FINANCIAL PERFORMANCE OF ISLAMIC BANKS IN PAKISTAN

Muhammad Tariq Majeed¹, Abida Zanib²

Abstract

In recent years, the fast growth of Islamic banks has generated debate among economists and policy makers about stainability and performance of Islamic banks. This paper aims to analyze the financial performance of Islamic banks as compared to Conventional banks from 2006 to 2014. The paper considers Financial Ratio Analysis (FRA) to analyze and compare the performance of Islamic and Conventional banks in Pakistan. The results show that Islamic banks are better capitalized, less risky and have higher liquidity. In contrast, Islamic banks are less profitable than Conventional banks. Data related to Burj bank, Dubai Islamic Bank and Bank of Khyber in Pakistan for 2006 is not available. Size of Islamic banking industry should be enhanced by merging with Islamic financial institutions to achieve economies of scale and better efficiency. The study assists investors, creditors, debtors and managers in making better decisions. It also provides latest valuable information to regulators and policy makers in making rules and policies for financial industry in Pakistan.

Keywords Financial Performance, Islamic banks (IB), Conventional banks (CB), Financial Ratio Analysis (FRA) **JEL CODES:** G10, G20, E44

1 Introduction

Today the growth of Islamic banking industry cannot be denied. The assets of Islamic banks (IB) have been growing at 17.6% annually across the world since 2009 (World Islamic Banking Competitive Report 2014-2015). The fundamental reason behind this fast growth is Sharia'h (Islamic law) based banking. Unlike Conventional banks (CB), IB follow rules derived from the Quran and Sunnah (explanation and actions of the Prophet Muhammad P.B.U.H.). Thus, there is no space of ambiguous

¹ Assistant Professor School of Economics Quaid-i-Azam University Islamabad

² Research Assistant Ministry of Development and Reforms Planning Commission Islamabad

interpretation by the bankers according to their whims (Chapra, 1992; Iqbal and Mirakhor, 2006).

While explaining Islamic financial system, Choudhury (1992) focuses on profit-sharing that is distinguishable feature of sharia'h based banking for instance profit-sharing instruments such as *Mudarabah* and *Musharakah* provides an alternative for interest-based financial instruments. Moreover, Iqbal (1997) emphasizes that Islamic banking is interest free financial system. Interest means "excess". It represents conditional loan where borrower repay to lender more than borrowing amount. Islam encourages trading of goods and services to earn profit and prohibits interest to promote social justice and property rights. Another, important feature is risk Sharing. As Islamic banking is interest-free, capital provider becomes investors instead of lender. Investor and entrepreneur share risk involved in business.

Moreover, Choudhury and Malik (1992) discuss that real ownership does not exist in Islamic financial system. However, it does not mean that emerging system is purely profit sharing rather it involves wages with combination of profit sharing over the specific time. In addition, Iqbal (1997) and Choudhury (1998a) describe that according to sharia'h, money is not commodity rather it is medium of exchange and store of value. Neither, selling nor renting out of money at higher price than its face value is allowed. Money is not taken as commodity rather it is linked with real assets to create economic activity. Finally, Choudhury and Harahap (2008) argue that Islamic banks collect and distribute zakat and provide qard-ul-hassan to poor class of society. Overall, these unique features of Islamic financial system contribute to economic prosperity (Choudhury and Hoque, 2004). As a result, demand for Islamic banking especially in Muslim majority countries has significantly increased.

The performance of Islamic banks is studied extensively in the world but in the case of Pakistan few studies did this job. This study focuses on Pakistan that is the third largest Muslim country offering dual banking system. According to the Islamic banking bulletin (2012)¹, during 2002-2011 deposits at Islamic banks boosted up to 56% compared to the Conventional banking deposits annual growth of 16. It is because religion is more important for Pakistani banking customers. Islamic banks in Pakistan are categorized in three groups; fully fledge Islamic banks (FFIB), Islamic branches of Conventional banks (IBCB) and sub branches

¹Available at http://www.sbp.org.pk/ibd/bulletin/2012/IBB-Mar-2012.pdf

(SB) of Islamic banks. FFIB follow sharia'h in overall operating process, while CB offer separate Islamic branches or windows to offer Islamic banking services. Sub branches also offer sharia'h based services to customers. Overall Islamic banks hold 13% share of financial industry. The Figure 1 summarizes the current position of Islamic banks in Pakistan.

