

DEMAND FOR AND SUPPLY OF MARK-UP AND PLS FUNDS IN ISLAMIC BANKING: SOME ALTERNATIVE EXPLANATIONS

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Profit and loss-sharing (PLS) and bai' al murabahah lil amir bil shira (mark-up) are the two parent principles of Islamic financing. The use of PLS is limited and that of mark-up overwhelming in the operations of the Islamic banks. Several studies provide different explanations for this phenomenon. The dominant among these is the moral hazard hypothesis. Some alternative explanations are given in the present paper. The discussion is based on both demand (user of funds) and supply (bank) side considerations. The central conclusion is that mark-up is consistent with firms' preference to re-invest profits in their own growth. It implies that PLS instruments which can allow profit retention by the user of funds and redeem consequently, could be more popular, particularly among risk-averse start-up firms.

1. INTRODUCTION

1.1 Background and Objective

Profit and Loss Sharing (PLS) comprising mainly of *mudarabah* and *musharakah* modes and deferred sale (*bai' al murabahah lil amir bil shira*; mark-up) are the two parent principles of Islamic financing.¹ Most of the research undertaken by Islamic economists emphasizes 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, over a very short period the mark-up principle became the basis of an overwhelming proportion of the Islamic banks' operations. A general consensus now exists among Islamic scholars that it is desirable for Islamic banks to reduce their reliance on the mark-up and increase the use of other Islamic modes, particularly the PLS.

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Therefore, an understanding of the factors which are responsible for the disproportionate reliance on the mark-up is useful. Several studies deal with explaining the causes of the observed phenomenon. The dominant among these explanations is the moral hazard hypothesis. Accordingly, application of the PLS principle requires perfection of the moral behaviour on the part of the user of funds. In the real world, in the absence of this requirement, PLS cannot be efficiently applied.

The present paper aims to put forward some alternative explanations for the subdued nature of the PLS principle in the operations of Islamic banks. The objective is to seek ways and means to enhance the flow of PLS funds from Islamic banks.

1.2 The Suggested Approach

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

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

There is no doubt that as suppliers of funds, the banks play an important role in influencing the choice of their clients for particular forms of funds. Nevertheless, it is also true that in a competitive environment, 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 needs to be studied in order to improve our understanding of the observed phenomenon. Given the considerations of banks (on the supply side) and their

clients (on the demand side), the task, then is to critically compare the inherent characteristics of 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 model of Islamic banking developed by Siddiqi (1967, 1983a and 1983b, subsequently used by other researchers as a synonym for Islamic financing), the Islamic economy was visualized as a debt-free economy. Elimination of interest-based debt was taken to leave the companies (users of funds) with only one option - 100% PLS. Moreover, during the last three decades the famous Miller-Modigliani (M-M) proposition (that under perfect competition considerations for the cost of finance are irrelevant in choosing between debt and equity) almost dominated the field of finance. Given the indifference of firms between debt and equity as implied by the M-M proposition from the cost side, and their clear preference for equity for Islamic reasons, the non-existence of PLS in the flow of funds can justifiably be seen as a reflection on the banks' attitude.

The innovation of the mark-up as an Islamic form of debt financing has, however, restored the users' choice for debt³ and equity. In addition, the M-M proposition has lost substantial ground due to its restrictive assumptions which are being proved unrealistic both at theoretical as well as empirical levels. It implies that users' preferences cannot be ignored while explaining the reasons for the overwhelming use of mark-up as a form of debt finance.

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

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

Section two of the paper presents an overview of the diverse nature of the Islamic modes of financing as well as the concentration of Islamic banks' operations in mark-up contracts. The

consequences of the dichotomy of the theory and practice are also reviewed briefly. Section three, deals with the preferences of both emerging and mature firms for PLS and mark-up contracts. Some other demand side considerations are also discussed. In Section four, the supply side considerations such as the moral hazard proposition, collateral and adverse selection, and a number of other considerations are discussed. Section five briefly discusses the institutional problems related to the application of PLS. Conclusions and implications are discussed in Section six.

