

## Comparative Analysis of performance of Islamic Vis a Vis Conventional Banking of Pakistan during Global Financial Crisis 2007-2010

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### Abstract

*This study aims at to conduct a comparative analysis of performance of on the impact of global financial crisis on Islamic and conventional banking in Pakistan during the period the 2007-2010. Three performance indicators have been considered for this purpose namely profitability, liquidity & Soundness. This study covers a four year period from 2007 to 2010. Based on the performance of 2007 the impact has been analyzed by using financial ratios as analysis tool. The financial ratios like Return on Assets (ROA), Return on Equity (ROE), Loan to Asset Ratio(LAR), Loan to Deposit ratio (LDR), Assets Utilization(AU), Debt to equity Ratio(DER) and Income to Expense ratio(IEER) are used to evaluate performance of sample banks. Primary data was also collected through survey by using a closed ended questionnaire. The study explores two main findings (I) there seems no any major variation in liquidity & profitability of both types of the commercial banks (II) the Islamic banks hold more liquid assets than conventional banks- counterparts, which affected their liquidity. While analyzing it was also concluded that cost of deposit on conventional side increased as compared to Islamic Banking and Non Performing Loans were increased after multi year stability and control on healthy loans on conventional side.*

**Key Words:** *Global Financial Crisis, Islamic, Conventional Banks, Liquidity, profitability, Non Performing Loans*

### Introduction:

The main objectives of this paper are to review the growth of the Islamic banking with respect to their counterpart conventional banking during the global financial crisis which started in US subprime mortgage and engulfed the entire globe. While the degree of economic damage varied across the countries, economists are of the same opinion that the current recession is the worst since the Great Depression of 1930. These are in essence credit crisis which are direct result of collapse of the mortgage market in United States.

The study is basically aimed at to evaluate and analyze the performance of conventional banking to its counterpart Islamic banking in Pakistan during the period 2007-2010. Specifically, focus is on two banks viz a viz Meezan bank Limited and Bank Alfalah Limited one from Islamic side and other from conventional side based on their deposit base ,net work and products and services provided. Data were collected from their annual reports. In this era of modern technology and very much competitive financial market it is pretty common to use this technique of analysis for comparison of Bank's performance.

### Bird's eye view of Global Financial crisis

The financial crises got extraordinary impetus during the period from 2004 to 2007, stock markets witnessed slow down and many large banks of the developed economies applied for bailout to evade collapse.

During 2009 global output dropped by 2.2 % percent and the unemployment rate increased by 7 % percent and global output declined by 2.2 per cent , resulted into more than 35 million people lay off .

The main causes of crises were imprudent lending for a pretty long period of time ,fair value of collateral accepted was ignored, repayment capacity of borrowers was ignored even down payment was ignored. relaxation of regulations by US government particularly repeal of the Glass-Steagall Act of 1933 ,improper rating was awarded by rating agencies against attractive incentives and risk rating mechanism was totally ignored.

### Impact of Global Financial Crisis on developed economies

It caused collapse of Financial Institutions globally, includes giant financial & insurance institutions like Lehman Brothers, American International Group Inc, Fannie Mae, Freddie Mac etc. Central Banks in weak economies like Iceland turn out to be bankrupt, Investors lost enormous amount globally severe liquidity crunch and credit squeeze for the financial sector occurred.

House prices declined by 20% from its peak in 2006 and home equity valued at \$13 trillion in the United States reached at lowest level of \$8.8 trillion in the mid of 2008. Many banks applied for bailout to avoid bankruptcy which led to a situation of layoffs and resulted into unemployment which reached its peak level in 2008.

### **Impact of Global Financial Crisis on Pakistan**

A strained global economic recession has seized FDI( Foreign Direct Investment) which declined by 47.5 % during the period July-April 2008-09. However remittances by workers' from abroad remained unaffected which were around US \$ 6.4 bln. Pakistan was unable to raise funds from capital markets of the world as entire globe was gripped due to such unprecedented global financial crisis. Literally Pakistan's presence was very much limited in the international capital markets during 2008-09.

### **Overall Impact on Banking Industry in Pakistan**

Keeping in view the demands for financial & economic globalization, Banking system of Pakistan also initiated to link itself with global financial market.

Consequent upon rumours spread over the country regarding Seizure of Lockers and freezing of Foreign Currency Accounts (FCY) Pakistan's financial sector experienced some shocks, which resulted into noticeable withdrawals of deposits liquidity problem. To lubricate the market suffering from liquidity crunch the central bank of Pakistan injected round about \$ 100 million in the market and also lowered its statutory requirements by 4 %.

### **Review of Literature**

There is a lot of empirical literature regarding the root causes Global Financial Crisis & its impact on banking industry and world economy as well. A number of reports & research papers attempted to examine the implications and effects of Global financial Crisis. In case of Pakistan very little empirical literature is available on the various financial and operational dimensions.

An attempt has been made to analyze and explore the causes and consequences of Global financial Crisis on various dimensions of Banking industry in Pakistan particularly performance of sample banks with respect to their liquidity, solvency & profitability. The existing literature explores the causes globally is reviewed as under.

