



## **Performance of Islamic and Conventional Banks in Pakistan: A Comparative Study**

**Shahab Aziz<sup>1,2</sup>, Maizaitulaidawati Md Husin<sup>3</sup>, Shujahat Haider Hashmi<sup>4\*</sup>**

<sup>1</sup>Credit Manager, Bank of Khyber, Pakistan, <sup>2</sup>PhD Scholar, University Technology Malaysia (UTM), Malaysia, <sup>3</sup>International Business School, Universiti Teknologi Malaysia (UTM), Malaysia, <sup>4</sup>Faculty of Management and Social Sciences, Capital University of Science and Technology (CUST), Pakistan. \*Email: [shujahat@cust.edu.pk](mailto:shujahat@cust.edu.pk)

### **ABSTRACT**

This study is conducted to find out financial performance of Islamic and conventional banks operating in Pakistan for the year 2006-2014. For comparison purpose five Islamic and five similar sized conventional banks have been selected. The comparison has been made on average values of different ratios of both Islamic and conventional banks. The comparison shows that Islamic banks performance has been better in terms of efficiency, return and asset quality. However Islamic banks are struggling in terms of advances, investment, liquidity, deposits and capital as conventional banks performance is better in these areas. Islamic banks are charging higher spread and share of distributable income to depositors is far less as compared to conventional banks. Islamic banks need to focus on fair distribution of profit to its depositors in order to increase its credibility and help in achieving overall Islamic socio economic objectives of justice and equality. Islamic banks should focus on new products development and innovative solutions to meet client's needs, also Islamic banks needs to strengthen their equity base.

**Keywords:** Financial Performance, Financial Ratios, Comparison, Islamic Banks, Conventional Banks

**JEL Classifications:** E44, G21

### **1. INTRODUCTION**

Economic performance in any country is dependent upon its financial sector. The role of banking sector is important in channeling public savings into productive investments which lead to economic growth. In Pakistan banking sector comprises of both Islamic and conventional banks. Conventional banking is based on interest and is against Islamic principles and therefore is prohibited. Islamic banks, on the other hand, are Shariah compliant and operate according to Islamic laws.

Islamic banks differ both in their assets and liabilities from their conventional counterparts. On liabilities side Islamic banks accept deposits on the basis of current and savings accounts. Current accounts are based on Islamic contract of Qarz-e-Hasana and savings accounts are opened on the basis of Mudarbara and Musharika. On assets side Islamic banks offer three types of Islamic modes of finance. Firstly, sale based modes i.e., Murabaha, Salam and Istisna. Secondly Islamic banks offer participatory

modes, Musharika, Mudarbaha, and Diminishing Musharika. Thirdly, Islamic banks offer Islamic leasing mode i.e., Ijarah. Islamic asset products are different from conventional debt based products.

In Pakistan Islamic banking started in year 2002 and as of December 2015 there are 6 full-fledged Islamic banks operating in Pakistan. Most of the conventional banks are also running Islamic banking parallel to their conventional banking business. Islamic banking in Pakistan is growing and currently share of Islamic banking industry stood at 11.4% of overall banking industry as on December 2015. Total Islamic banking branch network comprises of 2.075 branches as on December 2015 across the country where almost half of the branches are operating in Punjab province.

This study is aimed at comparing financial performance of Islamic banking industry with conventional banks for the years 2006-2014. The performance comparison has been made for 9 years on the basis of different ratios i.e., efficiency, liquidity, asset quality and

leverage. The study is important as there are many stakeholders interested in financial performance of Islamic banking industry. Firstly, financial performance indicators help regulator to keep an eye on financial industry outlook and its future growth and challenges. On the basis of financial indicators corrective measures can be taken which can be helpful for the banking industry. Secondly shareholders need to know the performance in order to assess their investment potential and future investment strategy. The objective of the study is to find out comparative performance of Islamic and conventional banks operating in Pakistan for the years 2006-2014. On the basis of aim and objectives the following research questions have been answered by the present study.

- To compare efficiency of Islamic banks with conventional banks
- To compare liquidity management of Islamic and conventional banks
- To determine asset quality of Islamic and conventional banks
- To determine leverage of both Islamic and conventional banks
- To compare performance of Islamic and conventional banks in terms of efficiency, liquidity, asset quality and leverage with overall banking industry.

## 2. LITERATURE REVIEW

Comparative analysis is often used in literature to measure performance of similar organizations. Financial ratio analysis is one of the tools which have been used extensively in literature to measure and compare performance of banks (Akkas, 1994; Elyasiani et al., 1994; Sabi, 1996; Saleh and Zeitun, 2006; Samad, 1999; Samad and Hassan, 2000; Spindler, 1991).

Samad (2004) carried out study while comparing Islamic and conventional banks in Bahrain for the years 1991-2001. The result of the study shows that credit performance of both types of banking is different however, there is not much difference between profitability and liquidity. Another study conducted by Srairi (2010) performed cost and profit efficiency analysis by using stochastic frontier approach. The study was carried out by analyzing 71 commercial banks in GCC countries from the year 1999 to 2007. The results reveal that conventional banks are more efficient than Islamic banks.

