

## PLS - A True Alternative to Interest-Based Banking: Reality or a Myth?

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### Abstract

There is a continuing debate on the applicability of Profit & Loss Sharing (PLS) financing by Islamic financial institutions. The proponents of PLS system consider it as the only genuine mode of Islamic finance however its marginal application by the Islamic financial institutions has created many doubts & marked a big question mark on the face of Islamic banking and financial system. Though, PLS remained the most preferable mode of financing amongst the academicians, researchers and scholars but undoubtedly it could not attain the due status amongst the practitioners of Islamic banking system. The empirical studies reveal that the current practices of Islamic Banks are far away from the fundamental conceptual model of interest-free Islamic banking system. There are a number of reasons relating to the issue of marginal acceptability of PLS base financing by the Islamic banks. This study highlights these critical issues and attempts to conclude logical analysis on the major causes of its marginal use in Islamic banks. The main objective of this paper is an attempt to investigate the need of PLS in the Islamic banking industry and to analyze the attitude of Islamic banks' practitioners towards three major hindrance factors i.e. Moral Hazard, Operational Difficulties and Government Policies that caused its low level acceptance.

**Key words:** Islamic Banking, PLS, Moral Hazard, Operational Difficulties, Government Policies

### 1. Introduction

To fulfill the first & foremost condition of economic justice, Islam requires both the financier and the entrepreneur to equitably share the profit as well as the loss. For this purpose, one of the basic principles of Islamic finance is: 'No risk, no gain' (Chapra, 2009). The idea of Islamic banking was originated from this fundamental principle of Islam. The principle of profit and loss sharing (PLS) was considered as an ideal Islamic transactional mode to achieve the primary purpose of adopting this principle in all of the financial activities performed by the interest-free banking and financial industry. Therefore, the PLS was acknowledged as a true and natural replacement of interest-based banking in the early literature of Islamic banking and financial framework. In the past, PLS remained not only the part of economic activities in the Muslim societies but also played a significant role in the non-Muslim world. According to Udovitch (1970), "the Islamic PLS modes of financing (Mudarabah & Musharakah) were able to mobilize the entire reservoir of monetary resources of the medieval Islamic world for financing agriculture, crafts, manufacturing and long distance trade. They were used not only by Muslims but also by Jews and Christians." Abdul-Rehman et al. (2014) strongly contend and support the improved application of PLS in Islamic Banks. They maintain that the theoretical literature on Islamic banking strongly supports the notion of adopting the PLS contracts and believe that it would increase the value of Islamic banks and make them resilient to crisis.

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Though the PLS concept remained the only alternative to interest-based banking amongst the academicians, thinkers and originators of Islamic banking system, however along with the development and growth of Islamic Banking industry the standing application of PLS started to shrink and subdued by other Islamic modes of transactions like Ba'ibithaman al-Ajal, Murabahah and Ijarah. Besides a phenomenal growth in Islamic banking industry, a number of challenges and obstacles still remain for banking institutions in Islamic countries. The principal challenge confronted by the Islamic banking is the adoption of equity-base modes i.e. Musharakah & Mudarabah in their financing activities. There are a number of reasons addressing the issue of marginal acceptability of PLS base financing by the Islamic banks which are revealed by the researchers, scholars and practitioners of Islamic banking system. However, the views presented by these experts are theoretical in concepts and descriptive in nature with very little support of empirical evidence. This study is an addition to the existing knowledge on the case with reference to the empirical analysis of managements' attitude towards the three major hindrance factors that curtail the application of PLS in Islamic banking system.

## **2. Methodology**

The methodology used in this study is a critical analysis of literature survey along with the empirical examination of collected data in the application of PLS financing by the Islamic banking practitioners. The literature on the concepts and studies pertaining to PLS based financing by Islamic Banks are evaluated to identify the hindrance factors which caused its insignificant application in the Islamic banking industry. In this paper, the factors are explored through the literature survey of more than 100 articles. Furthermore this study attempts to empirically analyze three major impeding factors that are determined by the Islamic banking experts (through literature review) which caused the low level application of PLS in the Islamic banks. A self-administrated questionnaire was designed for the survey to collect data and used to conclude the effect of these hindrance factors on the attitude of Islamic banks' managers towards the application of PLS financing in their respective banks. Analysis is performed using statistical tools such as descriptive analysis, reliability analysis and multiple regression analysis. Respondents (bank executives) from five major Islamic Banks of three big cities of Pakistan (Punjab Province) were requested to indicate their degree of importance for 17 statements that represent three major hindrance factors in the application of PLS financing and 9 statements are designed to evaluate outcomes for managers' attitude towards the application of PLS financing on a five-point Likert scale. The entire population of five full-fledged Islamic Banks in three major cities of Punjab province (i.e. Lahore, Multan and Faisalabad) of Pakistan (201 branches) are surveyed. Four respondents in each bank branch were surveyed with a focus on the decision makers of these banks which include the credit department manager, financial department employees and executive manager. Out of 800 distributed survey questionnaires 372 were found to be precisely filled and accepted for analysis. The response rate is calculated as 46.50%.

