

# Comparative Analysis of Three Islamic Banks In Pakistan

\* Arif Sohail

\*\* Ilyas Sharif

## Abstract

*Banks play pivotal role in financial affairs of individuals, groups, organizations and nations. Banking services may influence their all stakeholders in multifaceted ways. This paper sought to analyze and compare financial performance of three Islamic banks: Meezan Bank Limited (MB), Bank Islami Pakistan Limited (BI) and Dubai Islamic Bank Pakistan Limited through application of liquidity, profitability and activity ratios. It employed quantitative research to empirically analyze financial performance of the banks. Q-Q Plots and ANOVA were used to check data normality and analyze data respectively. The findings show that there is a lack of significant difference in financial performance of the banks in the period of the study. Nevertheless, significant difference is found in equity ratios of the banks. Due to insignificance of entire results except for return on equity, Least Significant Difference (LSD) method is applied to know that return on equity ratio of which bank in the sample is more (less) significant. This study has recommended numerous managerial and strategic level interventions as well as scholarly endorsements for better financial achievement of Islamic banks.*

**Key words:** Comparison of Three Islamic Banks, Meezan Bank Limited, Bank Islami Pakistan Limited, Dubai Islamic Bank Pakistan Limited, ANOVA, Ratios analysis

## Introduction:

As a complete code of life Islam guides humanity in all aspects of lifespan where Islamic teachings fully covers economic affairs. Main philosophy behind Islamic economic system and shariah compliant banking system is that Islamic teachings insist upon its followers to earn legitimate (Halal) earnings and earning of legitimate (Halal) profit has been declared as the core worship (Ibadat) by Islam. Islamic economic system and shariah compliant banking are the two basic tools which enable the people to earn legitimate (Halal) profits through investing their surplus capital 1-6. Islamic banking is based on Islamic teachings or it is "Shariah based banking system" 7-11. Distinguishing feature of Islamic banking is its Interest (riba) free nature. Interest is strictly prohibited in many Quranic verses and sayings of the last Prophet Muhammad (PBUH). Holy Quran has declared interest-based dealing(s) as a war against Allah and His Messenger Muhammad (S.A.W) 12, 13. Banking system cannot be declared Islamic if a small amount of interest is involved in its dealings.

### 1.1. Islamic Banking Vs Conventional Banking:

Conventional and Islamic banking prevail parallelly around the globe. There is a hill of difference these banking systems. Interest (riba) is the fundamental point of difference between Islamic and conventional banking. Prior is totally based on interest (riba) while, later is based on distribution of profit and loss and strictly prohibits dealing in interest. The shariah compliant banks provide social welfare while, the role of conventional banks biased and remain immoral social evil 14-16. Conventional banks make the capital idle due to offering a fixed interest while, Islamic economic system encourages investment of capital on profit and loss basis where hoarding of money is prohibited. Conventional banking maximizes profit by lending money to all business regardless their business however, Islamic system does not allow such illegal, immoral and unethical business. It has placed certain limits and checks over the use of money so that the money of people is used only in trade

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\* Accounts Officer, Higher Education Regulatory Authority, Khyber Pakhtunkhwa

\*\* Lecturer, Quaid-e-Azam College of Commerce, University of Peshawar

permitted by Islam 17-19. Thus, interest-based banking is globally dominant while, market segment of assets based Islamic Banking is growing around the world.

### **1.2. Islamic Banking in the World:**

Islamic Banking system had been in the theory for the last fourteen centuries, but it got a practical shape in the twentieth century when El-Najjar pioneered Islamic Banking as the the first Islamic bank in 1963 8, 10, 15. It was a saving bank that was run on profit and loss sharing basis. More Islamic Banks were established in Egypt up to 1967. Some other Islamic Banks like Dubai Islamic Banks, Dubai and Faisal Islamic Bank of Sudan and Egypt were established in 1975 and 1977 respectively in next ten to fifteen years in Arab world. Organization of Islamic Countries (OIC) initiated Islamic Development Bank (IDB) in the same era.

### **1.3. Islamic Banking in Islamic Countries:**

Islamic Banking got the status of a separate industry namely "Islamic Finance Industry". Even the non-Muslims countries are also adopting the Islamic Banking system. Islamic banking is constantly growing every year 10, 12, 13, 16, 20. Sudan and Iran have banned conventional banking mechanism and fully adopted the Islamic Banking system in their countries. So, Islamic Banking is a growing area around the globe and even Pakistan has initiated Islamic Banking.

Islam is the state religion of Islamic Republic of Pakistan. Islamic Banking represents only 8% of banking activities in the country however, its growth rate in Pakistan highlights the fact that the interest of Pakistanis is very high in Islamic Banking system. Many Pakistanis have the view to earn legitimates profits by investing in the Islamic institutions. Moreover, success of Some Pakistanis shifted to Islamic Banking system in retaliation as they view that Islam and Muslim are under assault from the West 12, 16, 20. Islamic Banking is growing in Pakistan because here people are aware of the financial turmoil caused by the interest-based banking system.

### **1.4. Significance of the Study:**

This research is valuable for all stakeholders of Islamic Banking like clients, students, professionals and policy makers. Customers and students of Islamic banks will get a clear picture Islamic banking where the later will analyze secondary data and financial performance of more than two Islamic banks. Based on this research, students can contribute their ideas in real business situations for the development of Islamic banking. With the study findings and recommendations bank manager will clearly understand Islamic finance. This study will provide policy implications to top level management of Islamic banks. The study may be extended to other Islamic Banks of the country.

### **1.5.Scope of the Study:**

Scope of the study is limited to MB, DIB and BI where financial performance of the sample banks is analyzed.

### **1.6.Research Question:**

Can financial performance of Islamic banks be analyzed?

### **1.7.Problem Statement:**

This study analyzes financial performance of the selected Islamic Banks to see whether financial performance of Islamic Banking system is significant or insignificant. Islamic banks are free from interest and based on shariah rules of profit and loss sharing. Islamic banking is a growing area of the market which highlights its markets efficiency. This research analyzes the financial performance of the Islamic banks through selected financial ratios.

### **1.8.Objectives of the Study:**

Analysis of financial performance of MB, DIB and BI is the core objective of this study selected financial ratios are utilized.