Iqbal (2001) has carried out their study regarding performance of Islamic banks by using trend and ratio analysis for the year 1990 to 1998. Kaleem and Isa (2003) have carried out their study regarding Islamic and conventional deposit return by using econometric techniques. The results showed that Islamic banks have significant contribution in developing economies. The result of the study shows that performance of Islamic banks is better than conventional banks. Akhtar et al. (2011) has made comparative analysis of Islamic and conventional banks. The results revealed that liquidity risk and networking capital to asset has positive relationship. Also capital adequacy of conventional banks and return on assets (ROA) of Islamic banks has positive and significant relationship with liquidity risk.

Wasiuzzaman and Gunasegavan (2013) investigated the performance of Islamic and conventional banks in Malaysia

and found that board size, ROA and bank size of Islamic banks are comparable with conventional banks. The results also found that capital adequacy, asset quality, liquidity and operational efficiency were better for Islamic banks. Safiullah (2010) analyzed performance of conventional and Islamic banks in Bangladesh for the years 2004 to 2008 by using ratio analysis. They showed that performance of conventional banks is better than Islamic banks in terms of productivity and efficiency. A study conducted by Ali et al. (2013) regarding Islamic and conventional banks has shown that satisfaction level of clients using conventional banks is higher as compared to Islamic banks. Siraj and Pillai (2012) made research regarding comparison of Islamic and conventional banks in GCC region for the years 2005 to 2010 by using ratio analysis. The study used six Islamic and six conventional bank as sample for study. The results implied that Islamic banks have higher financed equity, have higher operating profits as compared to conventional counterparts.

There are several studies carried out to compare performance of Islamic and conventional banks in Pakistan. Jaffar and Manarvi (2011) made the comparison of both Islamic and conventional banks performance for the years 2005 to 2009. The study used CAMEL test for analysis. The results showed that conventional banks have better liquidity management and earning ability. Both type of banks have similar asset quality. Moreover, they concluded that performance of Islamic banks is better than conventional banks by using UNCOL ratio analysis. Moin (2013) carried out similar study, however, for different time period i.e., 2003 to 2007. He used twelve ratios for comparison. It was found that conventional banks are better as they are operating for many years. A study conducted by Usman and Khan (2012) regarding Islamic and conventional banks in Pakistan for the year 2007 to 2009 concluded that growth and profitability of Islamic banks is higher as compared to conventional banks. Also Islamic banks have higher liquidity as compared to conventional banks. Another similar study carried out by Mughal et al. (2015) in Pakistani context for the years 2010-2014 evidenced that profitability of conventional banks is higher than Islamic banks.

There are a number of studies in literature which have used ratio analysis for comparing performance of Islamic and conventional banks. However, in Pakistani context, the existing studies have performed analysis for few years. The present study is being conducted for longer time period i.e., 2006 to 2014. Islamic banking started in Pakistan in year 2002; however, till 2006 the industry comprised of few other Islamic banks. This research is being extended to the maximum time period which would give a better performance review and comparison.

## 3. METHODOLOGY

The data is collected from various bulletins of State Bank of Pakistan's publication of financial statement analysis of financial sector for year 2006-2014. Currently there are six full-fledged Islamic banks which are operating in Pakistan; however, for this study five Islamic banks have been selected as one of Islamic banks has started its operations recently. Also five conventional banks have been selected which are similar in size in terms of

equity to Islamic banks for comparison. For carrying out analysis and comparison four types of ratios are selected i.e., efficiency, liquidity, asset quality and leverage. The comparison of Islamic banking along with conventional banks and industry is made in order to assess the performance. Ratio analysis has been carried out by taking averages of all the banks ratios and then comparison of performance is made of Islamic and conventional banks. Also performance of Islamic and conventional banks have been compared with overall banking industry.

### 3.1. Efficiency Ratios

The following ratios have been used to evaluate the efficiency of conventional and Islamic banks.

1.  $ROA = \text{Net profit after tax} / \text{total asset}$

This ratio expresses the capacity of earning profit by a bank on its total assets employed in the business. It is calculated as percentage of net profit after tax to total assets. It is useful for measuring efficiency as it shows to what extent assets are generating profits.

2.  $\text{Return on equity (ROE)} = \text{Net profit after tax} / \text{Share holders' equity}$

$\text{Total shareholders' equity (Banks)} = \text{Share capital} + \text{reserves} + \text{un-appropriated profit (loss) total}$

$\text{shareholders' equity (Foreign banks)} = \text{H.O capital account} + \text{reserves} + \text{unremitted profit}$ . This ratio expresses the return on shareholders' equity. ROE is a direct measure of returns to the shareholders. It is calculated as a percentage of the net profit after tax to total Shareholders' equity.

3.  $\text{Earnings per share (EPS)} = \text{Net profit after tax} / \text{no of ordinary shares}$

EPS is the ratio between net profit after tax to number of shares outstanding at the end of the year as shown in balance sheet and its relevant notes to accounts. It is useful for whole financial sector except for Mudaraba companies where certificates are issued for raising capital.