## **3. Research Objective**

This study is an attempt to expound the concept and need of PLS system in the Islamic banking industry and to analyze its importance for Islamic banking & finance. Besides, the main objective of this paper is to identify and evaluate three major hindrance factors influencing the attitude of bank managers in the application of PLS financing in their respective banks and to determine their significant role through logical scrutiny of these factors for the Islamic banking industry.

## **4. Significance of PLS Financing**

The classical literature on leads us to conclude that the Islamic banking and finance essentially originates from the core concept of profit and loss sharing principle. However, considering the disconnection between the claims and the practices of the Islamic banks, some have been led to the question "Is Islamic Banking a Reality or a Myth?" (Uppal & Mangle, 2014).

According to Kammer et al. (2015), Islamic finance is inherently less prone to crisis because of its risk-sharing feature that reduces leverage and encourages better risk management on the part of both financial institutions and their customers. Likewise, Chapra (1992), Kahf (1982), Siddiqi (1983), Zarqa (1983), Ahmad (1994), Warde (2000), Farooq (2006), Ahmed (2006), Mirakhor (2007) and Shinsuke (2010) all support the idea that the profit and loss sharing is more stable than the interest-based system.

Askari et al. (2012) claim that the risk sharing principle has been an integral part of human activity since long before the formation of modern day corporations, banks, and other financial institutions. It has been a natural activity whereby parties find it profitable to pool resources, be it financial, entrepreneurial, or technical instead of operating individually. Highlighting the importance of PLS based financing, Chapra (2007) emphasizes that the socioeconomic benefits of the prohibition of interest may not be realized fully until the share of PLS modes rises substantially in total financing. It would hence be desirable for the use of PLS modes to gain momentum. Similarly, Khan & Bhatti (2008) claim that the PLS system is the 'heart of Islamic financial intermediation.' In their analytical article, Zainol & Kassim (2010) recommend two alternatives for the Islamic Banks. Firstly, the Islamic Banks should move away from fixed rate instruments like Murabahah and Bai' Bithaman Ajal into profit and loss sharing contracts like Musharakah and Mudarabah. The argued advantage of the profit and loss sharing contracts is that the financing will be detached from the return rate movements since they are directly independent on profit or loss from the financed business. Secondly, a risk-sharing agreement between Islamic banks and their customers should take into account that the customer of long maturity loans agrees to partially compensate the banks if the average rate of return exceeds the predetermined level. In return, the banks agree to reduce the mark-up on outstanding balance if the rate is below the predetermined level.

According to Kamarudin & Ismail (2013), "Based on profits and losses principle, Islamic participative financial intermediation reduces costs of information as well as transaction and permits risk sharing." They also highlight the fact that participative intermediation leads to an equitable, stable and sustained economic development. It can help to resolve a variety of problems: poverty and unemployment. Greater reliance on equity financing has supporters even in mainstream economics. Rogoff (1999); a Harvard Professor of Economics, states that, "in an ideal world equity lending and direct investment would play a much bigger role." He further asserts that, "with a better balance between debt and equity, risk-sharing would be greatly enhanced and financial crises sharply muted."

### 5. Current status of PLS financing by Islamic Banks

When we analyze the application standing of PLS financing in the Islamic banks and other financial institutions the situation is not encouraging at all. Application of PLS based financing on the asset side of Islamic banking & financial industry is profoundly underutilized even after the completion of more than 40 years of its commercial practices. It is quite evident from the following data (Table 1) that the PLS application on the part of Islamic financing is very low all over the world.