### 1.9.Hypothesis of the Study :

$H_0$ : The means of all three Islamic banks are same.

$$H_0: U_1 + U_2 + U_3$$

$H^1$ : The means of all three Islamic banks are not same

$$H_1: U_1 + U_2 + U_3$$

## II. REVIEW OF LITERATURE:

This chapter presents the precedent studies on Islamic banks' financial performance which develops the hypothetical strategy for directing future research direction. This study attempts to analyze financial performance of selected Pakistani Islamic banks. Government should support banking sector 21-24. Principles of sharia compliant financial tools like Mudaraba should be thoroughly invoked for implementing interest free banking though, it seems something unfeasible as he did not recommend making venture of bank own resources 22, 25, 26. Mudaraba is the most significant financial product where profits/losses must be equally shared between bank and mudarib and recovery of bank losses should be made either from reserve fund of banks or borne by the bank owners 27, 28. Equal division of profit and losse between financier and the entrepreneur is not Sharia compliant and consequently not practical for Islamic banks. Mudaraba and Musharaka based models were based on two-tier Mudaraba where Islamic banks' actions and functions were split into three wide areas: free services, Mudaraba and Musharaka based financing dealings; and fee and commission based services 24, 29. They opined that success of interest free banking is possible only in those countries where interest (riba) is banned and interest-based dealings are penalized however, certain Islamic banks have operated successfully in many countries where Islamic laws obligatory. Thoroughly elaborated structured model for Islamization of banks in current environment correlated the apparent appearance of merchant banks, commercial banks, and development banks innovatively 21, 24, 30. Islamic banks (IBs) should adopt equity financing for financing of projects financing as profit and loss sharing (PLS) based agreements can decrease the distance between banks to their customers. Main difference between Islamic and conventional banks is that prior banks reject good projects due to less value of collaterals while collaterals value is not the decisive criterion of Islamic banks 4, 27, 31. Thus, Islamic banking may sustain economic growth as these banks finance such good projects on PLS basis.

Islamic banks must be competitive because their conventional counterparts also provide same services to their customers. Islamic banks can get more money their depositors rather than owners in economic growth 5, 29, 31, 32. Islamic banks should exist due to the spiritual and economic reasons where banks should present products and services of high quality as religious conviction is not exclusive attracting factor for consumers 16, 23, 27, 33-35. One class of Muslim depositors comprises those Muslims who firmly follow rules and regulations of Islam and prefer sharia compliant banking while the rest of depositors are those Muslims who prefer these banks due to service quality, high profit on their savings and location of banks 11, 15, 17, 23, 26, 34, 36, 37. Depositors in Islamic banks may open three types of accounts where current and saving accounts promise payment of a minimal value against the deposited amount to the customers where profits are not warrantied, while, the investment accounts opened in Islamic banks promises sharing profits and losses with no warranty regarding primary amount or pre-determined profits 38-40.

Majority of Muslims around the globe give significance to Islamic banks due to religious and financial factors 12, 17, 27, 33, 36, 41. Main dilemma of Islamic banks is inadequate training of their workers 8, 10, 16, 21, 42. However, 70% of Muslims in Jordan opt Islamic banks because of shariah conformity and spiritual factors 35. Jurists' views show that Islamic banking should not eliminate risk of loss from their contracts where accumulation of profits should be based on bank performance and not the fluctuations in interest rate 34, 43-45. Knowledge-based administration, customer-friendly processes and innovation of services can grow Islamic banks 15, 33, 46-48.

Across all developing nations people invest their saving funds because of profits and losses of the banks 2, 7, 38, 41. Islamic banks should grow their secondary market place for improving their risk management where they need cost clarity and liquidity by trading in Sukuks and Financial Takaful (insurance) as a medium of risk-hedging 20, 31, 49-53. In Brunei Darussalam Islamic banks face three types of risks: credit risk, foreign-exchange risk and operating risk where they professionally tackle these risks through risk management techniques namely risk identification (RI) and risk assessment and analysis (RAA) 20.

In emerging economies, existence of large-scale banks results in liquidity problems of Islamic banks, where usually they hold low liquidity assets however, in crises they keep highly liquid assets than single market banks 7, 25, 54, 55. Indirect relationship between liquidity and stock returns exists where stock become more illiquid and the liquidity risk increases more while, return is not affected by the variations in the liquidity of relative stock 11, 50, 51, 54, 56.

Islamic banks are evaluated on three factors like: banks' liquidity management strategy, asset and liability sides of their balance sheets, where the banks should improve their policies of balancing liabilities and assets, correspond their activities and principles to public for higher motivation towards Islamic banks and improve their liquidity management 11, 50, 52, 55. In financial crises due to liquidity problem ignited by the depositors, rather than discharging their loans, banks sell securities for raising their amount held in cash 50, 52-54.

### III. RESEARCH METODOLOGY:

This research assesses Islamic Banks' financial performance and gives a clear image of the same. There are various analytical methods of financial statements like vertical, horizontal and trend analysis where various ratios are calculated. Choice of the analyst depends upon their requirements. This study will utilize financial ratios and comparative analysis among Meezan Bank Limited, DIB and BI through "ANOVA" since this method was also applied Taking  $\alpha = 0.05$ . as it is widely used by researchers 57-61.

#### 3.1. Universe of the Study:

There are five major Islamic banks in Pakistan namely as BI, Al Baraka Bank (ABB), DIB, Burj Bank (BB), and MB. This study mainly focused on the evaluation of financial achievement of MB, DIB and BI. This study analyzes five years financial data of the three banks with effect from 2008 to 2012.

#### 3.2. Sampling Procedure and Size:

This study assesses financial performance of those Islamic banks that operate in Pakistan. Among these Islamic banks DIB, MB and BI are selected. Reason for selection of these Islamic banks is that the selected Islamic banks are mostly well-organized and leading Pakistani Islamic banks and secondly availability of their financial data. Al Baraka Bank (ABB) and Burj Bank (BB) are not selected for this study as these banks commenced their operation in Pakistan on November 1, 2010 and on April 27, 2007 respectively.

#### 3.3. Data and Sources of Data:

This study will use secondary data where data are collected from web sites of the banks, paksearch.com, Business Recorder and State Bank of Pakistan etc.

#### 3.4. Analytical Framework:

The tools of financial analysis highlight whether the firm has successfully achieved its financial objectives or not. Maximization of profit, minimization of and establishment of liquidity may be financial objectives of any firm, where actual performance is compared with budgeted performance of the firm. Financial efficiency shows the success of business in productive utilization of resources.

#### 3.5. Ratio Analysis:

Ratio means a procedure where one number is expressed in terms of another. Ratio may be presented in forms of proportion, percentage, rate and co-efficient. It highlights the relationship of one number with another number. It is widely used technique for analyzing

the financial analysis where analyst compares the different firms with each other or financial results of different years of the same firm. For checking firm's financial position, researchers have used different ratios are used 57, 58, 60. The ratios analysis also shows the level of efficiency of the firm and its different departments.