4.  $\text{Spread} = \text{Interest earned} / \text{interest expense}$

Spread is the gap between interest rate a bank charges on loans and rate pays on deposits. The amount of total interest earned divided by the total interest paid to depositors as mentioned in the income statement. This ratio is useful for banks to show to what extent net interest form part of banks income.

5.  $\text{Interest ratio} = \text{Interest paid} / \text{interest earned}$

Interest ratio shows the payment of interest/profit to the depositors. The higher the ratio the higher is the amount paid to the depositors out of interest income.

### 3.2. Liquidity Ratios

1.  $\text{Investment to total asset} = \text{Total investment} / \text{total assets}$

The ratio between Investment and total assets shows investment activity with reference to its total assets. It indicates the portion of total assets used for investment in various venues.

2.  $\text{Advances to total asset} = \text{Total net advances} / \text{total assets}$

This ratio expresses the relationship of advances (net) to total assets. This ratio is useful for banks to find out to what extent advances which is core banking business comprises of total assets.

**Table 1: Islamic Banks and Subsidiary**

Name of Bank	Year of establishment	Number of branches
Meezan Bank	2002	547
Bank Islami Pakistan Ltd.	2006	205
Dubai Islamic Bank Pakistan Ltd.	2006	199
Albaraka Bank Pakistan Ltd.	2010	136
Burj Bank Ltd.	2007	74
MCB - Islamic Bank Ltd. (Subsidiary)	2015	06

Islamic Banking Bulletin Oct-Dec 2015 (State Bank of Pakistan)

**Table 2: Return on assets**

Years	2006 (%)	2007 (%)	2008 (%)	2009 (%)	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)
Islamic	0.13	-0.09	-0.27	-1.00	-0.68	0.464	0.310	-0.12	0.69
Conventional	-0.97	-0.77	-1.67	-1.85	-1.55	-0.068	0.132	0.20	0.42
Industry	1.86	1.51	0.77	0.74	0.48	1.390	1.220	1.07	1.34

**Table 3: Return on equity**

Years	2006 (%)	2007 (%)	2008 (%)	2009 (%)	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)
Islamic	-19.50	5.46	2.00	-2.50	-2.17	7.42	5.032	1.1	5.0
Conventional	-	-	-	-	-43.08	-2.23	-15.00	-30.77	9.10
Industry	23.62	17.88	8.59	8.31	5.93	14.88	14.56	12.99	16.79

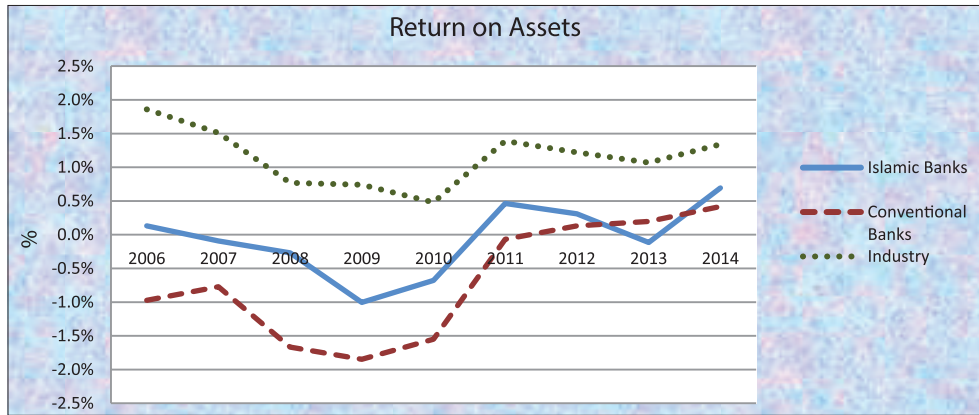
**Table 4: Earnings per share**

Years	2006	2007	2008	2009	2010	2011	2012	2013	2014
Islamic	-0.99	0.31	0.07	-0.17	0.12	1.07	0.83	0.61	1.11
Conventional	0.43	0.27	-0.41	-1.06	-0.69	0.21	-0.08	0.06	0.72

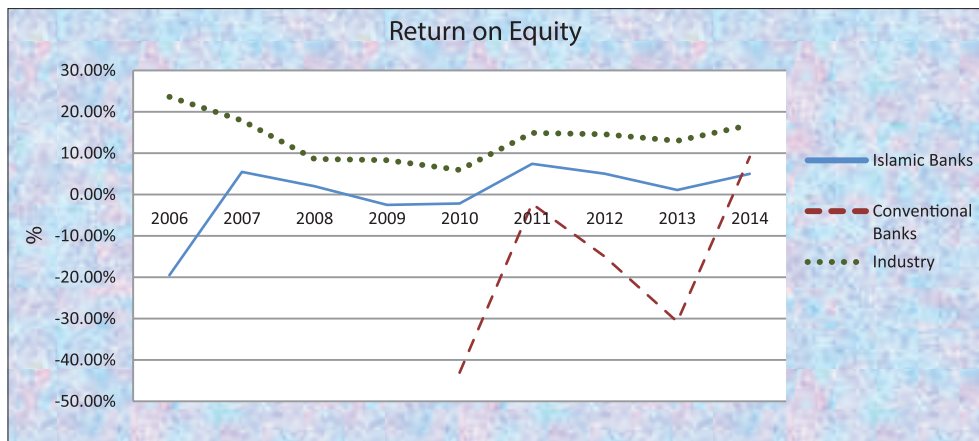
**Table 5: Spread**

Years	2006 (%)	2007 (%)	2008 (%)	2009 (%)	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)
Islamic	77.0	59.6	50.2	44.7	41.4	42.7	38.6	38.9	41.4
Conventional	31.0	34.3	34.5	28.2	28.4	36.5	30.3	29.7	32.5
Industry	56.6	52.1	48.9	45.1	43.7	45.9	42.9	43.1	45.4