Table 1

S. No.	Region	Percentage Application of PLS in comparison to other mode of financing by Islamic Banks
1	Middle-east	8.32%
2	Asia	5.01%
3	Africa	4.19%
4	Europe	0.73%

The following table (2) discloses the average percentage per instrument in the Islamic development banks' financing resources in the years 2011 & 2012. As compared to other modes of financing, Profit sharing tool remained at an average of 2.2% that clearly shows its poor level application.

Table 2: IDB financing (core resources) by instrument, in USD million

Instrument	2011	2012	2011-2012 average % per instrument
<b>Concessional</b>			
Loan	347.8	391.0	10.8%
Grant ( Technical Assistance)	31.0	11.5	0.6%
<b>Non-concessional</b>			
Istisna'a	1,591.3	1,559.9	46.3%
Leasing	1,024.2	520.0	22.7%
Instalment Sale	127.6	933.5	15.6%
Profit Sharing	100.0	50.0	2.2%
Equity	10.0	111.3	1.0%
<b>Total</b>	<b>3,231.9</b>	<b>3,577.1</b>	

Source: Islamic Development Bank Statistical Report (March 2014)

The current data (Table 3) publicized by the State Bank of Pakistan determines some encouraging figures (i.e. 15.6%) for the application of PLS in the major Islamic banks' financing portfolio. However, its application can be enhanced with proper allocation of resources in more profitable business ventures.

**Table 3**

<b>Financing Mix</b>		
<b>Percent Share</b>		
	<b>Sep- 2016</b>	<b>Dec - 2016</b>
<i>Murabahah</i>	16.9	15.8
<i>Ijarah</i>	7.8	6.8
<i>Musharakah</i>	12.0	15.6
<i>Mudarabah</i>	0.0	0.0
Diminishing <i>Musharakah</i> (DM) *	38.5	34.7
<i>Salam</i>	3.3	4.4
<i>Istisna'</i>	7.0	8.4
<i>Qard al Hasna</i>	0.0	0.0
Others	14.5	14.3
<b>Total</b>	<b>100</b>	<b>100</b>

Source: Islamic Banking Bulletin October – December 2016 (SBP)

\*Majority of Islamic finance experts consider that the "Diminishing Musharakah" is not the original form of PLS base financing.

## 6. Hindrance factors in the application of PLS financing

From the literature review it has been identified that various factors caused low level application of PLS financing by the Islamic banking industry. However, analyzing more than 100 research studies on this critical issue, it is established that among all the hindrance factors explored by these studies seven major impeding factors have a very strong influence in the application of PLS financing. Moreover the 'moral hazard' problem is identified as the most influential factor in the application of PLS financing with the highest percentage of 26.24. Whereas the percentage effect of "Internal Shariah Control" on the application of PLS in comparison to other hindrance factors identified through these studies is the lowest with the percentage of 5.67.

**Table 4**

<b>S. No.</b>	<b>Factors</b>	<b>Frequency</b>	<b>%age</b>
<b>1</b>	<b>Moral Hazard</b>	<b>37</b>	<b>26.24</b>
<b>2</b>	<b>Operational Difficulties</b>	<b>33</b>	<b>23.40</b>
<b>3</b>	<b>Government Policies</b>	<b>26</b>	<b>18.44</b>
4	High Risk	16	11.35
5	Organization Internal Control System of Financing	11	7.80
6	Customers' Preferences	10	7.09
7	Internal <i>Shariah</i> Governance	8	5.67
	<b>Total</b>	<b>141</b>	<b>100</b>

In this study, three top ranked impeding factors i.e. Moral Hazard, Operational Difficulties and the Government Policies are empirically examined through statistical tools to determine their influence on the applicability of PLS financing in the Islamic Banking system

## 7. Definition of the factors

### 7.1 Moral Hazard

Moral hazard is the result of information asymmetry which may arise because of the different level of information amongst the parties involved in the partnership contract. According to Azmat et al. (2015), Moral hazard may occur when asymmetric information causes a change in the behavior of the contracting parties. In the bank-firm relationship, this stems from the firm's incentive to indulge in excessive risk taking behavior.

## 7.2 Operational Difficulties

Operational difficulties refer to the issues relating to the problems faced by the Islamic banks' managers in the application of PLSbased financing. Some of the operational difficulties include accounting procedures, assessment of projects, monitoring costs and lack of entrepreneurial skills of Islamic banking staff.