### **3.5.1. Liquidity Ratio:**

Liquidity means the ability of a business to reimburse its short-term obligations on due time. One may assess firm's ability to pay its short-term economic obligations through utilizing these ratios. Liquidity ratios may be classified into four types which are explained as follows.

### **3.5.2. Current Ratio:**

Current ratio highlights the fact that how easily a firm can repay its short debts out of current assets. High value of current's ratio will show firms' strong financial position. Its formula is:

$$\text{Current Ratio} = \text{Current Assets} / \text{Current Liabilities}$$

### **3.5.3. Quick/Acid Test Ratio:**

This ratio uses the most liquid assets that are either in cash form or quickly convertible into cash. Business highest degree of liquidity can be shown through this ratio. It will be perceived that the firm may pay its short-term debts out of quick asset where value of this ratio is higher. Formula of acid test ratio is as under:

$$\text{Quick/Acid Test Ratio} = \text{Quick Assets} / \text{Current Liabilities}$$

### **3.5.4. Profitability Ratios :**

Profitability ratios show firm's capability of utilizing its capital, labors and general management for generating profit. These ratios compare return of the firm to the sales, equity, and investment in assets. Management is more interested in these ratios of firm. Firm's profitability can be assessed through following ratios.

### **3.5.5. Return on Equity Ratio:**

Return on equity ratio measures the returns earned from the firm equity. High value of this ratio shows attractiveness for the existing and future investors of firm that will raise value of the firm. Low value of this ratio communicates firm's worst position to the owners. For calculation of this ratio, firm's net income is divided by its owners' equity.

$$\text{Return on Equity Ratio} = (\text{Net Income} / \text{Owner's Equity}) * 100$$

### **3.5.6. Return on Assets Ratio:**

This ratio measures the business receipts from operation of all assets. Higher value of this ratio shows that the firm has ensured profitably use of its assets. On the other hand, lesser value of return on assets ratio signifies less profitable use of firm's assets. Its formula is:

$$\text{Return on Assets Ratio} = (\text{Net Income} / \text{Total Assets}) * 100$$

### **3.5.7. Net Profit Ratio:**

Net profit means the real and net amount received in return for sales of the firm. It shows that how much amount is left over for shareholders and retain earnings leftover after the payment of all business expenses. High value of this ratio shows the fact that the firm had generated more profit out of its sales and vice versa. Net profit ratio can be calculated through division of net income of business by its net sales value and multiplication of the resultant amount with 100.

$$\text{Net Profit Ratio} = (\text{Net Income} / \text{Net Sales}) * 100$$

### **3.5.8. Operating Profit Ratio:**

This ratio assesses the amount leftover with the business after deducting the cost of goods sold value and other operating overheads out of firm's sales. High value of operating profit ratio shows that more sales revenue has been spent on these activities. Low value of this ratio highlights that less sales revenue has been spent on generating sales which is a good sign for the management of the firm that operations are managed cost efficiently. From this ratio of a firm one may easily find out the amount that may be paid as interest or tax payable and

dividend. Operating profit ratio may be calculated through dividing earnings before interest and taxes by the value of sales and multiplying it with 100.

Operating profit ratio = (EBIT/ Sales) \*100

### 3.5.9. Administrative Expenses Ratio:

It shows the ratio of administrative expenses the sales value of the firm. This ratio gives us assessment of firm's administrative expenses in relation to sales. Higher value of this ratio means the higher cost/less efficiency of administration and vice versa. This ratio can be calculated by the division of all administrative expenses by the sales value of the firm and multiplication of the resultant value with 100.

Administrative expenses ratio = (Administrative Expenses/ Sales) \*100

### 3.5.3. Activity/Efficiency Ratios:

Efficiency or activity ratios may also be termed as the 'Turnover Ratios' in literature. Through these ratios one may assess the assets management efficiency of the business. These ratios define the ratio between the value of sales and assets of any business. These ratios show the number of times of generating sales with the assets. Some key ratios of this category are given below.

#### 3.5.3.1. Current Assets Turn Over:

Current assets turnover ratio is the rate of sales to current assets. Value of this ratio shows the number of times the firm converted its total current assets into the value of firm sales. High value of this ratio shows that management of the business used its current assets more professionally and vice versa. It can be calculated with following formula:

Current Assets Turn Over = Sales/Current Assets

#### 3.5.3.2. Fixed Assets Turnover:

This ratio indicates shows the efficiency of firm to utilize its long-term assets. Value of this ratio shows the number of times the firm converted its long-term assets into sales during a specific financial period. High value of this ratio shows more management efficiency of using fixed assets and vice versa. Its formula is:

Fixed Assets Turnover = Sales/Fixed Assets

#### 3.5.3.3. Total Assets Turnover:

This ratio shows the number of times the firm converted the value of total assets into sales. Higher value of this ratio shows the business has efficiently managed and converted into sales more value of sales, it will show management strength. If value of this ratio of any firm is low, it will not signify strength of the business to utilize its all current and fixed assets. Its formula is given as under:

Total Assets Turnover = Sales/Total Assets

### 3.6. Statistical Model:

For statistical model, this study adopts the research of Chaudhry and Kamal done in 2007 where with given observations from three samples they found the difference among the three means. Considering the variances as a random sample from a normal population with mean  $H_0:U_1=U_2=U_3$  and unknown standard deviation  $\delta D$ , researchers applied ANOVA on them.

$$F = \frac{S_b^2}{S_w^2}$$

The formula is

Which, if  $H_0$  is true, has an F-distribution with  $V_1 = k - 1$  and  $V_2 = n - k$  degree of freedom. The total variation present in the samples can be partitioned into two parts. The first part is the sum of the square of deviations of the observations from the sample mean and is called the within (samples) sum of squares. It is also known as the error sum of squares. The second part is weighted sum of the square of deviations of the sample means

from the grand mean and is called the between sum of squares. We can thus represent the sum of squares identity symbolically by the equation:

$$\text{Total SS} = \text{Within SS} + \text{Between SS} \quad \text{Where} \quad S_b^2 = \frac{1}{k-1} \left[ r \sum_{j=1}^k (\bar{X}_{.j} - \bar{X}_{..})^2 \right], \text{ and}$$

$$S_w^2 = \frac{1}{n-k} \sum_{i=1}^r \sum_{j=1}^k (X_{ij} - \bar{X}_{.j})^2.$$

### 3.7. Least Significant Difference (LSD):

To check significance of the result, least significant difference (LSD) test is used. LSDs mostly signify complete t test results where more detailed estimate of the “noise” or error in the data (the pooled error variance or the square of the more commonly calculated ‘mean square of the error’ or Error Mean Square) to compare statistically valid means. LSD (Least Significant Difference) is the value at a given statistically probable level (e.g.  $P \leq 0.05$ - means with 95% accuracy) when increased by the variance between two varietal means for a certain feature, then the two varieties are said to be diverse for that feature at the given or lesser levels of probability. The change between two means is stated statistically significant at any desired significance level while its value is generally calculated through the following formula:

$$\text{LSD} = t(s)2/\sqrt{n}$$

### 3.8. Assessing Normality:

To assess data normality various statistical methods are used namely as Kolmogorov Smirnov test, Normal Q-Q Plots and Normal P-P Plots. In this study Normal Q-Q Plots method is used to assess data normality. This is a graphical procedure where observed values and expected values are plotted on X-axis and Y-axis respectively and normal distribution is assumed. It is noteworthy point that if the sample is disseminated precisely like normal distribution, then the points will fall on a straight line.