According to T Schuermnn & A.B.Ashcraft, et al, 2007, the root cause of the crisis is the process of collateralization, which gave birth to the global financial crisis. Near about 75 per cent subprime mortgage loans were linked directly with the securitization process. Financial derivatives played vital role in securitization of the loans in special compartment of CLOs (collateralized loan obligations) and CDOs (collateralized debt obligations)

Dr Umer Chapra -2008 in his research regarding financial crisis has claimed that the current global economic recession is worse than the Great Depression of 1929. He further argued that the growth of banking industry will remain slow and effects of crisis may remain for longer period of time. He further explained on credit problem, he analyzed that more profit means more lending and high leverage is the reason which makes excess lending possible and results into artificial boom in prices of assets and gives rise in speculative investment and consumption. Such high leverage is difficult to unwind and this vicious cycle of selling ultimately leads to steep decline in prices rather to downturn and outcome is financial crisis.

Lowenstein (2008) explores that the regulators and central banks have allowed the recurrence of crisis who have failed to display financial discipline even forget the past events from which lessons should be learnt. It was need of hour to recognize the early warning signals so that financial derivatives could be managed more firmly and tightly. Rather they promoted such risky business instead by behaving in a speculative manner and looked for bailout.

Nicholson, 2008 confirms that global financial crisis which gets start from United States has engulfed the entire world. The crisis was so severe that it not only affected US financial industry but crashed stock exchanges of many countries of Asia & Europe. Global Financial crisis also affected Socialist economies apart from capitalist, Russian stock Market also dropped significantly during May 2008.

Bartlett (2008) has expressed his point of view on the causes of financial crisis, he stated that the crises which started with the fall down of sub-prime mortgage industry in states but the intensity was so severe which engulfed the globe. According to him losses were unprecedented in the history ,on such risky assets (MBOs, CLOs, CDOs and subprime securities) accounted for about US \$945 billion during March 2008 which he confirmed that these losses are biggest one even in comparison of banking crisis of Japan accounted for to US\$ 780 billion approximately during 90s, During Asian crisis the losses were accounted for around US \$ 420 billion during 90s and Saving & Loan Disaster of United States were around US \$ 380 billion during 1986-95

JPMorgan et al, 2006, explored that Mortgage-Backed securities which were highly risky has witnessed a tremendous expansion after 1998 although it initiated growth in 70s but its use was very much limited in mortgaged backed industry before late90s.

Wim Naude has very clearly expressed that there were several causes of global financial crisis which include inter alia weak regulatory checks ,easy access to cheap money, Irresponsible, imprudent & aggressive lending ,rise in housing prices with the start of the century which unduly facilitated the mortgage backed loans around one trillion US dollars particularly to those households who otherwise were not entitled to avail the facility on the basis of very little repaying the risk so arising was covered by securitization. The predictable income from such infected finances were packed with other securities like CDO (Collateralized Debt Obligations) & were sold onward by getting required rating of AAA from world fame rating agencies for which they were offered handsome incentives. Moral Hazards & Conflicts of interest were common all over in the system.

Yilmaz (2008) has clearly fixed responsibility on U.S mortgage industry that extended mortgage finance facilities to sub prime clients thus resulted into occurrence of severe nature of financial crisis, initially anticipated the losses in the range of US \$ 300 To 600 billion which later were accounted for about US \$1 trillion.

## **Research Methodology**

### **Ratio Analysis**

In this study Banks' performance have been measured by using ratio analysis technique, the main advantage of this method is to remove disparity based on their size of deposits ,advances & network and brings the banks at par. This method was also used by other researchers too such as Ahmed & Hassan (2007),Sabi(1996) and Chen & Shimerda (1981).

### **Financial Analysis by using Ratios**

#### **Profitability Ratios**

Return on Assets (ROA):

This ratio is indicator of evaluating managerial efficiency as to how bank management uses its assets profitably. Higher ratio is better managerial efficiency indicator and shows better performance and vice versa.

Formula used for ROA is, Return on Assets = Net Profit/Total Assets

Return on Equity (ROE):

This ratio is also indicator of managerial efficiency and shows how well a bank invests its capital to generate income. It evaluates efficiency at generating profits from every unity of equity. Higher ratio is better managerial efficiency indicator and shows better performance and vice versa.

Formula used for ROE is, Return on Equity =Net Profit/Equity

| Bank | Year | Mean | Standard Deviation |
|------|------|------|--------------------|
|------|------|------|--------------------|

### Credit Risk Performance

Equity to Total Assets (ETA):

It measures the credit risk of banks, it shows as to how bank protects against its assets & investments. Basically it tells about capacity of shock absorbance arising out from potential losses of loaned assets and investments. Higher ratio is better indicator of maintaining the loan losses.

Formula used for ETA is, Equity to Total Assets= Common Equity/Assets

### Capital Adequacy Ratio (CAR):

It measures banks capital against its Risk Weighted Assets (RWA) /Credit Exposure. Higher ratio does not always mean good performance but indicates that large amount of capital is maintained to meet risks arising out from its credit exposures. There are three types of risks, Credit Risks, Market Risks & Operational Risks.

Formula used for CAR is, Tier-I capital +Tier Two capital / Risk Weighted Assets

### Management Efficiency

Income Expense Ratio (IER):

This ratio measures the amount of income earned in comparison to operating expenses. This is very common ratio used by bank management to improve efficiency by controlling operating expenses which results in better income generation. Higher ratio means better performance in terms of profit with respect to operating expenses.

Formula used for IER is, Income Expense Ratio=Total Income/Total Operating Expenses

### Management Ability

Asset Utilization (AU):

This tells how effectively bank's management uses its assets for revenue generation. Higher ratio is indicator of better use of assets to generate income & vice versa.