## 7.3 Government Policies

Government policies include the banking and financing rules and regulations imposed by the government through its regulatory bodies such as central banks. It also includes tax and other legal framework employed by the authorities.

Factors relating to the legal and regulatory environment (including policies pertaining to tariffs, quotas, taxation or subsidies and any sudden policy changes) affecting the quality and viability of an investment, and need to be considered in the risk evaluation. Therefore these factors assert a considerable influence on the bank managers' attitude.

## 8. Statistical Analysis

Major focus of this study is to determine the bankers' attitude towards PLS financing in Islamic Banks functioning in the Punjab province of Pakistan. In order to achieve this objective, this study surveys a specific category of respondents who are involved in the Islamicbanking operations at middle and higher level management position using a structured questionnaire. The key respondents include; Executive manager, Risk management manager, Credit department manager and Treasurer/financial department manager. The main research question is to find out the effect of three major factors influencing the Islamic banks managers' attitude towards the application of PLS based financing. To explore the answer to the main research question, it is divided into following three significant research questions:

1. How does the issue of 'moral hazard' affect the managers' attitude towards the application of PLS based financing?
2. How does the 'Government policies' affect the managers' attitude towards the application of PLSbasedfinancing?
3. How does the problem of 'Operational Difficulties' affect the managers' attitude towards the application of PLSbasedfinancing?

**Table 5: Profile of Respondents (Overall)**

S. No.	Item	N	%
	<u>Banking Experience</u>		
	Less than 1 year	32	8.6
	1-5 years	142	38.2
	5-10 years	151	40.6
	More than 10 years	47	12.6
	<u>Working Experience in same Bank</u>		
	Less than 1 year	79	21.2
	1-5 years	187	50.3
	5-10 years	95	25.5
	More than 10 years	11	3.0
	<u>Educational Qualification (General)</u>		
	Certificate	1	0.3
	Diploma	4	1.1
	Bachelor Degree	139	37.4
	Master Degree	226	60.8
	PhD	2	0.5
	<u>Educational Qualification (Islamic Banking)</u>		
	Certificate	59	15.9
	Diploma	39	10.5
	Bachelor Degree	11	3.0
	Master Degree	21	5.6
	PhD	0	0
	No Response	242	65.1

Source: Primary Data

**9. Descriptive Statistics**

The responses of the sample of this study were subjected to various statistical measures to explore the frequency, percentage, dispersion, distribution, underlying dimensions and dependency among the variables. Results indicate that the variable Operational Difficulties (M = 3.51) was considered as the weak factor in the application of PLS method of finance when compared with other two variables.

**Table 6: Descriptive Statistics (N=372)**

Variable	No. of Items	Minimum	Maximum	Mean	Std. Deviation
Government Policies (GP)	5	1	5	3.76	0.7942
Operational Difficulties (OD)	6	1	5	3.51	0.9368
Moral Hazard (MH)	6	1	5	3.75	0.8229
Managers' Attitude towards PLS financing (MA)	9	1	5	3.77	0.7169

Source: Primary Data

**10. Reliability Analysis**

Reliability analysis is performed to confirm whether the scale items of the questionnaire are consistently measuring what it was supposed to measure. Reliability analysis assesses the repeatability and consistency of the instrument. The coefficient of alpha (Cronbach's Alpha) is one of the popular methods to evaluate the reliability of the measuring items (Cronbach, 1951). A Cronbach's alpha value of greater than 0.7 is an indication that the scale is highly reliable (Nunnally, 1978). It is evident from the results that the reliability of the scale items is good. Managers' Attitude towards PLS financing (MA) reported highest reliability score of 0.974. On the other hand, Moral Hazard reported lowest coefficient of reliability (0.913). Most of the items of the scale variable have reported high reliability values. Below tables provide the SPSS output for the Reliability statistics of these variables.

**Table 7: Reliability Analysis (overall)**

Variable	No. of Items	Cronbach's Alpha
Government Policies (GP)	5	0.975
Risk Factors (RF)	6	0.946
Moral Hazard (MH)	6	0.913
Managers' Attitude towards PLS financing (MA)	9	0.974
<b>Overall Scale</b>	<b>26</b>	<b>0.952</b>

The hypotheses framed for the study are stated here.

Hypothesis 1: There is a significant relationship between Government Policies (GP) and Managers' Attitude towards the application of PLS based financing.