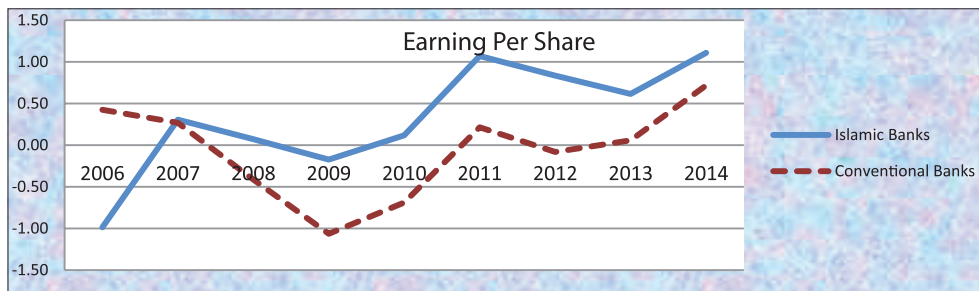
**Figure 1:** Comparative analysis of return on assets of conventional and Islamic banks



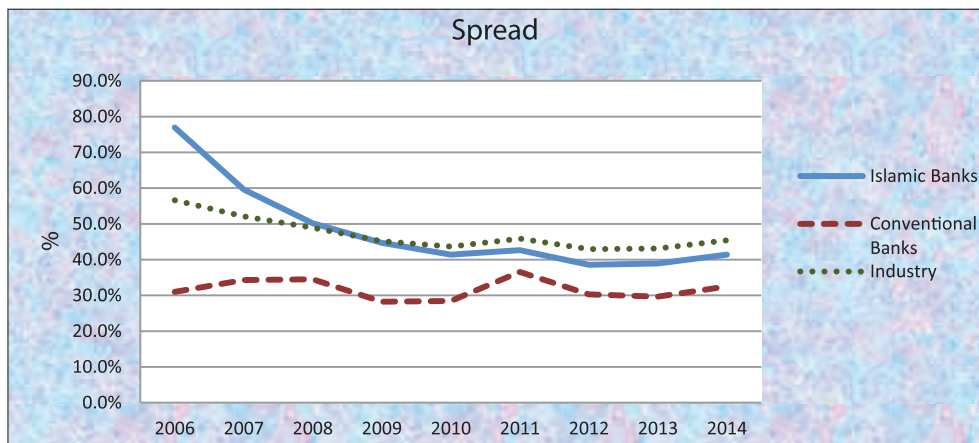
**Figure 2:** Comparative analysis of return on equity of conventional and Islamic banks



**Figure 3:** Comparative analysis of earnings per share of conventional and Islamic banks



**Figure 4:** Comparative analysis of spread of conventional and Islamic Banks



### 3.3. Asset Quality

1. Non-performing loans (NPL) to gross advances= $\text{NPL}/\text{gross advances}$

This ratio expresses the quality of loan portfolio of a bank. It shows the percentage of NPLs as gross advances made by a bank and evaluates assets quality based on loan portfolio. This ratio is useful for banks and DFIs.

2. Provisions against NPL to gross advances =  $\text{Provision against NPL}/\text{gross advances}$

The ratio between provisions against classified loans/advances to gross advances reflects the quality of Advances of banks and DFIs.

### 3.4. Leverage Ratio

1. Capital ratio =  $\text{Total share holders' equity}/\text{total asset}$

Where, total shareholders "equity (Pakistani Banks) = share capital + reserves + un-appropriated profit (loss) total shareholders" "equity (Foreign Banks) = H.O Capital Account + Reserves + Unremitted Profit. The ratio between shareholders' "equity and total assets expresses the percentage of equity in total assets."

2. Total deposit to total equity =  $\text{Total deposits}/\text{total share holders' equity}$

The ratio shows the relationship between total deposits in a bank to the total shareholders equity.

## 4. RESULTS

The overall trend of ROA is almost similar for Islamic, conventional banking and industry. There is declining trend of ROA of three segments from 2006 to 2010 in Figure 1 and Table 2. After 2010 ROA has improved for a couple of years for all segments. From year 2009 to 2010 ROA of both Islamic and conventional banks shows increasing trend. From year 2011 to 2013 return of Islamic banks shows declining trend in contrast to conventional banks. From 2013 to 2014 Islamic and conventional banks both has shown increase in asset returns. If we analyze past 9 years Islamic banks has performed a lot better than similar size conventional banks.