Formula used for AU is, Asset Utilization=Total Revenue/Total Assets

**Loan to Deposits Ratio:** This ratio indicates that how a Bank utilizes its deposits by extending loans, relatively low ratio contributes higher liquidity and results in low profits and low ratio creates stress for managing liquidity but higher profits.

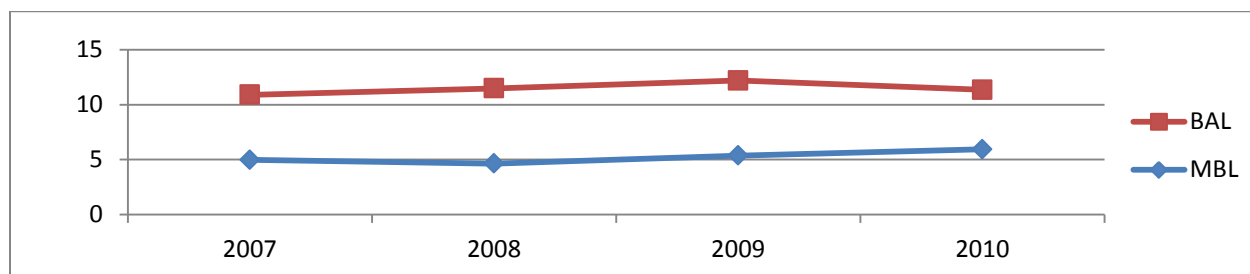
Formula used for LDR is, Loan to Deposits Ratio =Total Loans/Total Deposits

**Loans to Assets Ratio:** This ratio measures that what percentage a bank has invested in shape of loans, the higher ratio indicates less liquidity and vice versa. But it is pertinent to mention that high ratio leads to better profitability with risk of solvency.

Formula used for LAR is, Loan to Deposits Ratio =Total Loans/Total Assets

### ROA

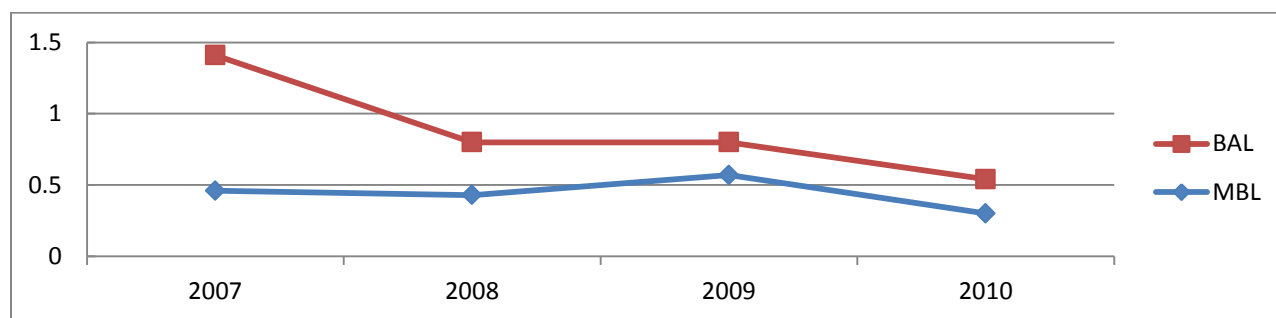
|            | 2007         | 2008        | 2009        | 2010        |              |               |
|------------|--------------|-------------|-------------|-------------|--------------|---------------|
| <b>MBL</b> | <b>5.35</b>  | <b>5.85</b> | <b>7.85</b> | <b>4.44</b> | <b>5.87</b>  | <b>1.4417</b> |
| <b>BAL</b> | <b>22.73</b> | <b>8.90</b> | <b>4.53</b> | <b>4.90</b> | <b>10.26</b> | <b>8.542</b>  |



Return on Assets of Meezan Bank limited(MBL) quite stable as compared to Bank Alfalah Limited(BAL) as shown from above figures ,ROA of BAL was 22.73% in 2007 which immediately declined to 8.90 % and 4.90 % in 2010 whereas MBL remained stable and improved in 2009 mean remains improved.

### ROE

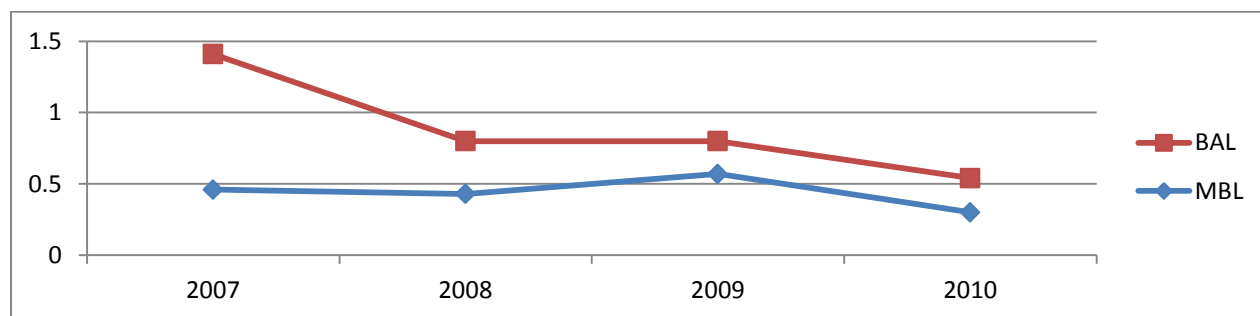
| Bank       | Year        |             |             |             | Mean        | Standard Deviation |
|------------|-------------|-------------|-------------|-------------|-------------|--------------------|
|            | 2007        | 2008        | 2009        | 2010        |             |                    |
| <b>MBL</b> | <b>0.46</b> | <b>0.43</b> | <b>0.57</b> | <b>0.30</b> | <b>0.44</b> | <b>0.1110</b>      |
| <b>BAL</b> | <b>0.95</b> | <b>0.37</b> | <b>0.23</b> | <b>0.24</b> | <b>0.44</b> | <b>0.3410</b>      |