Hypothesis 2: There is a significant relationship between 'Risk Factors' (RF) and Managers' Attitude towards the application of PLS based financing.

Hypothesis 3: There is a significant relationship between 'Moral Hazard' (MH) and Managers' Attitude towards the application of PLS based financing.

In order to test the stated hypotheses, Multiple Regression Analysis was conducted with Managers' Attitude towards the application of PLS financing (MA) as the dependent variable and variables like Government Policies (GP), Risk Factors (RF), and Moral Hazard (MH) as predictor variables. The regression results are shown in the following tables.

**Table 8: Model Summary**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.355	.126	.109	.6767278

Predictors: (Constant), MH, GP, RF

The regression result from Model Summary shows that predictor variables together accounted only 12.6% of variance in the output variable - Managers' Attitude towards PLS financing.

**Table 9: ANOVA Results**

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	24.010	7	3.430	7.490	.000
Residual	166.698	364	.458		
Total	190.707	371			

Predictors: (Constant), MH, GP, RF, Dependent Variable: MA

Reports on ANOVA results assess the overall significance of the model. As the reported 'p' value is less than the cut-off limit of 0.05 ( $p=.000$ ), the model construct is valid. Thus, it can be stated that the model suggested by the study i.e. the predictor variables is having a significant role in explaining the Managers' Attitude towards PLS financing is validated.

**Table 10: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.991	.400		7.48	.000
GP	.153	.051	.170	2.99**	.003
RF	-.002	.073	-.002	-0.031	.975
MH	-.125	.047	-.143	-2.64**	.009

Dependent Variable: MA

The Standardized  $\beta$  Coefficients give a measure of the contribution of each variable to the model. A larger value indicates that a unit change in this predictor variable has a larger effect on the criterion variable. Based on the regression results, following inferences were made with regard to the testing of hypotheses.

- The factor "Government Policies" (GP) is significantly related with the Managers' Attitude towards the application of PLS financing (MA). Thus the hypothesis "There is a significant relationship between Government Policies and Managers' Attitude towards the application of PLS financing", was Accepted.

- The factor "Risk Factors" (RF) is found insignificantly related with the Managers' Attitude towards the application of PLS financing (MA). Thus the hypothesis, "There is a significant relationship between Risk Factors and Managers' Attitude towards the application of PLS financing" was Rejected.

- The factor "Moral Hazard" (MH) is significantly related with the Managers' Attitude towards the application of PLS financing (MA). Thus the hypothesis "There is a significant relationship between Moral Hazard and Managers' Attitude towards the application of PLS financing", was Accepted.

## 11. Concluding Remarks

The proponents of PLS financing system strongly believe that PLS is the only alternative to interest-based banking, however the practical scenario is significantly different from this fundamental principle. They claim that PLS i.e. Mudarabah&Musharakah financing are indeed viable modes of financing however the crucial point is to design and structure these kinds of financing with incentive-compatible constraints (Iqbal & Llewellyn, 2002). Chapra (2009) argues that one of the major causes of global financial crises is the absence of risk-sharing, which dilutes market discipline in the financial system that leads to excessive lending, high leverage, speculation, and unsustainable rise in asset prices. He points out that the generally recognized most important cause of almost all crises has been excessive and imprudent lending by the banks. There would be a check on excessive lending only if the banks were afraid that this would lead to losses, souring of their reputation, and bankruptcy. This does happen in a system where profit and loss sharing (PLS) does not exist, the repayment of loans with interest is generally assured, and "the too big to fail" concept ensures survival. Akacem&Gilliam (2002) and Mehmet (2007) deliberate that the profit sharing concept may approach to market solution because it requires direct involvement of civil society, managerial skills and expertise in overseeing different investment projects from the banks.

The banks need to have a correct perception in considering the superiority of equity financing compared to debt-like instrument. Therefore, they concluded that the argument that PLS contracts are too risky for Islamic banks to adopt is not convincing. Thus they deliberatethat further research and discussion is needed in order to provide continued support to the practice of PLS. The result relating to Hypothesis#2 (Risk Factors) recommends to conductingextendedempirical analysis to other impeding factors in order to objectively evaluate their influence on the application of PLS and examine the criticisms on impracticability of PLS based financing in Islamic Banking. We also recommend taking into consideration the wider scale research covering the Islamic banking and other Islamic financial institutions from different parts of the world on this very important subject.

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