Return on equity of Islamic banks is consistent with overall industry however, the selected conventional banks ROE is mostly negative for the period chosen. Islamic banks on the other hand have performed a lot better as compared to conventional banks throughout the comparison period. The respective results are reported in Figure 2 and Table 3.

### 4.1. EPS

Earnings per share of Islamic banks for the selected time period i.e., 2006-2014 is far better than its conventional counterparts as reported in Table 4 and Figure 3. This clearly exhibits that Islamic bank earning are better than conventional banks. From 2006-

**Table 6: Interest ratio**

Years	2006 (%)	2007 (%)	2008 (%)	2009 (%)	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)
Islamic	30.7	40.4	49.9	55.3	58.6	57.3	61.4	61.1	58.6
Conventional	69.0	65.7	65.5	71.7	71.5	73.4	72.0	70.3	67.4
Industry	43.1	47.8	51.1	54.8	55.3	54.1	57.1	56.8	54.6

**Table 7: Investment to total asset**

Years	2006 (%)	2007 (%)	2008 (%)	2009 (%)	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)
Islamic	5.7	20.2	18.2	17.1	27.0	36.7	40.3	31.2	23.7
Conventional	23.2	25.4	20.9	29.4	33.6	33.9	40.2	33.3	36.8
Industry	30.3	37.1	41.1	41.0	44.0	37.1	41.1	41.0	44.0

**Table 8: Advances to total assets**

Years	2006 (%)	2007 (%)	2008 (%)	2009 (%)	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)
Islamic	24.4	43.1	48.6	43.4	41.8	41.9	39.8	44.6	49.4
Conventional	36.9	40.4	49.9	43.3	43.4	53.7	50.3	55.1	52.8
Industry	55.7	51.9	56.3	50.0	47.7	41.5	39.2	39.2	37.7

**Table 9: NPL to gross advances**

Years	2006 (%)	2007 (%)	2008 (%)	2009 (%)	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)
Islamic	0.3	0.8	2.9	8.1	10.1	8.2	8.5	6.5	5.4
Conventional	16.4	11.0	11.9	12.6	19.9	23.0	22.2	17.0	13.3
Industry	7.1	7.2	7.5	8.6	13.8	14.9	14.0	13.3	12.2

**Table 10: Provision against NPL to gross advances**

Years	2006 (%)	2007 (%)	2008 (%)	2009 (%)	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)
Islamic	0.0	0.0	0.0	0.0	22.0	26.2	26.1	27.6	25.4
Conventional	0.0	0.0	0.0	0.0	29.6	29.8	29.9	32.2	35.6
Industry	5.0	5.6	7.0	8.5	9.7	10.4	9.9	10.2	9.7

2009 however there is mix trend of EPS of Islamic banks after 2009 there is increasing trend in EPS. Conventional banks have negative EPS until 2010 however after that there is slight increase. From 2013 there is positive EPS of conventional banks. Overall Islamic banks EPS is far better than conventional counterparts for the time period.

**4.2. Spread**

As shown by Figure 4 and Table 5, spread of Islamic banks is better than the conventional counterparts for the whole period even for some years i.e., 2006 to 2008 it was better than the overall industry rate of spreads. Islamic banks are often been criticized as well on the basis of charging higher spreads and not passing on the margin to its clients.

**4.3. Interest Ratio**

Interest ratio shows the amount to be distributed among deposit holders out of total interest income of the bank. The comparison

in Figure 5 and Table 6 shows that amount distributed among deposit holders is far less than the similar size conventional banks. This clearly shows that Islamic banks are keeping larger share of profit with them for equity holders and sharing less portion to its depositors. This is perhaps against the very essence of Islamic banking goals where Islamic banks are supposed to make a fair and just distribution of profits being earned.

**4.4. Investment to Total Asset**

Investment to total asset ratio shows that investments portion of banks to total assets. In Table 7 and Figure 6, the ratio clearly shows that Islamic banks have lower investment in comparison to conventional counterpart and industry standards. The reason is obvious as Islamic banks don't have many investment options. There are limitations on making short term investment as there is lack of Shariah compliant instruments available. Also there is limited number of Shariah compliant stock where Islamic banks can invest.

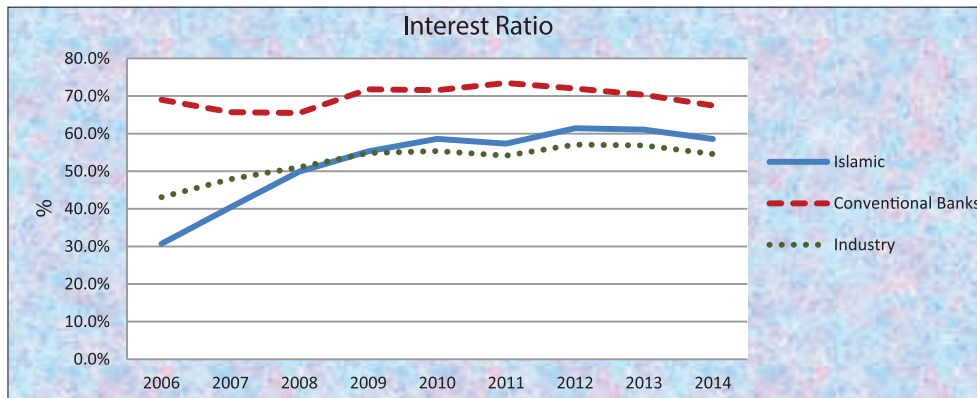
**Table 11: Capital ratio**

Years	2006 (%)	2007 (%)	2008 (%)	2009 (%)	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)
Islamic	21.2	27.1	23.5	18.5	13.4	11.9	9.0	7.6	8.0
Conventional	22.9	22.2	21.9	15.2	12.8	18.9	15.7	14.9	13.5
Industry	7.9	8.4	9.0	8.9	8.1	9.4	8.4	8.3	8.0