Figure 1. Islamic Banking in Pakistan (2015



Sources: Islamic Banking Bulletin State Bank of Pakistan (2015)

World Islamic banking competitive report (2014-15) confirm the higher demand by mentioning that the total assets of Islamic banks have crossed US \$ 1.8 trillion. The surge in Islamic banking has generated debate among economists and policy makers about sustainability and performance of Islamic banks. The literature reveals that various studies evaluate the performance of Islamic banks for different countries such as Rosly and Bakar (2003), Mokhtar et al. (2008), Masruki et al. (2011), Malaysia; Widagdo et al. (2008), Indonesia; Siraj and Pillai (2012), GCC; Elsiefy (2013), Qatar; Onakoya and Onakoya (2013), United kingdom; Abdelkader and Salem (2013), MENA Countries, Sillah et al. (2014) Saudi Arabia. In the case of Pakistan, some studies like Jaffar and Manarvi (2011), Usman and Khan (2012), Ansari and Rahman (2012) also measure the financial performance. It is observed that they use small sample of bank and time frame ranges from 2005 to 2009.

It is also observed that annual financial performance evaluation of emerging financial industry is prerequisite in Pakistan. However, such recent assessment particularly after 2012 is missing in the literature. For instance, Kakakhel et al. (2013) analyze financial performance of banks utilizing data from 2008 to 2010 and sample of just two Islamic and two conventional banks. No doubt, two studies like Saeed et al. (2013) Siddique and Rahim (2013) use large data over the period 2007-2012 and large sample of banks. Nevertheless, these studies don't measure financial performance rather focus on efficiency of Islamic banks and utilize different estimation technique such as data envelopment analysis. In addition, the previous studies don't provide detail reasons for their findings. These factors motivate us to conduct this study.

Our study is different from existing studies in Pakistan in several ways. First, this study uses largest available data set for the period of 2006-2014. Second, large and different sample of banks (such as top 10 Islamic banks) is utilized. Third, comparison of 5 full fledge Islamic banks (FFIB) is made with 5 conventional banks offering Islamic window which are larger than FFIB. This practice of inter-bank evaluation is preferred to study bank performance (Sabi, 1996). Moreover, the study not only finds comparative evidence of better/lower performance but also helps to understand logical reasons of each finding. In order to achieve the objective, the study address the following research questions.

- 1. Do Islamic banks perform better than Conventional banks in Pakistan during 2006-2014?
- 2. What are the factors that explain comparative difference between performance of Islamic and conventional banks?

This study has important repercussion, because information of bank's financial performance is required by different parties such as investors, bank managers, depositors and policy makers. This indicates that evaluation of financial performance is very important topic but studies found in the case of Pakistan are outdated. The findings of this study provide detail about challenges that undermine the performance of Islamic banks which are not well highlighted by available studies in Pakistan. Therefore, this study is useful for investors and depositors in making better decisions regarding investments and withdrawal of funds. It also provides direction to bank's manager to improve quality of both finance and deposit services. Finally, results of this study facilitates financial regulators formulating appropriate policy.

2 Literature Review

Banks utilize saving of customers and finance business activities that results into more employment opportunities, higher income and better

standard of living. Thus, economic development relies on the performance of banking industry (Siraj and Pillai, 2012). Accordingly, the assessing performance of financial industry has been attention grabbing area for researcher in every time. Many previous studies analyze performance of conventional banks employing financial ratios (Reger et al., 1992; Patnam, 1983; Meister and Elyasiani, 1988; Spindler, 1991; Sabi, 1996 and Samad, 1999).