2. DICHOTOMY IN THEORY AND PRACTICE OF ISLAMIC BANKING: OVERVIEW OF CONSEQUENCES

2.1 The Diversity of Islamic Modes of Financing

Contractual relationships and trusts between parties are the two fundamental building blocks of an Islamic economic system. Almighty God, while characterizing the believers says: The believers must (eventually) win through [23:1]. Those who faithfully observe their trusts and their covenants [23:8] (translation by Yousuf Ali). The Holy Qur'an provides basic guidelines for establishing just and efficient contractual relations and their preservation (see for example, verse 282 of *Surah al Baqarah*). The Prophet (peace be upon him) was a perfectly trustworthy (*amin*) person in his transactions with followers and foes alike.

Islamic *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 these 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 demonstrates the diversity of Islamic modes of finance.



Chart - 1 : Diversity of Islamic Modes of Financing

2.2 Concentration of Islamic Banks' Short-term Assets

As far as the use of PLS and mark-ups is concerned, Table-1 provides information for some Islamic banks. The mark-up is predominant in general. The little use of the PLS reported for some banks concentrates on short-term trade financing.

TABLE 1
CONCENTRATION OF ISLAMIC BANKS' ASSETS

	PLS	Mark-up
Banks in Islamic Republic of Pakistan ¹	13	87
Banks in Islamic Republic of Iran ¹	37	52
Islamic Development Bank ²	04	81
Faisal Islamic Bank, Egypt ³	03	52
Islamic Bank for Investment and Development, Egypt ³	02	75
Al Barakah Turk Finance House, Turkey ⁴	05	94
Jordan Islamic Bank, Jordan ⁴	05	65
Bangladesh Islamic Bank ⁵	NA	65
Sudanese Islamic Bank ⁵	NA	54
Tadamon Islamic Bank ⁵	NA	61
Qatar Islamic Bank ⁵	NA	98
Bank Islam Malaysia Berhad ⁶	NA	94
Notes:		
NA implies not available.		
1. IMF (1985); for Pakistan and Iran data relate to 1984 and 1985 respectively and cover the entire commercial banking sector.		
2. Annual Reports of IDB; average of all operations till the 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 are for 1984.		
6. Bank Nagara Malaysia, <i>Annual Report</i> (1991).		

2.3 Overview of Consequences

The phenomenon of the 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 which are discussed here.

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 a mode that is the most distinct from interest-based financing. This view is based on the fixed nature of the 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, 1983, Khan 1984, and others) treat PLS as a synonym for Islamic financing.

Second, Homoud (1976) views that the mark-up mode is the most important Islamic substitute for interest. For its sharing nature, he sees the PLS as irrelevant for many financing needs where no profit is expected which can be shared. Moreover, in his view, the traditional PLS modes of finance imply one to one correspondence between suppliers and users of funds which does not meet the modern needs of financial intermediation. In line with Homoud, Ismail (1989) also takes a critical note of the first attitude. In his view, the most important Islamic alternative to interest-based debt creation (financing) is deferred trading-based *dayin* (debt) creation. He argues that the 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 *shari'ah* consultants of these banks.

Third, Chapra (1985), Kahf and Khan (1992) adopt a middle course by integrating the above two views. The essence of this approach is to accept the *shari'ah* permissibility of both the PLS and mark-up modes and then to concentrate on the suitability of one or the other to a particular economic environment. Although the mark-up mode is more prone to violate the *shari'ah* 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.

2.3.2 Stability of the banking system

The consequences of the use of these modes 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 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 (e.g. 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.⁴

Mirakhor (1987) develops the above argument further to compare the effects of the PLS and the mark-up modes 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 the context of the present practices of Islamic banks, some other considerations also need to be added. First, 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.⁵ Second, the type of credit risk and the resultant bankruptcy confronted by conventional banks is not relevant for Islamic banks. The mark-up is a very short-term operation. Therefore, it does not involve any significant credit risk. Moreover, the 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.

2.3.3 Diversification and macroeconomic competitiveness

Diversification reduces the risk of individual assets. Thus, it is argued that even if individual PLS operations are risky, by diversification this risk can always be eliminated. Islamic banks are thus advised to use more extensively the PLS mode 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 and consequently to 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.