Return on Equity of MBL remains almost unchanged and it varied 0.95 % in 2007 to 0.24 % in 2010 which shows impact of crisis on BAL as compared to MBL which remained resilient.

**ETA**

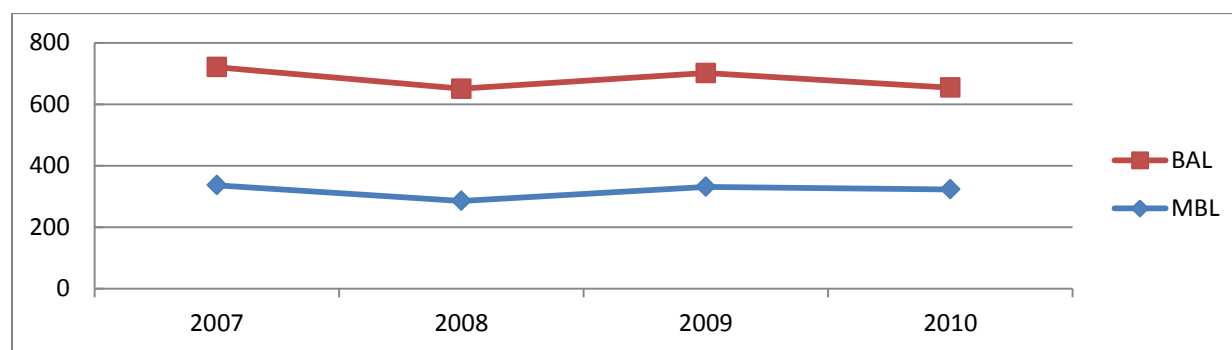
| Bank       | Year        |             |             |             | Mean          | Standard Deviation |
|------------|-------------|-------------|-------------|-------------|---------------|--------------------|
|            | 2007        | 2008        | 2009        | 2010        |               |                    |
| <b>MBL</b> | <b>8.51</b> | <b>7.44</b> | <b>7.32</b> | <b>6.94</b> | <b>7.5525</b> | <b>0.6729</b>      |
| <b>BAL</b> | <b>4.18</b> | <b>4.18</b> | <b>5.08</b> | <b>4.79</b> | <b>4.5575</b> | <b>0.4516</b>      |



It measures the credit risk of banks, in case of BAL it has declined from 8.51% in 2007 to 6.94% in 2010 but remained almost unaffected in CASE of MBL which shows strength of Bank to absorb shocks of crisis or crises have no effect on its ETA position.

**IER**

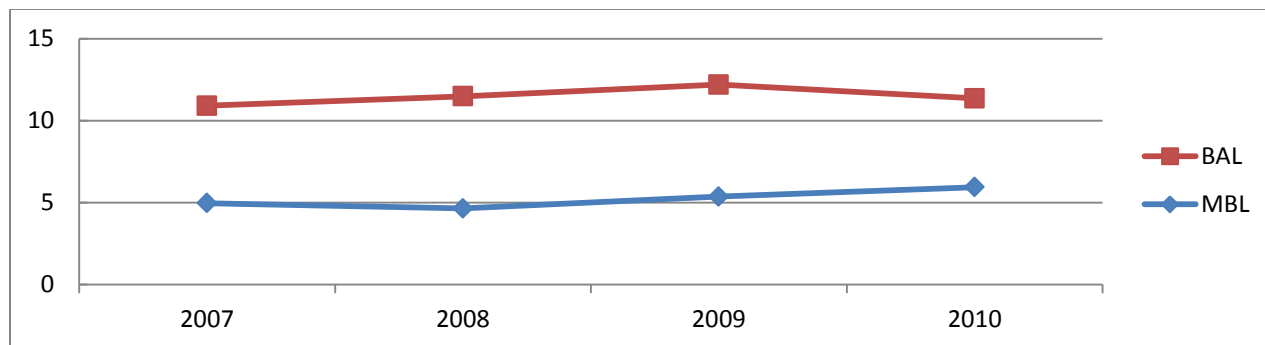
| Bank       | Year          |               |               |               | Mean          | Standard Deviation |
|------------|---------------|---------------|---------------|---------------|---------------|--------------------|
|            | 2007          | 2008          | 2009          | 2010          |               |                    |
| <b>MBL</b> | <b>336.61</b> | <b>285.91</b> | <b>331.35</b> | <b>323.01</b> | <b>319.22</b> | <b>22.9017</b>     |
| <b>BAL</b> | <b>383.90</b> | <b>364.47</b> | <b>370.32</b> | <b>331.17</b> | <b>362.46</b> | <b>22.3946</b>     |



It tells that both banks have maintained control over its operating expenses in respect of income, in otherwise crises has not affected operating expenses position significantly though have affected BAL from 363.90% to 331.17% but MBL remained comparatively stable.