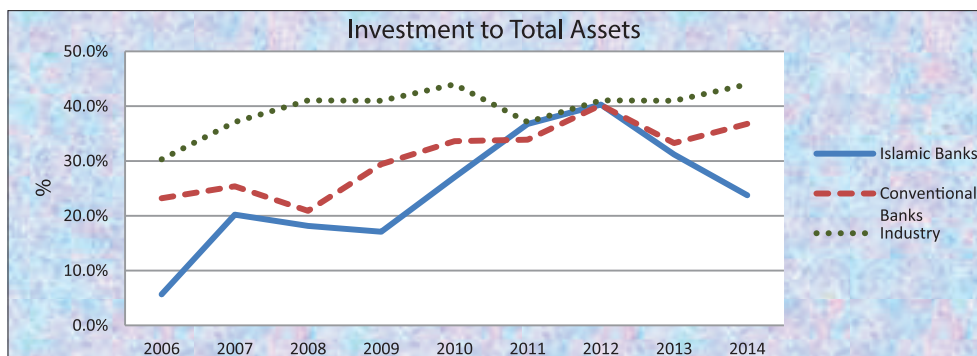
**Table 12: Total deposit to total equity**

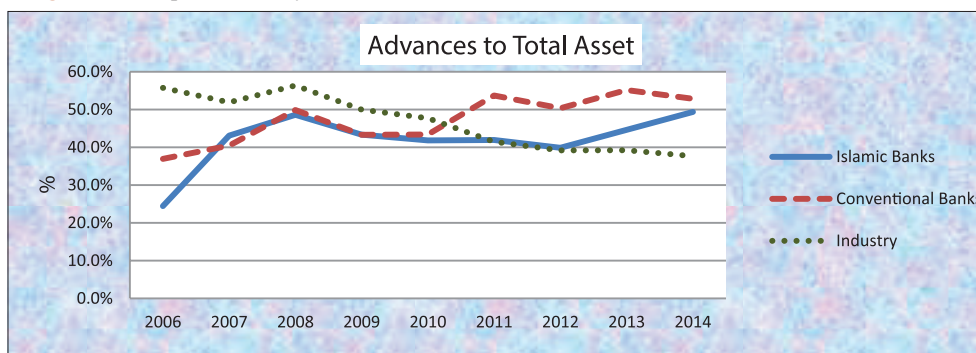
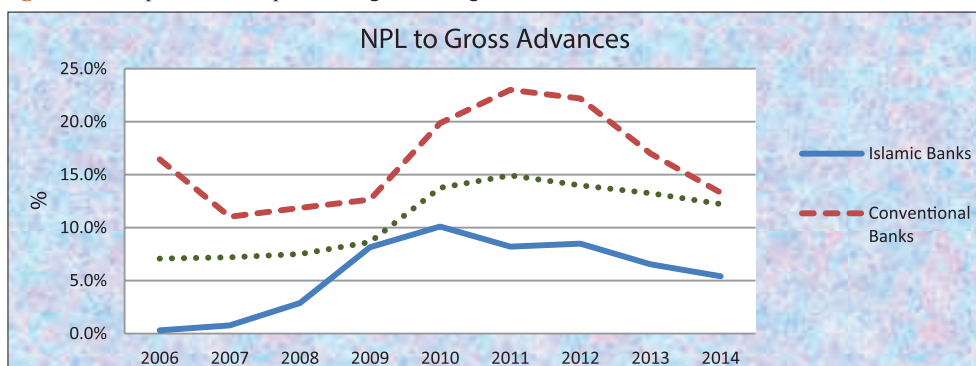
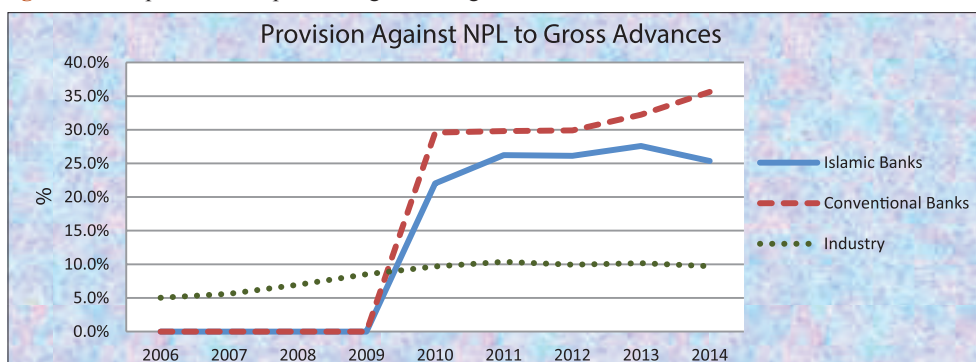
Years	2006	2007	2008	2009	2010	2011	2012	2013	2014
Islamic	1.872	3.762	4.492	5.47	7.296	8.136	10.016	11.818	11.832
Conventional	4.782	4.202	3.922	5.31	8.032	6.624	10.77	24.696	21.25
Industry	9.48	8.84	8.36	8.26	9.41	8.14	8.92	9.59	9.61