## VI. RESULTS AND DISCUSSION

This chapter presents results of selected ratios of three Islamic Banks, statistical results and discussion of each result to know if the result is significant or insignificant.

### 4.1. Year wise calculated ratios of Dubai Islamic Bank

S. NO	Ratios	2008	2009	2010	2011	2012
1	Current Ratios	1.18	1.20	1.17	1.14	1.12
2	Return on Equity Ratios	3.58	3.75	12.78	9.37	4.02
3	Return on Assets Ratios	3.003	2.08	1.93	1.21	0.43
4	Net Profit Ratios	0.13	0.12	0.04	0.04	0.12
5	Operating Profit Ratios	14.5	10.00	1.18	51.00	106.1
6	Administrative Expense Ratios	65.76	47.28	51.46	53.89	50.09
7	Current Assets Turnover Ratios	0.61	0.96	1.02	2.24	1.07
8	Fixed Assets Turnover Ratios	0.58	0.07	0.06	0.32	0.5
9	Total Assets Turnover Ratios	0.27	0.30	0.32	0.74	0.42

### 4.2 Year wise calculated ratios of Bank Islami Limited Ratios

S. NO	Ratio	2008	2009	2010	2011	2012
1	Current Ratios	1.37	1.16	1.11	1.10	1.08
2	Return on Equity Ratios	1.02	10.13	11.44	2.73	3.29
3	Return on Assets Ratios	0.27	1.397	1.21	0.24	0.24
5	Operating Profit Ratios	13.21	12.31	11.21	12.12	11.3

6	Administrative Expense Ratios	70.01	80.01	4.81	39.03	38.01
7	Current Assets Turnover Ratios	0.70	0.98	1.02	0.99	1.02
8	Fixed assets turnover Ratio	0.60	0.10	0.90	1.90	0.12
9	Total Assets Turnover Ratios	0.12	0.12	0.22	0.87	0.12

#### 4.3 Year wise calculated ratios of MB Ratios:

S.NO	Ratio	2008	2009	2010	2011	2012
1	Current Ratios	1.07	1.07	1.07	1.07	1.06
2	Return on Equity Ratios	30.80	17.37	14.88	24.60	21.19
3	Return on Assets Ratios	2.15	1.28	1.06	1.69	1.27
4	Net Profit Ratios	0.12	0.09	0.13	0.10	0.09
5	Operating Profit Ratios	14.81	12.12	15.09	13.01	18.09
6	Administrative Expense Ratios	38.60	34.94	36.29	30.04	32.95
7	Current Assets Turnover Ratios	1.00	1.70	2.09	1.00	2.00.
8	Fixed Assets Turnover Ratios	0.89	0.22	0.91	0.99	0.19
9	Total Assets Turnover Ratios	0.12	0.12	0.21	0.76	0.91

#### 4.4. Results :

Comparative results of calculated ratios of three Islamic Banks for five selected years from 2008 to 2012 taking  $\alpha$ -value = 0.05 and P value will change because P-value shows significance level. It is obvious from results of ANOVA test that the result of the test is statistically significant at 5% significance level. Same method was used by 57-61.

**Table 4.4.1 Comparison of Administrative expenses ratios among Islamic banks:**

Bank Name	N	Mini	Max	Difference	Mean	S.D.	C.V.
DIB	5	47.283	65.764	18.481	5.370	7.154	133.222
BI	5	4.819	80.018	75.199	4.640	29.754	641.25
MB	5	30.044	38.608	8.564	3.457	3.261	94.330
Total	15	4.819	80.018	75.199	4.488	18.362	409.135
F-value = 1.476		$\alpha$ -value = 0.05			p-value = 0.267		

Mini stands for minimum, max stands for maximum, S.D. stands for standard deviation and, C.V. stands for coefficient of variation.

Table 4.4.1 shows the administrative expenses ratios of the above mentioned three banks i.e. MB, DIB and BI. The table shows that BI has minimum value i.e. 4.819 and maximum value i.e. 80.108 and the largest difference among all the three banks. DIB has the highest mean ratio, but the standard deviation of BI is larger than MB and DIB. The table shows the largest coefficient of variation(C.V.)for BI, means there is inconsistency in administrative expenses and the BI Bank administrative expenses are not stable, while on the other hand MB has low variation in the data, which means there is consistency in MB.

From the above table we observe that the value of F statistic is 1.476,  $\alpha$ -value = 0.05 and p-value=0.267. As the p-value is greater than  $\alpha$ -value (i.e. 0.267 > 0.05), the result is insignificant, and we conclude that the average administrative expenses are same. In simple words there is no difference among the three means of administrative expenses.

Table 4.4.2 Comparison of Current Assets Turnover Ratio among Islamic banks

Bank Name	N	Mini	Max	Difference	Mean	S.D.	C.V.
DIB	5	0.610	2.244	1.634	1.169	0.625	53.464
BI	5	0.700	1.020	0.320	0.950	0.137	14.421
MB	5	1.000	2.090	1.090	1.570	0.525	33.439
Total	15	0.610	2.244	1.634	1.230	0.516	41.951
F-value = 2.160		$\alpha$ -value = 0.05			p-value = 0.158		

Mini stands for minimum, max stands for maximum, S.D. stands for standard deviation and, C.V. stands for coefficient of variation.

Table 4.4.2 shows the current assets turnover ratio of the above mentioned three banks i.e. MB, DIB and BI. The table shows that DIB has minimum value i.e. 0.610 and maximum value i.e. 2.244 and the largest difference among all the three banks. MB has the highest mean ratio, but the standard deviation of DIB is larger than MB and BI. The table shows the largest coefficient of variation (C.V.) for DIB, means there is inconsistency in current assets turnover and the DIB Bank current assets turnover are not stable, while on the other hand BI has low variation in the data, which means there is consistency in BI.