**CAR**

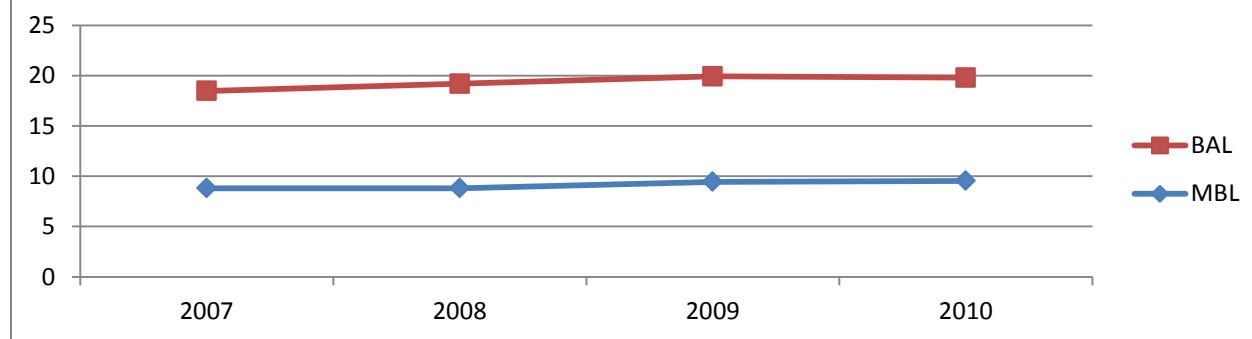
| Bank       | Year         |              |              |              | Mean         | Standard Deviation |
|------------|--------------|--------------|--------------|--------------|--------------|--------------------|
|            | 2007         | 2008         | 2009         | 2010         |              |                    |
| <b>MBL</b> | <b>10.84</b> | <b>10.03</b> | <b>12.77</b> | <b>12.41</b> | <b>11.51</b> | <b>1.2957</b>      |
| <b>BAL</b> | <b>9.85</b>  | <b>8.03</b>  | <b>12.46</b> | <b>10.53</b> | <b>10.15</b> | <b>1.8299</b>      |



CAR is basically cushion of capital against its Risk Weighted Assets, Position of MBL improved but it was slightly affected in case of BAL. CAR of MBL was 10.84% in 2007 which was improved to 12.41% in 2010 whereas in case of BAL it was immediately affected in 2008 and regained in 2009 but was slightly declined in 2010 which shows instability.

**AU**

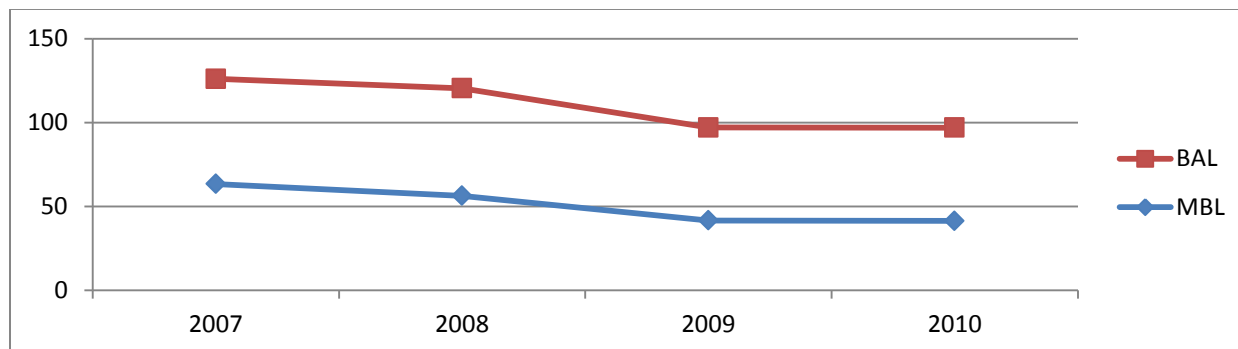
| Bank       | Year        |              |              |              | Mean         | Standard Deviation |
|------------|-------------|--------------|--------------|--------------|--------------|--------------------|
|            | 2007        | 2008         | 2009         | 2010         |              |                    |
| <b>MBL</b> | <b>8.81</b> | <b>8.80</b>  | <b>9.45</b>  | <b>9.54</b>  | <b>09.15</b> | <b>0.40008</b>     |
| <b>BAL</b> | <b>9.67</b> | <b>10.39</b> | <b>10.47</b> | <b>10.26</b> | <b>10.19</b> | <b>0.3621</b>      |



Both banks remained alert and used its assets in a better way but standard deviation of MBL is 0.40008 in comparison to 0.326 of BAL.