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 as compared to the finance provided by direct equity stakes.

Direct equity stakes by banks in industrial projects enforce 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, the longer-term interest of the Islamic banks in projects could improve the performance of the projects and contribute to macro-economic efficiency.

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 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 this seminar it was recommended that Islamic banks should consider reducing their reliance

on the mark-up mode and find 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.

3. DEMAND SIDE CONSIDERATIONS: FIRMS' PREFERENCES FOR FORMS OF FINANCE

3.1 Preferences of Infant Firms for the PLS

Individuals differ in their attitude 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 towards risk is impossible. In this section, it is assumed that individuals' attitude to risk changes over time depending on their exposure to risk and experience with entrepreneurship. 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.

3.1.1 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 prohibition of 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 while others may have a more positive attitude towards risky activities.

3.1.2 The basis of preference for the PLS Mode

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 *mudarabah* 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 *mudarabah*.

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 investment, induce innovations and technological progress and ultimately economic efficiency. Nevertheless, the entrepreneurial class is weaker in the developing countries. Only a small number of people are capable of taking entrepreneurial risks. Inculcation of entrepreneurial qualities in the population should, therefore, be an integral part of an Islamic economic policy.⁶

In this regard, the PLS mode can be instrumental, because: (i) it spreads the risk of projects between the entrepreneur and the financier, thus encouraging 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 thus ensures technical support and efficiency.

The mark-up modes 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 as compared to the mark-up mode.

3.1.3 The role of Islamic banks

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

3.1.4 The nature of PLS contracts

Some observations about the nature of the PLS contracts and the utilization of the entrepreneurs' improved risk profile are useful. The traditional forms of the PLS (both *mudarabah* and *musharakah*) are perpetual and permanent contracts (see, Hassan, 1992). Once formulated and agreed, these contracts can 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, the entrepreneur is not left with any opportunity to re-invest his savings in the project.

3.1.5 Utilization of the improved risk-profile

It is in the interest of the financial and economic system that any 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 his 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 mode, banks would thus play effective role in the promotion of entrepreneurship in the society.

3.1.6 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 matures 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 and the shorter the time for the transfer of ownership, the more would be the bank capable of undertaking diminishing PLS contracts with other infant enterprises.⁷

At the cost of some repetition, 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. It can improve the efficiency of the contract itself. For instance,

- i) the above logic also applies to the social role of 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 *ummah*, under the

- perpetual PLS contracts, this again requires the banks to engage in a very large number of projects. By terminating PLS contracts, banks can generate more projects as ownership of projects will continuously roll-over to the entrepreneurs.
- ii) terminating PLS contracts can reduce the foreign control of local projects, enhance the understanding between host societies and foreign investors, minimize non-commercial risks and promote foreign investment through 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 a policy perspective, it may be useful to consider that while in general entrepreneurs are expected to be risk-neutral, certain groups 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 a crucial role in the promotion of investment by 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 PLS funds is to be generated by the investment promotion policies of 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, 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.

3.2 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 exaggerated (see, e.g., Ahmad 1985, Siddiqi 1983, and Zarqa 1986). Until recently little empirical evidence was available to verify the validity of these arguments.

3.2.1 Some empirical evidence

When two prominent economists (Samuelson and Nordhaus, 1985) 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. Comprehensive evidence on this issue 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.

- 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) 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. Retention is a major source of funds only in the Pakistani companies but is still smaller as 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. Due to various factors, discrepancies are found among the developing countries and among the developing and developed countries in this regard. However, from this information we 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,
- iii) this also supports the argument that the role of interest-based debt in the economy is exaggerated.

It is 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 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 risk of takeovers, mergers, bankruptcies, taxes etc., as well as decreases the companies' privacy.
- iv) 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.

3.2.2 Implications for form of funds

The case of these established and growing firms is therefore different compared to infant firms. These established firms have become familiar with risk, they need to absorb their savings in their growth by acquiring assets. Infant firms, on the other hand, need not only capital but also funds with risk-spreading characteristics. 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 the mark-up mode. 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 representative of the thousands of non-

incorporated firms, particularly in the developing countries. A considerable number of such growing firms may need the 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 and as such has an in-built incentive mechanism for efficiency. Therefore, enlarging the retention of profit may be considered one of the ultimate policy objectives of a PLS contract.