From the above table we observe that the value of F statistic is 2.160,  $\alpha$ -value = 0.05 and p-value=0.158. As the p-value is greater than  $\alpha$ -value (i.e. 0.158>0.05), the result is insignificant, and we conclude that the average current assets turnover is same. In simple words there is no difference among the three means of current assets turnover.

**Table 4.4.3 Comparison of Fixed Assets Turnover Ratio among Islamic banks**

Bank Name	N	Mini	Max	Difference	Mean	S.D.	C.V.
DIB	5	0.060	0.580	0.520	0.306	0.239	78.10458
BI	5	0.100	1.900	1.800	0.724	0.738	101.9337
MB	5	0.190	0.990	0.800	0.640	0.399	62.34375
Total	15	0.060	1.900	1.840	0.557	0.502	90.12567
F-value = 0.962		$\alpha$ -value = 0.05			p-value = 0.410		

Mini stands for minimum, max stands for maximum, S.D. stands for standard deviation and, C.V. stands for coefficient of variation.

Table 4.4.3 shows the fixed assets turnover ratio of the above mentioned three banks i.e. MB, DIB and BI. The table shows that DIB has minimum value i.e. 0.060 but BI has maximum value i.e. 1.900 and the largest difference among all the three banks. BI has the highest mean ratio and larger standard deviation than DIB and MB. The table shows the largest coefficient of variation (C.V.) for BI, means there is inconsistency in fixed assets turnover and the BI fixed assets turnover are not stable, while on the other hand BI has low variation in the data, which means there is consistency in BI.

From the above table we observe that the value of F statistic is 0.962,  $\alpha$ -value = 0.05 and p-value = 0.410. As the p-value is greater than  $\alpha$ -value (i.e. 0.410>0.05), the result is insignificant, and we conclude that the average fixed assets turnover is same. In simple words there is no difference among the three means of fixed assets turnover.

**Table 4.4.4 Comparison of Total Assets Turn over Assets ratio among Islamic banks:**

Bank Name	N	Mini	Max	Difference	Mean	S.D.	C.V.
DIB	5	0.270	0.740	0.470	0.410	0.170	41.463
BI	5	0.120	0.870	0.750	0.290	0.327	112.758
MB	5	0.120	0.910	0.790	0.424	0.380	89.622
Total	15	0.120	0.910	0.790	0.375	0.294	78.400
F-value = 0.282		$\alpha$ -value = 0.05			p-value = 0.759		

Mini stands for minimum, max stands for maximum, S.D. stands for standard deviation and, C.V. stands for coefficient of variation.

Table 4.4.4 shows the total assets turn over assets ratios of the above mentioned three banks i.e. MB, DIB and BI. The table shows that MB has minimum value i.e. 0.120 and maximum value i.e. 0.910 and the largest difference among all the three banks. MB has the highest mean ratio, but the standard deviation of BI is larger than MB and DIB. The table shows the largest coefficient of variation (C.V.) for BI, means there is inconsistency in total assets turn over and the BI Bank total assets turn over are not stable, while on the other hand BI has low variation in the data, which means there is consistency in BI.

From the above table we observe that the value of F statistic is 0.282,  $\alpha$ -value = 0.05 and p-value=0.759. As the p-value is greater than  $\alpha$ -value (i.e.0.759>0.05), the result is insignificant, and we conclude that the average total assets turn over are same. In simple words there is no difference among the three means of total assets turn over assets.

**Table 4.4.5 Comparison of Current Ratios among Islamic banks:**

Bank Name	N	Mini	Max	Difference	Mean	S.D.	C.V.
DIB	5	1.121	1.206	0.085	1.168	0.034	2.911
BI	5	1.081	1.373	0.292	1.167	0.118	10.111
MB	5	1.064	1.079	0.015	1.073	0.005	0.466
Total	15	1.064	1.373	0.309	1.136	0.080	7.042
F-value = 2.900		$\alpha$ -value = 0.05			p- value = 0.094		

Mini stands for minimum, max stands for maximum, S.D. stands for standard deviation and, C.V. stands for coefficient of variation.

Table 4.4.5 shows the current ratios of the above mentioned three banks i.e. MB, DIB and BI. The table shows that MB has minimum value i.e. 1.064 but BI has maximum value i.e. 1.373 and also the largest difference among all the three banks. DIB has the highest mean ratio but the standard deviation of BI) is larger than MB and DIB. The table shows the largest coefficient of variation (C.V.) for BI, means there is inconsistency in current ratios and the BI bank current ratios are not stable, while on the other hand MB has low variation in the data, which means there is consistency in MB.

From the above table we observe that the value of F statistic is 2.900,  $\alpha$ -value = 0.05 and p-value = 0.094. As the p-value is greater than  $\alpha$ -value (i.e. 0.094>0.05), the result is insignificant, and we conclude that the average current ratios are same. In simple words there is no difference among the three means of current ratios.

**Table 4.4.6 Comparison of Operating Profit Ratio among Islamic banks:**

Bank Name	N	Mini	Max	Difference	Mean	S.D.	C.V.
DIB	5	1.180	106.100	104.92	3.655	43.267	1183.776
BI	5	11.210	13.210	2.000	1.203	0.819	68.079
MB	5	12.210	18.090	5.880	1.462	2.298	157.181
Total	15	1.180	106.100	104.920	2.107	25.811	1225.012
F-value = 1.450		$\alpha$ -value = 0.05			p- value = 0.273		

Mini stands for minimum, max stands for maximum, S.D. stands for standard deviation and, C.V. stands for coefficient of variation.

Table 4.4.6 shows the operating profit ratios of the above mentioned three banks i.e. MB, DIB and BI. The table shows that DIB has minimum value i.e. 1.180 and maximum value i.e. 106.100 and the largest difference among all the three banks. DIB has the highest mean ratio and standard deviation of DIB is larger than MB and BI. The table shows the largest coefficient of variation (C.V.) for BI, means there is inconsistency in operating profit and the DIB Bank operating profit ratios are not stable, while on the other hand BI has low variation in the data, which means there is consistency in BI.

From the above table we observe that the value of F statistic is 1.450,  $\alpha$ -value = 0.05 and p-value = 0.273. As the p-value is greater than  $\alpha$ -value (i.e.  $0.250 > 0.05$ ), the result is insignificant, and we conclude that the average operating profit are same. In simple words there is no difference among the three means of operating profit.

**Table 4.4.7 Comparison of Net Profit Ratios among Islamic banks**

Bank Name	N	Mini	Max	Difference	Mean	S.D.	C.V.
DIB	5	0.040	0.135	0.095	0.091	0.046	50.549
BI	5	0.012	0.200	0.188	0.114	0.067	58.772
MB	5	0.090	0.130	0.04	0.106	0.018	16.981
Total	15	0.012	0.200	0.188	0.103	0.046	44.660
F-value = 0.298		$\alpha$ -value = 0.05			p-value = 0.747		

Mini stands for minimum, max stands for maximum, S.D. stands for standard deviation and, C.V. stands for coefficient of variation.