**LDR**

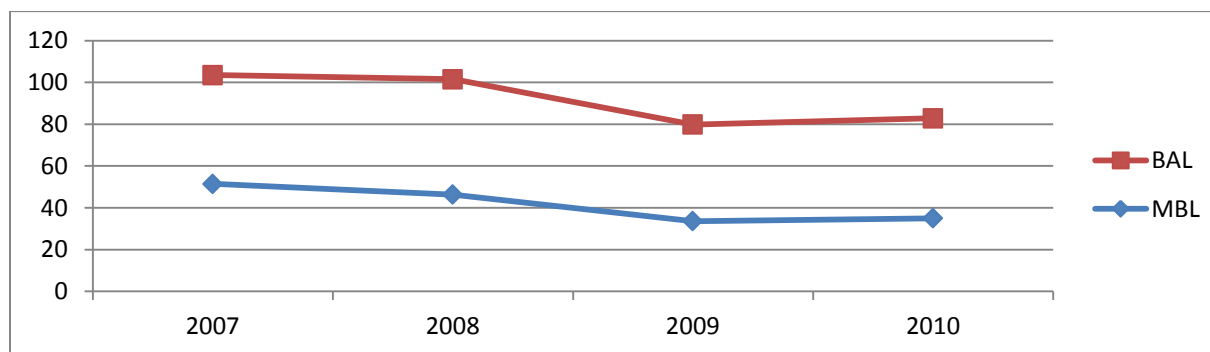
| Bank       | Year         |              |              |              | Mean           | Standard Deviation |
|------------|--------------|--------------|--------------|--------------|----------------|--------------------|
|            | 2007         | 2008         | 2009         | 2010         |                |                    |
| <b>MBL</b> | <b>63.34</b> | <b>56.28</b> | <b>41.57</b> | <b>41.34</b> | <b>50.6575</b> | <b>10.9826</b>     |
| <b>BAL</b> | <b>62.67</b> | <b>64.06</b> | <b>55.43</b> | <b>55.57</b> | <b>59.4325</b> | <b>4.5765</b>      |



LDR of BAL was affected considerably from 63.34 % in 2007 to 41.34 % in 2010 whereas MBL declined slightly but liquidity seems better .Mean of MBL is 50.6575 in comparison to BAL that is 59.4325.

**LAR**

| Bank       | Year         |              |              |              | Mean          | Standard Deviation |
|------------|--------------|--------------|--------------|--------------|---------------|--------------------|
|            | 2007         | 2008         | 2009         | 2010         |               |                    |
| <b>MBL</b> | <b>51.46</b> | <b>46.35</b> | <b>33.58</b> | <b>35.02</b> | <b>41.602</b> | <b>8.7062</b>      |
| <b>BAL</b> | <b>52.05</b> | <b>55.20</b> | <b>46.26</b> | <b>47.81</b> | <b>50.33</b>  | <b>4.0657</b>      |



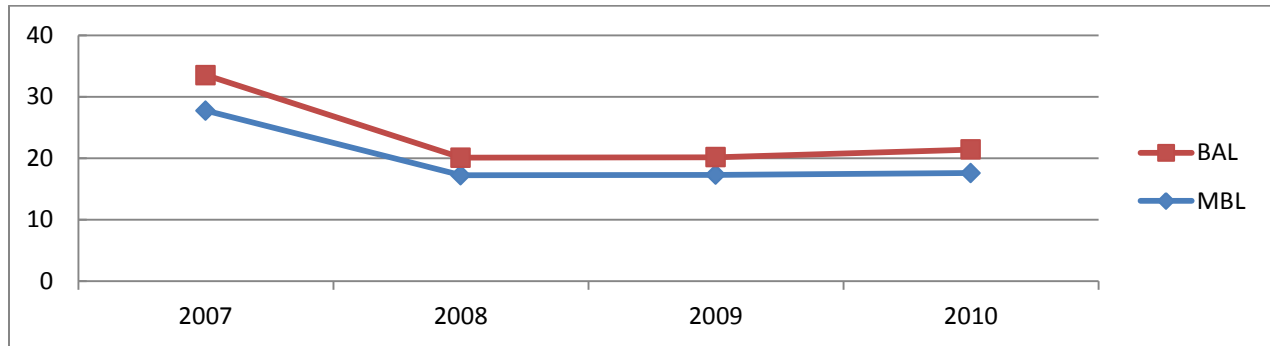
There seems no liquidity problem at MBL as Loan to Assets ratio is within manageable limit and better than its counter part BAL.

Besides above following ratios also sheds light on performance of both banks.



**PBT Ratio**

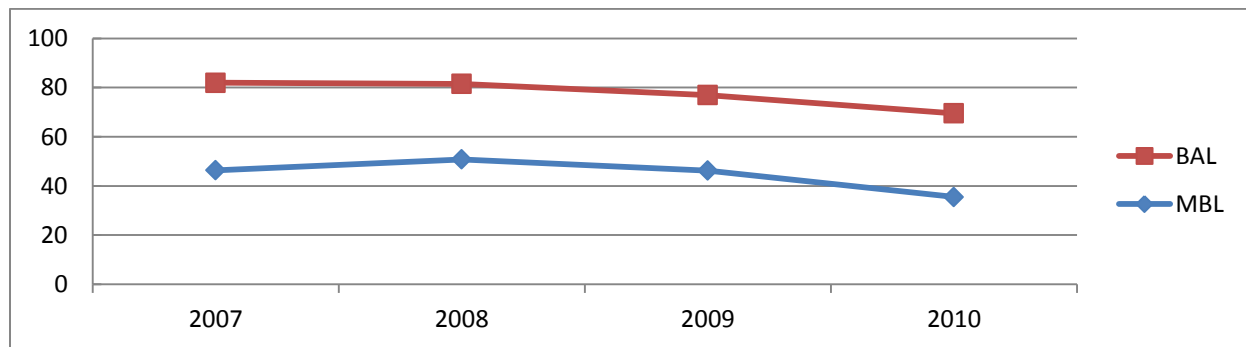
| Bank       | Year         |              |              |              | Mean         | Standard Deviation |
|------------|--------------|--------------|--------------|--------------|--------------|--------------------|
|            | 2007         | 2008         | 2009         | 2010         |              |                    |
| <b>MBL</b> | <b>27.74</b> | <b>17.22</b> | <b>17.30</b> | <b>17.59</b> | <b>19.96</b> | <b>5.1874</b>      |
| <b>BAL</b> | <b>5.78</b>  | <b>2.86</b>  | <b>2.85</b>  | <b>3.83</b>  | <b>3.83</b>  | <b>1.3788</b>      |



Profit before Tax ratio of BAL and MBL has significantly affected during the period under review though the mean of MBL is quite better.