3.3 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 the mark-up mode is relevant whereas, in the latter case both the mark-up and PLS are relevant. Some observations on this comparison are in order.

To explain the relevance of the mark-up and PLS modes under this case, we may turn to the basic individual demand and supply schedules. Let us assume that all available means can support an individual demand shown as DD in the figure below. 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 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 the 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.

Figure: 1

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. This again limits the horizon of the application of the PLS arrangements.

3.4 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 the PLS and the mark-up modes for the issuance of bonds.

3.4.1 Issuance of bonds under the PLS and mark-up

Under certain restrictive conditions, Islamic law allows the issuance of *muqaradah* bonds for the mobilization of funds⁸. An important condition is that the bonds can only be issued against real assets owned by the issuing authority. In 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 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, the 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 *muqaradah* 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.

3.4.2 The problems of implementing a bond contract

Fiqh provisions may be discovered for the issuance of bonds under PLS contracts. As a result, PLS contracts may allow issuance of bonds. Even then, due to lack of retention of profits in the PLS mode, as 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 the mark-up. As soon as a bond is issued, the ownership of the firm is divided between the bond holders and managers of the firm. The welfare of the bond holders and managers of the firm may diverge over time.

For the *shari'ah* validity of the bond contract, it is crucial that the welfare of the managers of the firm and the *muqaradah* bond holders must move together over time. It may be argued that due to a direct relationship between the bond holders' 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 *muqaradah* bond holders may exist unless proper protective clauses are incorporated in the bond contract.

3.4.3 Some common causes of conflicts

The most important cause of a conflict between the welfare of the firm's manager and its bond holders 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 may be seen by the bond holders 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's managers will increase. But as these factors will decrease the value of the firm the welfare of the bond holders will decrease.

Moreover, at the time of issuing the bonds the observed risk exposure of the company may be attractive for the bond holders. 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 bond holders. Managers' welfare will improve at the cost of the bond holders. In addition, at the time of the initial bond issuance, the company's observed value was attractive for the bond holders. 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.

3.4.4 The cost of resolving the conflict

In conclusion, many factors may contribute to a conflict between the interests of bond holders and managers of a firm - often managers tending to maximize their welfare at the cost of the bond holders. As a result, a net wealth transfer will take place by-passing the contract. To avoid such a situation, certain restrictive clauses need to be 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 directions. 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 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 could have improved welfare. In addition, the bond contract may require the maintenance of the company's assets which will certainly improve the value of the company, thus improving 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 affect the dynamic nature of the firm.

3.4.5 Profit retention and 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? The longer-run value of the firm is a crucial variable in this regard. The welfare of both the managers and bond holders 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 in 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 the retained profits the more would be the longer-run expected value of the company, and the more consistent would be the welfare of the bond holders 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 modes, 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, the diminishing PLS will dominate.

3.5 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 thus the cost of capital. Therefore, 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 in an increase in capital gains. So, equity can be raised without increasing tax

liabilities, even if taxation system is discouraging dividend payments.⁹ 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 developing countries. Many individual studies as well as Islamization reports indicate that the taxation system in developing countries is biased against the application of the PLS system. The essence of these arguments is as follow: 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 weak.

Thus, Khan (1992) argues that the prevailing corporate income tax system needs to be replaced by a net-worth taxation system. With this arrangement, he expects that ultimately dividends would be tax exempted. Hence, in his view even tax evading companies will not hesitate to demand PLS funds.

However, this argument misses a crucial point: if a net-worth tax is introduced, to evade the tax companies will have an 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 worth taxation system is adopted it would shorten the life of companies as they will try to suppress their net worth in order to evade taxes.

4. SUPPLY SIDE CONSIDERATIONS: BANKS' PREFERENCES FOR MODES OF FUND FLOWS

Banks are the suppliers of funds. As discussed in Section One, most Islamic economists consider Islamic banks to be largely responsible for the overwhelming use of mark-up. The present section aims to discuss considerations which are expected to affect the decisions of Islamic banks in determining the form of funds supplied to their clients.