Table 4.4.7 shows the net profit ratios of the above mentioned three banks i.e. MB, DIB and BI. The table shows that BI has minimum value i.e. 0.012 and maximum value i.e. 0.200 and the largest difference among all the three banks. BI has the highest mean ratio and the standard deviation of BI is larger than MB and DIB. The table shows the largest coefficient of variation (C.V.) for BI, means there is inconsistency in net profit ratios and the BI bank net profit are not stable, while on the other hand MB has low variation in the data, which means there is consistency in MB.

From the above table we observe that the value of F statistic is 0.298,  $\alpha$ -value = 0.05 and p-value = 0.747. As the p-value is greater than  $\alpha$ -value (i.e.  $0.747 > 0.05$ ), the result is insignificant, and we conclude that the average net profit ratios are same. In simple words there is no difference among the three means of net profit ratios.

**Table 4.4.8 Comparison of Return on Assets Ratios among Islamic banks:**

Bank Name	N	Mini	Max	Difference	Mean	S.D.	C.V.
DIB	5	0.435	3.003	2.568	1.733	0.965	55.684
BI	5	0.247	1.397	1.15	0.676	0.577	85.355
MB	5	1.065	2.158	1.093	1.495	0.434	29.030
Total	15	0.247	3.003	2.756	1.301	0.797	61.261
F-value = 3.172		$\alpha$ -value = 0.05			p-value = 0.078		

Mini stands for minimum, max stands for maximum, S.D. stands for standard deviation and, C.V. stands for coefficient of variation.

Table 4.4.8 shows the Return on Assets Ratios of the above mentioned three banks i.e. MB, DIB and BI. The table shows that BI has minimum value i.e. 0.247 and DIB has maximum value i.e. 3.003 and the largest difference among all the three banks. DIB has the highest mean ratio, but the standard deviation of DIB is larger than MB and BI. The table shows the largest coefficient of variation (C.V.) for BI, means there is inconsistency in return on assets ratios and the BI bank return on assets ratios are not stable, while on the other hand MB has low variation in the data, which means there is consistency in MB.

From the above table we observe that the value of F statistic is 3.172,  $\alpha$ -value = 0.05 and p-value = 0.078. As the p-value is greater than  $\alpha$ -value (i.e.  $0.078 > 0.05$ ), the result is insignificant, and we conclude that the average return on assets ratios are same. In simple words there is no difference among the three means of return on assets ratios.

**Table 4.4.9 Comparison of Return on Equity Ratios among Islamic banks:**

Bank Name	N	Mini	Max	Difference	Mean	S.D.	C.V.
DIB	5	3.589	12.781	9.192	6.704	4.171	62.217
BI	5	1.020	11.448	10.428	5.726	4.722	82.466
MB	5	14.888	30.802	15.914	2.177	6.257	287.414
Total	15	1.020	30.802	29.782	1.140	8.962	786.140
F-value = 15.388		$\alpha$ -value = 0.05		p- value = 0.000			

Mini stands for minimum, max stands for maximum, S.D. stands for standard deviation and, C.V. stands for coefficient of variation.

Table 4.4.9 shows the Return on Equity Ratios of the above mentioned three banks i.e. MB, DIB and BI. The table shows that BI has minimum value i.e. 1.020 and has maximum value i.e. 30.802 and the largest difference among all the three banks. DIB has the highest mean ratio, but the standard deviation of MB is larger than BI and DIB. The table shows the largest coefficient of variation (C.V.) for MB, means there is inconsistency in return on equity ratios and the MB Bank return on equity ratios are not stable, while on the other hand DIB has low variation in the data, which means there is consistency in DIB.

From the above table we observe that the value of F statistic is 15.388,  $\alpha$ -value = 0.05 and p-value = 0.000. As the p-value is less than  $\alpha$ -value (i.e.  $0.000 < 0.05$ ), the result is significant, and we conclude that the average return on equity ratios are different. In simple words there is difference among the three means of return on equity ratios.

**4.5 Table of Least Significant Difference (LSD) :**

S. No	Ratios	P- value			$\alpha$ -value
		1	2	3	
1	Administrative Expenses Ratios	0.527	0.114	0.314	0.05
2	Current Ratios	0.976	0.057	0.061	
3	Current Assets Turnover Ratios	0.468	0.217	0.062	
4	Fixed assets turnover Ratio	0.214	0.315	0.797	
5	Total Assets Turnover Ratios	0.553	0.944	0.507	
6	Operating Profit Ratios	0.147	0.191	0.873	
7	Net Profit Ratios	0.46	0.634	0.789	
8	Return on Assets Ratios	0.033	0.598	0.088	
9	Return on Equity Ratios	0.768	0.001	0	

1 stands for Meezan Bank Limited, 2 stands for Dubai Islami Bank Pakistan Limited and 3 stands for BI.

Table 4.5 shows the significance of three selected Islamic banks. S. No1 as the p-value of Meezan Bank limited, DIB and BI is greater than  $\alpha$ -value of each bank (i.e.  $0.527 > 0.05$ ,  $0.114 > 0.05$  and  $0.314 > 0.05$ ) respectively. Hence there is no significant difference in the performance of the selected Islamic banks with respect to administrative expenses ratios.

S. No 2 as the p-value of Meezan Bank limited, DIB and BI is greater than  $\alpha$ -value of each bank (i.e.  $0.976 > 0.05$ ,  $0.057 > 0.05$  and  $0.061 > 0.05$ ) respectively. Hence there is no significant difference in the performance of the selected Islamic banks with respect to current ratios.

S. No 3 as the p-value of Meezan Bank limited, DIB and BI is greater than  $\alpha$ -value of each bank (i.e.  $0.214 > 0.05$ ,  $0.217 > 0.05$  and  $0.062 > 0.05$ ) respectively. Hence there is no significant difference in the performance of the selected Islamic banks with respect to current assets turnover ratios.

S. No 4 as the p-value of Meezan Bank limited, DIB and BI is greater than  $\alpha$ -value of each bank (i.e.  $0.468 > 0.05$ ,  $0.315 > 0.05$  and  $0.797 > 0.05$ ) respectively. Hence there is no significant difference in the performance of the selected Islamic banks with respect to fixed assets turn over ratios.