**Gross Spread Ratio**

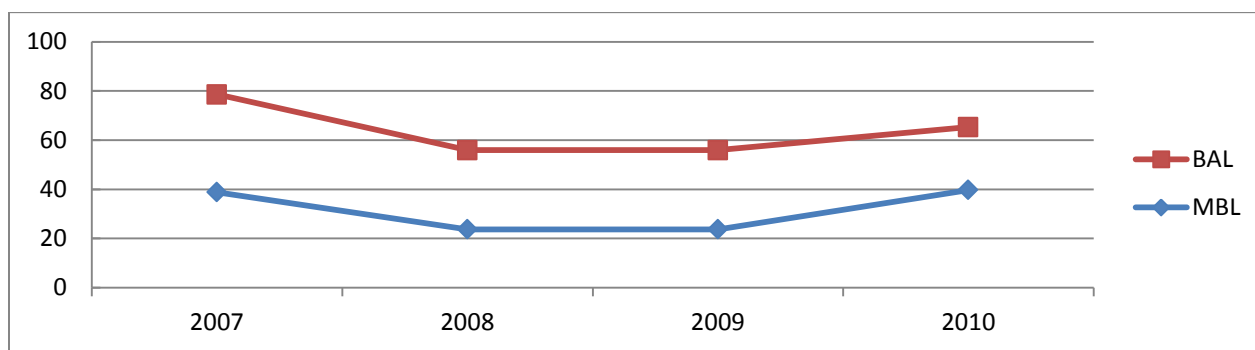
| Bank       | Year         |              |              |              | Mean          | Standard Deviation |
|------------|--------------|--------------|--------------|--------------|---------------|--------------------|
|            | 2007         | 2008         | 2009         | 2010         |               |                    |
| <b>MBL</b> | <b>46.39</b> | <b>50.80</b> | <b>46.25</b> | <b>35.54</b> | <b>44.745</b> | <b>6.4901</b>      |
| <b>BAL</b> | <b>35.54</b> | <b>30.67</b> | <b>30.67</b> | <b>33.98</b> | <b>32.715</b> | <b>2.4457</b>      |



Gross Spread ratio has also been affected in case of BAL due to increase in Mark up expense and decrease in Markup income however it remained somehow better in MBL

**Non Interest Income**

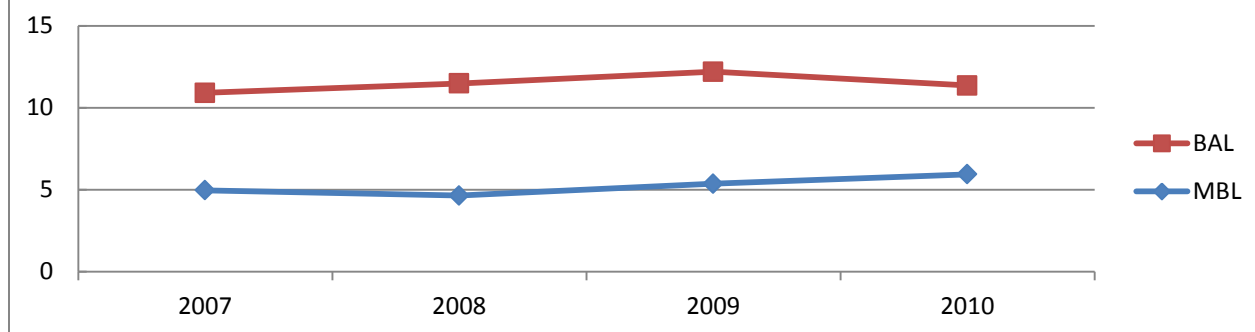
| Bank | Year  |       |       |       | Mean   | Standard Deviation |
|------|-------|-------|-------|-------|--------|--------------------|
|      | 2007  | 2008  | 2009  | 2010  |        |                    |
| MBL  | 38.85 | 23.74 | 23.74 | 39.72 | 31.51  | 8.9819             |
| BAL  | 39.72 | 32.21 | 32.20 | 25.61 | 32.435 | 5.7665             |



Noninterest income (fees, commission and dividend income etc) was affected for both banks.