4.1 Moral Hazard: The Case of Ongoing Enterprises

At present, the moral hazard hypothesis is the dominant explanation of the problems which are being faced or could be faced in the practical application of the PLS system. In the context of the application of the PLS modes of Islamic financing, it was first brought up by Khan (1983).¹⁰ He concluded that due to the existence of an economic incentive for a dishonest attitude the application of PLS banking principles would require additional costs of monitoring the activities of users of funds. Thus, he concluded that without efficiency loss, introduction of PLS modes of financing is not possible.¹¹ Tag El-din (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".¹² Most Islamic scholars interested in the promotion of the application of the PLS principle are also preoccupied with this problem (see, e.g., Siddiqi 1988, 1993, al Qari 1993 etc.).

4.3.1 Brief overview of the agency theory

The moral hazard hypothesis 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. Wherever 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 wherever 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 the 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 derived 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 principle implies monitoring costs and banks acting as owners of funds will not offer PLS funds.

4.3.2 Critical evaluation of the proposition

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

Table - 2 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, whereas at 100% internal ownership, all cost of the non-pecuniary benefits are borne by the manager himself.

Table 2
Efficiency Implications of Ownership Structure

Contracts	Manager's ownership as % of total	Out-side ownership as % of total	Dollar value per unit of non-pecuniary benefits derived by the manager	Dollar value of the firm per share	Cost per unit of non-pecuniary benefits for the	Cost per unit of non-pecuniary benefits for the
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	ownership	ownership			manager	out-side owner
A	100	0	0	2	0	-
B	100	0	.10	1.90	.10	-
C	90	10	.10	1.90	.09	.01
D	80	20	.10	1.90	.08	.02
E	70	30	.10	1.90	.07	.03
F	60	40	.10	1.90	.06	.04
.
.
N	0	100	.10	1.90	0	.10

Suppose, 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 the 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-2, 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.

The 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 zc 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 zdh 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 z_{dh} 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 z_c and z_{dh} . This framework is utilized by Khan (1983) to suggest that elimination of interest and its replacement with equity financing would put the economy at a lower growth path.

Figure: 2

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 affected by the logic underlying Table-2. 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, over time 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 need 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 the moral hazard problem, this problem could have been solved by designing contracts which enhanced the incentive of the manager. This could have been done by offering them ownership of the projects. As a result, diminishing *musharakah* would have been significant among Islamic banks.

4.2 Moral Hazard: The Case of Liquidating Enterprises

Other important arguments for the overwhelming use of the mark-up mode by 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 trading activity may equally be liquid as the mark-up. It is also consistent with the term-structure of deposits. PLS is traditionally a trade financing device. Ironically, why then the mark-up principle also dominates the trade financing operations of 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 the context of the supply of credit. However, the phenomenon of domination of trade financing by the mark-up mode needs further explanation from the supply side.

A 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 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 to understand the actual significance of the moral hazard phenomenon.

First, in order to reward 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 reaches 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 the 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 less favorable moral conditions. Therefore, it can be expected that even if moral conditions are bad, *mudarabah* can be effectively applied as signaling is possible in general. Third, even if signaling is not 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 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 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 certainly suggest that moral hazard may not be the only factor responsible for the phenomenon.

4.2 Acquisition of Assets for Re-sale

If a significant portion of 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.).¹³ For the capturing of 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 Islamic banks but also with the traditional financial institutions. Under these circumstances, if the Islamic banks opted for PLS in trade financing, will not the cost of their funds be higher? Will they ask for more profit in order to adjust the risk? Will they lose their markets to other channels of trade? At least theoretically, Islamic banks are not pure financiers. In mark-up financing too, the banks are supposed to be responsible for the risk of the commodities while in their ownership. Nevertheless, this risk is minimal under the mark-up mode by practically securing the credit sale through irreversible orders by clients - a weakness of the mark-up as 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 PLS, a large part of import trade financing which is effected for re-sale purposes is a good candidate for PLS financing. However, the probability of commodities not being sold will continue to be an excuse for the banks to refrain from contracting PLS, particularly when the mark-up mode is available as a substitute. PLS financing can be brought at par with the mark-up mode 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 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. The distinct risk sharing attributes of 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 *mudarabah* 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 profit sharing. In all ongoing enterprises, the re-payment of the *mudarabah* funds is however, a major problem. In the existing conceptual framework, all funds of a *mudarabah* contract retire together leading to lump sum payments after adjusting for losses. For the cash flows of a fund user or a fund supplier, gradual re-payment of funds is of vital significance. Some mechanism for gradually redeeming PLS (after accounting for losses) will meet this vital requirement in the same way 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 mode of financing.¹⁴

