Investments in Developing Countries: National Perspectives, Paris, OECD.

Omar, Mohammad Abdul Halim (1992) "Operational Details Of murabahah Contracts In Islamic Banking", In Investment Strategy In Islamic Banking, Amman, Al Albait Foundation


Roth, Gabriel (1983), The Private Provision Of Public Services In Developing Countries: Myth Or Reality, Washington: The World Bank

Saleh, A. Nabil (1986), Unlawful Gain and Legitimate Profit in Islam, London: Cambridge University


SBP - State Bank Of Pakistan, Statistical Bulletin, Various Issues

SBP - State Bank of Pakistan, Balance Sheet Analysis of Joint Stock Companies various issues.

Shalabi, Isma'il Abdul Rahim (1992) "Legal Aspects Of The Application Of Murabaha And Mudharabah Contracts", In Investment Strategy In Islamic Banking, Amman, Al Albait Foundation


Sharpe, Wm, F. (1980) "Mutual Fund Performance" in Francis (1980), re-print

Shirazi, Habib (1990), Islamic Banking, London: Botterworths


Siddiqi, M. N (1985), Partnership And Profit In Islamic Law, Leicester: The Islamic Foundation


Siddiqi, M.N (1983b) Issues In Islamic Banking, Leicester : The Islamic Foundation.


The Banker, London (Different Issues)

The New Horizons, London (Different Issues)


Uthman, Usama Ahmed (1994), "Debt And Equity Contracts In The Theory Of Social Economy", Review Of Islamic Economics, Vol. 3 No. 1


Zakariya Man, "Islamic Banking: The Malaysian Experience" In Mohammad Ariff ed., *Islamic Banking In Southeast Asia*