**Figure 5: Comparative analysis of interest ratio of conventional and Islamic banks**



**Figure 6: Comparative analysis of investment to total assets ratio of conventional and Islamic banks**



**Figure 7:** Comparative analysis of advances to total assets ratio of conventional and Islamic banks**Figure 8:** Comparative non-performing loans to gross advances ratio of conventional and Islamic banks**Figure 9:** Comparative non-performing loans to gross advances ratio of conventional and Islamic banks

#### 4.5. Advances to Total Assets

Advances to total asset ratio shows to what extent advances form part of total assets. From 2007 to 2010 advances to total asset ratio are similar for Islamic and conventional banks however, from year 2010 onwards shows that Islamic banking asset size is lower than conventional as compared to total asset base. The results are reported in Figure 7 and Table 8.

#### 4.6. NPL to Gross Advances

As reported in Table 9 and Figure 8, NPL ratio is higher for conventional banks as compared to Islamic banks and overall banking industry. The reason can be debt based instruments and poor lending practices from conventional banks. NPL's of Islamic banks are far lower than conventional and industry level. From 2006 to 2010 NPL's are steadily increases and reaches at 10% in year 2010. However, after 2010 there is decreasing trend of NPL's. The reason of having lower NPL's as compared to conventional

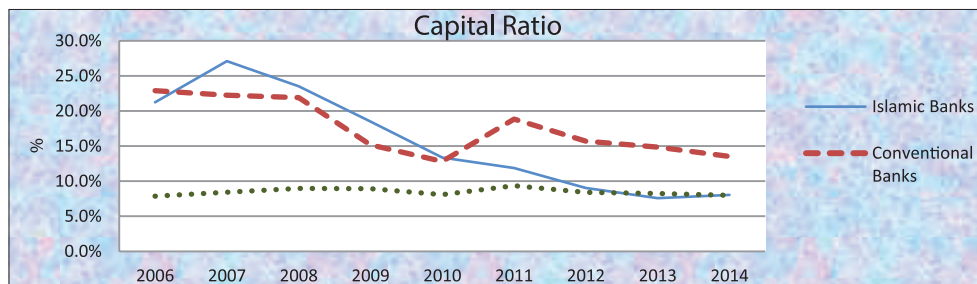
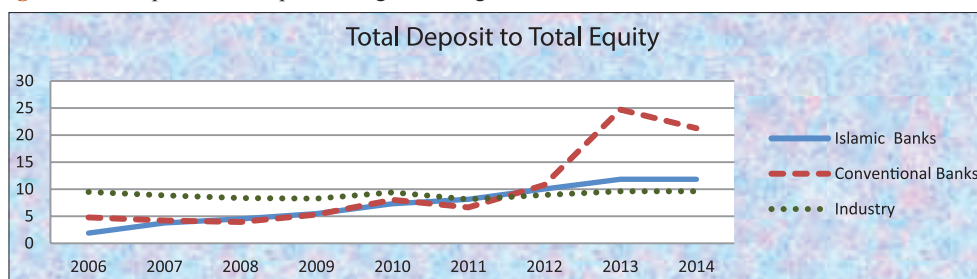
banks is that Islamic banks deal in assets and having less default rates.

#### 4.7. Provisions against NPL to Gross Advances

As per SBP prudential banks have to create provisions against NPL. The higher the NPL's the higher will be provisions so conventional banks have higher provisions As compared to conventional banks, Islamic banks as Islamic banks have lower level of NPL. The results are shown in Figure 9 and Table 10.

#### 4.8. Capital Ratio

In Figure 10 and Table 11, from 2006 to 2010, From 2006 to 2010 capital ratio of Islamic banks is higher than conventional banks however, from 2010 onwards capital ratio of Islamic banks has declined sharply which shows that assets of Islamic banks has grown at faster rate than their equity. Islamic banks need to strengthen their capital base.

**Figure 10:** Comparative non-performing loans to gross advances ratio of conventional and Islamic banks**Figure 11:** Comparative non-performing loans to gross advances ratio of conventional and Islamic banks

#### 4.9. Total Deposit to Total Equity

Deposits of Islamic banks have been steadily growing for the period under study as given in Figure 11 and Table 12. However, Islamic bank's deposits are less than conventional banks. Islamic banks mostly attract deposit on the basis of Musharika where there is possibility of sharing of loss also exists for the depositors also Islamic banks mostly don't offer fix rates of return on deposits. This makes Islamic deposits less attractive in comparison to conventional where return is guaranteed.