4.4 Collateral Conditions and Adverse Selection

Collateral requirements play an important function in the supply and allocation of credit in interest-based credit markets. Collateral may be internal - a firm offering its own assets as a pledge to secure credit, or it 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.

4.4.1 Firm's perspective

From the perspective of the firm, a collateral offer gives the lender a claim on its own assets without of course rendering the 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 collaterals 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.

If collateral requirements 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 is required only for securing debt finance. If the bank has 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 subject to the danger of selecting bad projects - adverse selection. Adverse selection may, however, also happen in the debt market. If borrowers understand that it is a 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.¹⁵

4.4.2 The banks' perspective

Thus, there is no reason for 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 than the average, its collateral pledge has to be more than the 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 all the three studies indicate that contrary to the Stiglitz-Weiss proposition, riskier firms offered higher collateral pledges to secure credit.

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 dishonest borrowers exploiting this situation is also high. Thus, banks would prefer to secure genuine collateral pledges rather than having none. 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.

4.4.3 Attitude of Islamic scholars to the role of collateral

A reference to the works of Islamic scholars on certain aspects of 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)... (2:283). 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 borrowing firms and in transactions involving international payments an external pledge in the form of a 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 considered 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 banks indifferent to the efficiency of firms. Many inefficient firms may secure credit by virtue of collateral. Conversely, many efficient firms may 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 arrangements can best be characterized as quasi equities rather than pure PLS arrangements. The OIC *Fiqh* Academy, in its Resolution on *muqaradah* bonds justifies a third party guarantee of the principal of a sharing financing. Siddiqi (1988, 1993) takes such proposals more seriously. The essence of Siddiqi's view is that the principal 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 greater 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 blemished moral attitudes are difficult. This by itself may cause disputes. Moreover, under the proposed arrangement the PLS model of banking will lose 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 for 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 government or the guarantee institution on the credit policies of the banks. This may cause inefficiency.

However, the banks can minimize the problem of adverse selection by investing in research and development activities 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 fear of selecting bad projects will always restrict the use of the PLS mode.

5. INSTITUTIONAL CONSIDERATIONS

5.1 Size and Management of Public Sector

The size and management of the public sector is another important problem confronted by the financial intermediation mechanism in the developing countries. The problems posed by this phenomenon for the application of the PLS mode 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 tax free rate of return of over 14% per annum. As a result, we can expect that:

First, private 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 banks to involve themselves 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 mode could have found fertile soil for its nourishment.

Second, as discussed in Section 3, the mark-up mode can be used to finance government procurements. The PLS mode is again at a disadvantage. Therefore, the institutional implications of the above and similar other considerations related to the size and management of the public sector are biased against PLS. The size of the public sector has remained a controversial issue. However, reforms in the management of public sector is less 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.

5.2 Behavioral Considerations

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

First, a conflict between the values of the contracting parties may cause problems later in the implementation and follow-up of 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 PLS financing.

Second, concern for privacy is a recognized natural phenomenon. Privacy may be needed for keeping the actual operations of the enterprise confidential, for protecting the basis of comparative advantage 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 users 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 the situation against the PLS mode.

5.3 Other Considerations

There are numerous other institutional considerations which create a bias against a large scale application of PLS contracts. These include: similarity of the mark-up method with the established commercial banking traditions and conventions, the orientation and familiarity of the banking personnel with these traditions, the convenience in the use of mark-up for 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 intermediation framework consistent with PLS, the competition for banking services, the limited sources of income of 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 mode is closer to this culture.