S. No 5 as the p-value of Meezan Bank limited, DIB and BI is greater than  $\alpha$ -value of each bank (i.e.  $0.553 > 0.05$ ,  $0.944 > 0.05$  and  $0.507 > 0.05$ ) respectively. Hence there is no significant difference in the performance of the selected Islamic banks with respect to total assets turn over ratios.

S. No 6 as the p-value of Meezan Bank limited, DIB and BI is greater than  $\alpha$ -value of each bank (i.e.  $0.147 > 0.05$ ,  $0.191 > 0.05$  and  $0.873 > 0.05$ ) respectively. Hence there is no significant difference in the performance of the selected Islamic banks with respect to operating profit ratios.

S. No 7 as the p-value of Meezan Bank limited, DIB and BI is greater than  $\alpha$ -value of each bank (i.e.  $0.460 > 0.05$ ,  $0.634 > 0.05$  and  $0.789 > 0.05$ ) respectively. Hence there is no significant difference in the performance of the selected Islamic banks with respect to net profit ratios.

S. No 8 as the p-value of DIB is greater than  $\alpha$ -value of BI and vice versa (i.e.  $0.598 > 0.05$  and  $0.088 > 0.05$ ) respectively. Hence there is no significant difference in the performance of the DIB and BI with respect to return on assets ratios except MB because p-value of MB is less than  $\alpha$ -value, so the result is significant (i.e.  $0.033 < 0.05$ ).

S. No 9 as the p-value of DIB is less than  $\alpha$ -value of BI and vice versa (i.e.  $0.001 < 0.05$  and  $0.000 < 0.05$ ) respectively. Hence the result is significant with respect to return on equity ratios except MB because p-value of MB is greater than  $\alpha$ -value of DIB and BI. So, the result is insignificant (i.e.  $0.768 > 0.05$ ).

#### 4.6Q-Q Plots Explanation:

Following figures shows normality of the data of Islamic banks

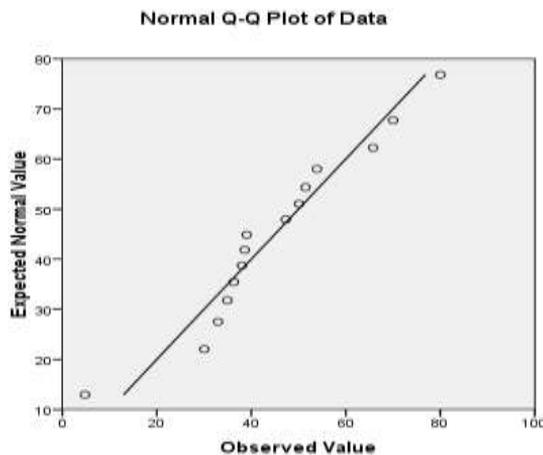


Figure 4.6.1

Figure 4.6.1 shows normality of data of the selected Islamic banks. As almost all the points fall on or near the straight line in the graph. Therefore, the data with respect to administrative expenses ratios satisfied the normality condition.

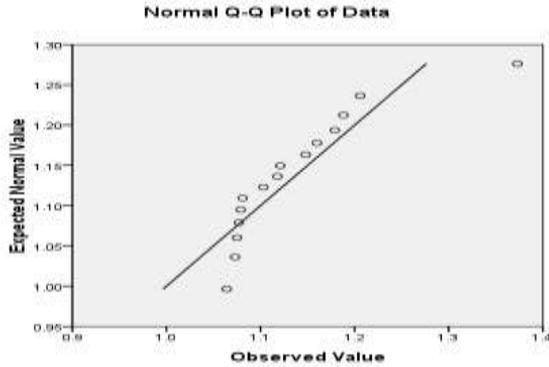


Figure 4.6.2

Figure 4.6.2 shows normality of data of the selected Islamic banks. As almost all the points fall on or near the straight line in the graph. Therefore, the data with respect to current ratios satisfied the normality condition.

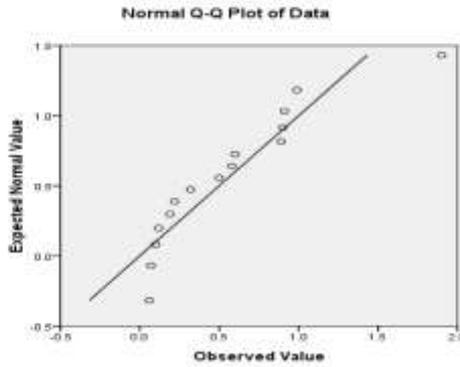


Figure 4.6.3

Figure 4.6.3 shows normality of data of the selected Islamic banks. As almost all the points fall on or near the straight line in the graph. Therefore, the data with respect to fixed assets ratios satisfied the normality condition.

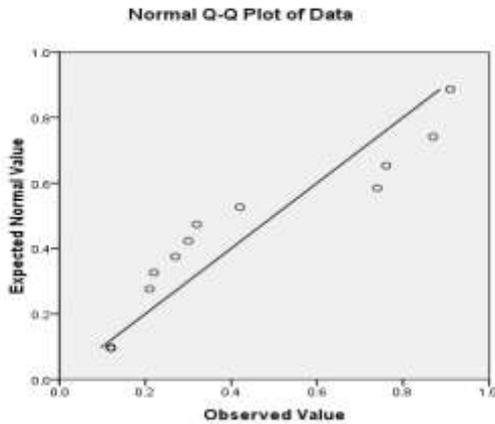


Figure 4.6.4

Figure 4.6.4 shows less normality of data of the selected Islamic banks because just two points fall on the straight line in the graph, two to three points near and the remaining points lie outside the line in the graph. Therefore, the data with respect to total assets ratios satisfied the normality condition.

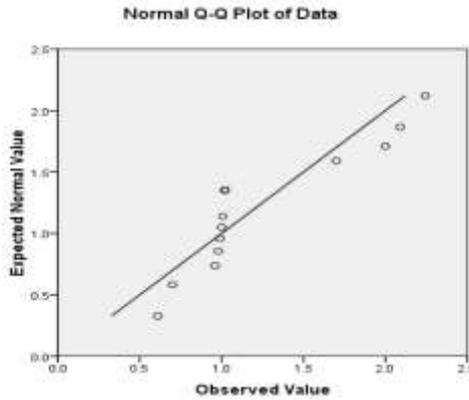


Figure 4.6.5

Figure 4.6.5 shows less normality of data of the selected Islamic banks. As just two points lie on the straight line and two to four points fall near the straight line and the remaining points fall outside the line in the graph. Therefore, the data with respect to current assets ratios shows less normality.