**Weighted Average Cost of Deposits**

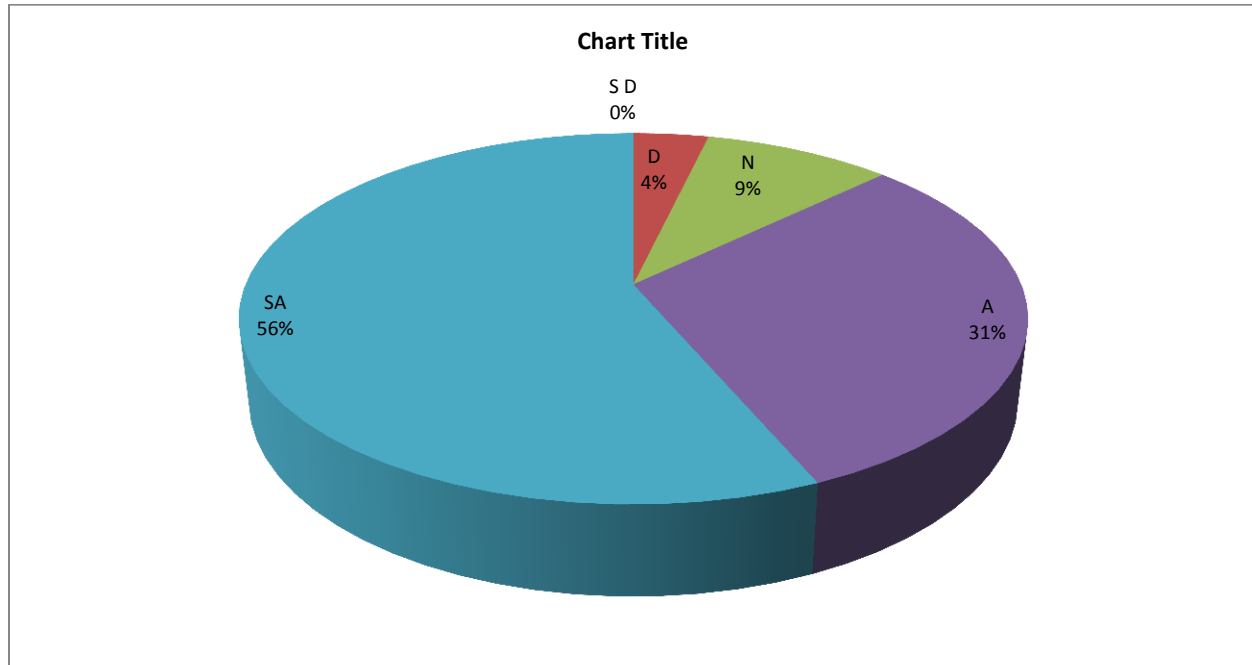
| Bank | Year |      |      |      | Mean | Standard Deviation |
|------|------|------|------|------|------|--------------------|
|      | 2007 | 2008 | 2009 | 2010 |      |                    |
| MBL  | 4.97 | 4.64 | 5.37 | 5.94 | 5.23 | 0.55958            |
| BAL  | 5.94 | 6.84 | 6.83 | 5.42 | 6.25 | 0.6998             |



It is very much clear that cost of deposits have risen significantly in case of BAL with respect to MBL which means deposits were mobilized at high cost to keep their financial position particularly Balance sheet in tact in the eyes of stake holders.

**Primary Data**

Primary Data was collected from management of commercial banks and from SBP officials ,a closed ended questionnaire was developed and results were analyzed , A five point Likert scale was used as tool to gauge all the factors (1 for strongly disagree & 5 for strongly agree).

**Overall Response –By 185 /200 respondents****Results**

Primary data were collected from 185 out of 200 respondent also confirms that the Global Financial Crisis has affected the conventional banking industry of Pakistan in terms of Profitability ,liquidity and NPL increase.

**Conclusion**

This study is aimed at investigating the performance of both Islamic as well as conventional banks in Pakistan, sixth largest bank from conventional side and first established bank from Islamic were studied in terms of financial ratios.

It was revealed that conventional banks remained under pressure to maintain their deposits position, mobilized costly deposits which badly affected its profitability. Moreover liquidity was tight for which SBP reduced SLR+CRR from 34 % to 30% besides injecting \$ 20-100 millions to lubricate the financial sector. Islamic banks were not affected as much as conventional due to investment in real assets instead of cash which was limited exposure. Overall performance of Meezan Bank Limited remained stable and resilient as compared to Bank Alfalah Limited.

**References:**

Alan Zibel, “Liar loans' threaten to prolong mortgage crisis” (2008)

Ahmed, O. B. (2001). Islamic Financial Instruments to Manage Short-Term Excess Liquidity (2nd Edition ed.). Jeddah: Islamic Development Bank.

Charnes, A. Cooper W W and Rhodes E (1978) Measuring Efficiency of Commercial banks with the use of Financial ratios and Data Envelopment Conventional Banks” IIUM Journal of Economics & Management Vol 10 No 1 pp 1-25

Dar K.H and Shimerda ,T (1981) “An Empirical Analysis of Useful financial ratios “ Financial Management Vol10 No 1 pp 51-60

Muljawan, D.; H. Dar, and M. J. B. Hall (2002), “A Capital Adequacy Framework for Islamic Banks: The Need to Reconcile Depositors’ Risk Aversion with Managers’ Risk Taking” ,Loughborough University Economics Papers,

Tarawneh, M. (2006), A Comparison of Financial Performance in the Banking Sector: Some Evidence from Omani Commercial Banks. *International Research Journal of Finance and Economics*, Issue (3). ISSN 1450-2887

Yue, P. (1992), "Data Envelopment Analysis and Commercial Bank Performance: A Primer with Applications to Missouri Banks," Working Papers, ICW Institute, University of Texas at Austin.

Zaman, R., & Movassaghi, H. (2001). Islamic Banking: A Performance Analysis. *The Journal of Global Business*, 12(22), 31-38.