6. CONCLUSIONS AND IMPLICATIONS

6.1 Conclusions

An attempt has been made in the present paper to offer some alternative explanations for the subdued nature of the PLS principle in the operations of Islamic banks. The discussion is based on both demand (user of funds) and supply (bank) side considerations. On the demand side, as the PLS mode spreads the risks of investment projects, it should have been very popular in the developing countries as the nascent entrepreneurial class can benefit from this risk spreading characteristic. It is argued that for tapping this potential benefit of PLS, Islamic financial institutions need to follow entrepreneurial promotion activities, such as the undertaking of new projects through PLS modes. At present, such policies are not common among Islamic banks. Thus the potential demand for PLS does not become effective. On the other hand, 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 PLS are not attractive for them. Moreover, these companies are able to save and prefer to invest these savings in their expansion. In such a situation they depend less on external sources for long-term funds. Thus, their demand for PLS financing is expected to be weaker as compared to mark-up financing.

In addition, the demand for a particular form of financial contract must also depend on the nature of the contract itself. Three characteristics of PLS financing may be making it less 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 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 enterprises.

On the supply side, Islamic banks do not undertake entrepreneurial promotion policies, because such policies require the banks to undertake new projects. The banks hesitate to get involved in new projects due to the risk of adverse selection and longer-term involvement in projects.

6.2 Implications

The preceding discussion raises a number of interesting policy implications. Some of these are briefly discussed below.

6.2.1 Consequences of diverting mark-up funds into PLS

It may be suggested that the present use of the PLS and mark-up modes of financing is disproportionate. There is a need to extend the use of the PLS principle. However, a word of warning is in order. The demand for mark-up financing is a segmented demand. The demand for mark-up funds 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. If 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 mode. To re-emphasize this point an example can be given. Suppose the institutional requirements and parameters are such that the PLS mode 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, mark-up remains a convenient Islamic substitute for interest.

6.2.2 Implications for the nature of demand for funds

We have now reached the most crucial question of our analysis: Should changing the nature of demand for Islamic bank's funds be targeted as a policy objective to promote PLS? The apparent answer is, yes. A large source of the demand for funds which has a bias for mark-up namely, public debt is a target of macroeconomic structural policies in many countries. For instance, the 1994 budget of Pakistan aims at reducing public deficit to 4% of GNP from 7.9% in 1993. Such policies, if implemented faithfully coupled with a transparent privatization program, will improve the horizon for PLS financing. 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, which weakens the demand for PLS.

Apart from these considerations, our analysis implies that an attempt to change the nature of demand for funds from the mark-up (which strengthens internal ownership) to the PLS mode (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 a 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 finance implies a sacrifice of ownership for getting funds. Even if justification is 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 become more acceptable to enterprises, it should be redeeming in nature rather than permanent and perpetual.

6.2.3 Implications for the interests of users and suppliers of funds

It needs to be emphasized that the mark-up and PLS modes have their own merits and demerits. The merit of 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 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 modes new PLS contracts can be designed which can harmonize the interests of users and suppliers of funds.

As examples, we have discussed in the paper how a PLS contract which allows for profit retention (purchase by the entrepreneur the ownership shares of the financier in the project, over time) will harmonize *the interests of bond holders and owners of an enterprise*. It is argued that there is no convenient substitute to the issuance of bonds to meet the urgent needs of the firm for funds. A contract which will impose restrictions on this will impose a restriction on its own use. But if bonds are issued, there is a need to be careful that over time, the owners and bond holders' interests should not conflict. It implies that such PLS contracts should be designed, which in the first instance, should leave the provision for bond issuance in conformity with the *shari'ah* requirements, and second, should minimize the conflict of interests of the two parties. These requirements are met only if the entrepreneur's ownership share in the PLS contract is increasing overtime.

Moreover, a provision for profit retention 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 over time, improving cash flows, project financing and promoting the capabilities of banks. Simultaneously, the considerations of enterprises for balancing internal and external ownership will tend to be fulfilled.