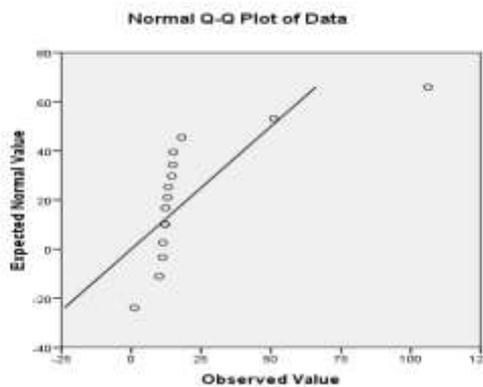


Figure 4.6.6

Figure 4.6.6 shows less normality of data of the selected Islamic banks. As just two points lie on the straight line and two to three points fall near the straight line and the remaining points fall outside the line in the graph. Therefore, the data with respect to operating profit ratios shows less normality.

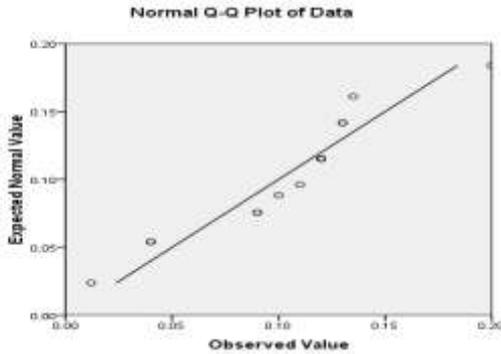


Figure 4.6.7

Figure 4.6.7 shows less normality of data of the selected Islamic banks because only one point lies on the straight line and three to four points fall near the straight line and the remaining points fall outside the straight line in the graph. Therefore, the data with respect to net profit ratios shows less normality.

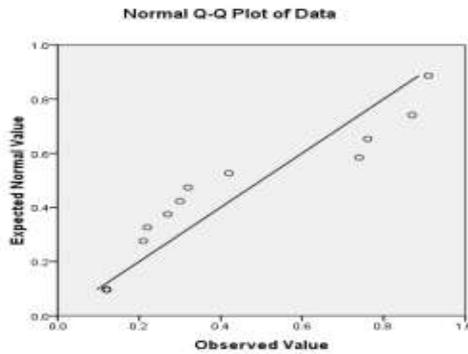


Figure 4.6.8

Figure 4.6.8 shows less normality of data of the selected Islamic banks. As just two points fall on the straight line in the graph, two to three points lie near the line and the remaining points fall outside the straight line in the graph. Therefore, the data with respect to return on total assets ratios shows less normality.

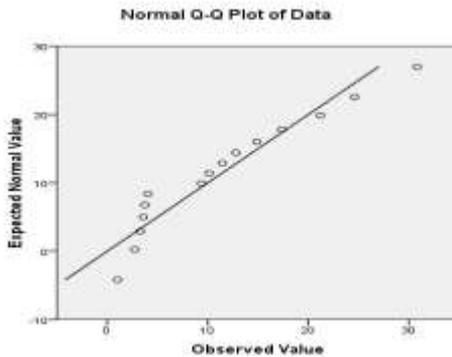


Figure 4.6.9

Figure 4.6.9 shows normality of data of the selected Islamic banks. As almost all the points fall on or near the straight line in the graph. Therefore, the data with respect to return on equity ratios satisfied the normality condition.

## V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This section consists of summary, conclusion of the statistical analysis and recommendations for improving the performance of Islamic Banking mentioned as below:

### 5.1. Summary:

This study quantitatively analyzed financial achievement of three Islamic banks working in Pakistan in terms of liquidity ratios, profitability and activity ratios. Research question of this study whether the financial results of Islamic banks may be analyzed or not? The main objective of this study was to analyze the financial performance of Meezan Bank Limited, DIB and BI. The financial output of these three Islamic banks was the main concern of the current research. Five years secondary data from 2008 to 2012 was selected to conduct this research.

The researcher hypothesized that there is difference in the performance of Islamic banks. To test the above hypothesis, three Islamic banks namely as Meezan Bank Limited, DIB and BI are selected as a sample. The analyzed data through ANOVA showed that there was no significant difference in the performance of the selected banks in terms of liquidity ratios, profitability and activity ratios. However, the difference between return on equity ratio among the selected banks was statistically significant. To check the result whether it is significant or insignificant, least significant difference (LSD) test is used. In this study Normal Q-Q Plots method is used to assess data normality. This is a graphical procedure that plots the observed values on the X-axis and the expected values (assuming a normal distribution) on the Y-axis.

### 5.2 Conclusion :

It was found that customer's preference of Islamic banking in Pakistan is at an acceptable level. The key reason behind this is that Pakistani society highly inclined towards religion. Pakistanis prefer products of Islamic banks as there is not involvement of Interest (riba) in them. Customers of Islamic banks have found its products as the best alternative of the products of conventional banks of Pakistan. Nevertheless, Islamic banks apply promotional activities and tools less effectively to make their products public and aware people about their products. Ijara is the most common and widely used product of Islamic Banks in Pakistan. Murabahah is the second highly used and common product of Pakistani Islamic banking channel. The products of Ijara and Murabahah are more traded more in Pakistan than Mudaraba and Musharaka. We may say that Islamic banks in Pakistan do not sufficiently utilize Musharaka and Mudaraba. Less profitability, higher risks, and the required monitoring and supervision for Musharaka and Mudaraba are the main reasons for the underutilization of these products. Besides, Islamic banks may face heavy financial losses if they provide such products to dishonest customers. Key problem in successful operation of International Financial Institutions (IFIs) in Pakistani context that public is unaware about availability of Islamic banking services. The problem of could solve through awareness of public about Islamic banking products nevertheless, Islamic banks in Pakistan do not sufficiently employ promotional tools and techniques.

### 5.3. Recommendations:

Based on the results of this study it is recommended that:

1. Islamic banks should minimize their administrative expenses. It will increase operating profit and net operating profit.
2. For the Islamic banks it is recommended that they should increase investments in current assets to work effectively and efficiently.

3. Islamic banks should increase operating profit and net operation profit. For awareness of products, Islamic banks should effectively use media for promoting their products and services among public.
4. Products of Islamic i.e Musharaka and Mudaraba, Murabaha and Ijara are riskier and costly. Therefore, to increase return on equity and total assets it is recommended that Islamic banks should initiate intensive research for finding out ways of minimizing risk and costs sharia complaint products.
5. Some products of Islamic banks i.e Musharaka and Mudaraba are riskier and costly. In this connection, it is recommended that Islamic banks should conduct intensive research for assessing the ways of reducing risks and costs of the less productive and more risky products of Islamic banks.
6. More research work is recommended to find out other key factors for the enhancement and development of Islamic banks in Pakistan and throughout the world.

#### **EndNotes:**

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