### 5. CONCLUSION

Performance of Islamic banks has been compared with conventional banks and overall banking industry for the year 2006 to 2014. The result of the study shows that Islamic banks have been efficient in term of returns as compared to conventional banks of the same size. Islamic banks have been earning higher spreads and also share of distribution of profits for the depositors is far less. Islamic banks advances practices are better as compared to conventional banks. The reason might be that Islamic banks financing modes are based on assets and there are no consumption loans which gives an advantage to Islamic banks to have less non-performing assets.

The comparison also shows few concern areas of Islamic banks as compared to conventional counterparts. Firstly and most importantly there is an issue of share of distribution of profits to depositors. The result states that profit share given to depositors by Islamic banks is far less than similar size conventional banks. This is perhaps against the very essence of Islamic moral economy where distribution of profit shall be based on justice and fairness. Instead major portion of profit is taken away by owners. The issue needs to be addressed as Islamic banks are often criticized due to charging higher spreads and not sharing proper share of profits with their depositors. Islamic banks needs

to address this issue in order to increase its credibility as being fair and just.

Secondly the comparison shows there is an issue of liquidity for Islamic banks. The comparison also shows poor investment and advances position of Islamic banks. The reason is that presently Islamic banks are facing lack of products for investment and advances. Thirdly, the issue of capital is a concern area for Islamic banks as these banks are less capitalized as compared to conventional banks. Islamic banks are facing these challenges which can be overcomes through new product development and injecting fresh equity.

### REFERENCES

- Akhtar, M.F., Ali, K., Sadaqat, S. (2011), Liquidity risk management: A comparative study between conventional and Islamic banks of Pakistan. *Interdisciplinary Journal of Research in Business*, 1(1), 35-44.
- Akkas, A. (1996), Relative Efficiency of the Conventional and Islamic Banking System in Financing Investment. Unpublished Ph. D. Dissertation, Dhaka University.
- Ali, L., Ali, A., Khwaja, H. (2013), Comparison of Islamic and conventional banking on the basis of Riba and services: A case study of Peshawar region. *International Review of Management and Business Research*, 2(3), 837.
- Elyasiani, E., Mehdiian, S., Rezvaniyan, R. (1994), An empirical test of association between production and financial performance: The case of the commercial banking industry. *Applied Financial Economics*, 4(1), 55-60.
- Iqbal, M. (2001), Islamic and conventional banking in the nineties: A comparative study. *Islamic Economic Studies*, 8(2), 1-28.
- Jaffar, M., Manarvi, I. (2011), Performance comparison of Islamic and conventional banks in Pakistan. *Global Journal of Management and Business Research*, 11(1), 59-66.
- Kaleem, A., Isa, M.M. (2003), Causal relationship between Islamic and conventional banking instruments in Malaysia. *International Journal*



- of Islamic Financial Services, 4(4), 1-8.
- Moin, M.S. (2013), Financial performance of Islamic banking and conventional banking in Pakistan: A comparative study. *International Journal of Innovative and Applied Finance*, 3, 2-5.
- Mughal, K.M., Waheed, A., Shah, B.M. (2015), Comparison of Islamic and conventional banks performance. *International Journal of Research in Economics and Social Sciences*, 5(6), 37-46.
- Sabi, M. (1996), Comparative analysis of foreign and domestic bank operations in Hungary. *Journal of Comparative Economics*, 22(2), 179-188.
- Safiullah, M. (2010), Superiority of conventional banks & Islamic banks of Bangladesh: A comparative study. *International Journal of Economics and Finance*, 2(3), 199.
- Saleh S.A., Zeitun, R. (2006), Islamic Banking Performance in the Middle East: A Case Study of Jordan (No. wp06-21).
- Samad, A. (1999), Comparative efficiency of the Islamic bank vis-à-vis conventional banks in Malaysia. *IIUM Journal of Economics and Management*, 7(1), 1-27.
- Samad, A. (2004), Performance of interest-free Islamic banks vis-à-vis interest-based conventional banks of Bahrain. *IIUM Journal of Economics and Management*, 12(2), 1-15.
- Samad, A., Hassan, M.K. (2000), The performance of Malaysian Islamic bank during 1984-1997: An exploratory study. *International Journal of Islamic Financial Services*, 1(3), 1-14.
- Siraj, K.K., Pillai, P.S. (2012), Comparative study on performance of Islamic banks and conventional banks in GCC region. *Journal of Applied Finance and Banking*, 2(3), 123-161.
- Spindler, A. (1991), The Performance of Internationally Active Banks and Securities Firms Based on Conventional Measure of Competitiveness. New York: Federal Reserve Bank.
- Srairi, S.A. (2010), Cost and profit efficiency of conventional and Islamic banks in GCC countries. *Journal of Productivity Analysis*, 34(1), 45-62.
- Usman, A., Khan, M.K. (2012), Evaluating the financial performance of Islamic and conventional banks of Pakistan: A comparative analysis. *International Journal of Business and Social Science*, 3(7), 1-4.
- Wasiuzzaman, S., Gunasegavan, U.N. (2013), Comparative study of the performance of Islamic and conventional banks: The case of Malaysia. *Humanomics*, 29(1), 43-60.