6.2.4 Implications for the promotion of entrepreneurs

The management of the public sector can perhaps be changed so as to use the PLS principles for entrepreneurial development, poverty alleviation and human resource development in line, for example, with the proposals contained in Khan (1992) and Boualem and Khan (1995). In addition, by appropriate incentives, governments can consider to motivate the banking sector to undertake a certain minimum level of PLS operation to generate new projects.

6.2.5 Implications for research and development investments

If PLS has to be used by banks to any significant extent, the banks will require to invest in their research and development activities in the areas of project identification, appraisal and follow-up. This will no doubt raise their initial expenses, but by improving their project identification, appraisal and follow-up capabilities, it will improve their efficiency in the long run. The banks will thus be able to minimize the risk of adverse selection.

6.2.6 Implications for future research

Preferences of the firms for the forms in which funds are obtained has so far remained a neglected area of research in Islamic economics. The present work can possibly be extended at least into three dimensions: (a) in a comprehensive form, covering the areas where PLS funds need to be redeeming, instead of being perpetual and permanent, and to discuss this mode's equity and efficiency implications, (b) in a formal sense, discussing the evolution of a comprehensive PLS financing mechanism - a mechanism which unlike *mudarabah* and *musharakah* ensures the separation of financial policy of the firm from its longer-run ownership structure, and (c) linking the Islamic financing principles with corporate finance with the help of

data, for example, from the stock markets of Turkey, Jordan, Pakistan and Malaysia. Studies on the structure of capital of companies listed in these markets could be useful in order to understand their preferences for forms of funds, the determinants of these preferences, their consequences for growth, profitability, etc. Such studies could supplement in a useful manner the on-going theoretical and empirical research on Islamic banking and could also be instrumental in designing PLS contracts suitable for the use of various types of firms, (growing, small, large, etc.) as well as responding to sectoral considerations.

NOTES

- 1.The participatory modes of Islamic financing include *muzara'*, *musaqa'* diminishing *musharakah* (DM), durable asset participation (DAP), *musharakah* and *mudarabah*. However, the first two modes are specific to agriculture. DM and DAP being only recent innovations are not known in the market. However, *musharakah* and *mudarabah* are not only widely known but are also relevant to the financial structures. In the present study, therefore, PLS is treated as a synonym for only the *mudarabah* and *musharakah* modes of Islamic financing. Rent is a price of the usufruct 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 neither of these cases does the financier 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.
2. See e.g., Siddiqi (1988), Khan (1992), Mirakhor (1987) and Ziauddin (1985).
3. It needs to be noted that the matter of debt financing by issuance of bonds and other debt instruments is not yet settled.
4. Khan provides several examples of practices similar to the Islamic banking system that are proposed in the United State for reforming the US banking system.
5. On the liability side of Islamic banks the PLS is fully being utilized.
6. Khan (1992) 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 failure, an extreme case of risk-aversion.
7. For a detailed profile of the diminishing PLS contract, see Khan and Boualem (1993).
8. See, *Fiqh* Academy of the Organization of Islamic Conference, Resolution No.5 concerning *Muqaradah* Bonds and Investment Certificates, adopted in the Fourth Session, held in Jeddah, Saudi Arabia, 18-12 Jumad Thani 1408H (6-11 February 1988).

9. 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-term and unsustainable in nature. Retention is likely to increase the company's value and its capital gains. Should investors prefer this to dividends is, however, a controversial phenomenon.
10. The most important and useful policy implication of Khan's work is its appeal for designing incentive mechanisms for the application of PLS. This suggestion provides a crucial premise for the implementation of PLS principles in some form.
11. Khan (1983) also treats *mudarabah* as a synonym of Islamic financing.
12. Tag El-din (1991) pp.62.
13. Some useful information in this regard is provided in an OECD publication, *Japan's General Trading Companies*, Paris. OECD, 1985).
14. A more detailed and formal analysis of this point is undertaken in a forthcoming IRTI research publication. It is very encouraging that some prominent *shari'ah* scholars have confirmed the permissibility of the proposals raised in this paper in relation to the repayment of PLS funds.
15. For a formal model of the crucial role of capital market failure due to adverse selection see de Meza David and Webb, David (1990), "Risk, Adverse Selection and Market Failure", *The Economic Journal*, March 1990, 206-214.

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