As Islamic banking is an emerging industry, the literature reveals that various studies have been conducted to scrutinize and compare the performance of Islamic and Conventional banks (for detail see Table 1). Most of the previous studies find mixed results. For instance, Ariss (2010) analyzes the performance of Islamic banks using H-Statistics and Lerner Index. The findings show that IB have better capitalization and higher share of asset to loan but less competitive and less profitable than CB. Loghod (2011) does the same job using data from GCC countries and conclude that IB are less risky and independent to external funds than CB but no difference is found in profitability and internal growth.

Other studies use financial ration analysis and also find mixed evidence about the performance of Islamic and conventional banks (Samad and Hassan, 1999; Masruki et al., 2011; Siraj and Pillai, 2012; Srairi; Elsiefy, 2013). In the same way, Onakoya and Onakoya (2013) comparatively explore the performance of Islamic and conventional banks in United Kingdom. The findings show that IB are cost-efficient, less risky and independent to external fund but less profitable and inefficient in meeting financial obligations than CB.

In addition, some previous studies conducted in Pakistan also conclude mixed results representing that IB are better in liquidity and capital adequacy but similar in asset quality and lower in profitability than CB (Jaffar and Manarvi, 2011). IB have higher liquidity, low risk and operational efficiency than their counterparts (Ansari and Rahman, 2012). IB performed better in term of cash, asset turnover and debt to asset but less profitable than CB (Kakakhel et al., 2013). Full fledge Islamic banks are more efficient in term of technical efficiency however less scale efficient than conventional banks (Majeed and Zanib, 2016).

In contrast, many studies clearly find better performance of Islamic banks as compared to conventional banks. For instance, Iqbal (2001) estimates the performance of Islamic banks in 9 Middle East countries during 1990 to 1998. Bader et al. (2008) and Beck et al. (2013) compare the performance of Islamic and Conventional banks in Asian and Middle East countries from 1990 to 2009. These studies utilize financial ratio analysis (FRA) and find similar results that Islamic banks performed significantly better than Conventional banks.

Similarly, recently Rahim et al. (2013) examine the efficiency of Islamic banks in MENA and Asian countries. They find that IB are highly pure technical efficient and IB from Asian countries perform significantly better than IB from MENA countries. Rosman et al. (2014) undertake the same task however, draw different conclusion that performance of IB sustains during crisis but most of Islamic banks prove scale inefficient.

Nonetheless, few studies find lower performance of Islamic banks for example Rosly and Bakar (2003) and Mokhtar et al. (2008) conduct studies in Malaysia and conclude lower performance of IB than CB. Hassan (2006) investigates the efficiency of Islamic banks in 26 Middle Eastern and Asian countries over the period 1995-2001 and finds that IB are less efficient than CB. A recent study conducted in Pakistan by Saeed et al., (2013) utilize both techniques DEA and FRA to scrutinize the efficiency of Islamic banks during 2007-2011. The results reveal that IB are less efficient than CB.

The debate in the literature reveals that in spite of being availability of data, up-to-date evaluation regarding performance of Islamic and Conventional banks after 2010 is missing in the literature particularly in Pakistan. It is also noticed that previous studies do not provide details of their conclusions. It is worth mentioning that efficiency and financial performance are two different concepts. Former is complex and cannot be understood by common people but later provides useful information in figures that can easily be compared by depositors, investors, debenture holders and shareholders. Therefore, in order to facilitate bankers, customers and financial regulators, this study utilizes financial ratio analysis considers latest data set. Since Pakistan is one of the pioneer countries which are actively engaged in Islamic banking promotion throughout the world. It is important to conduct a comparative performance up to date analysis. In particular, our study highlights the likely causes of difference in comparative performance.

Table 1. Summary of Studies Measuring the Performance of Islamic Banks

Studies	Study Period	Methods	Findings
Cross counties s	tudies comparing th	e performance of	Islamic and Conventional Banks
Haron (1996)	1982-1994	OLS	IB perform better in competitive

Iqbal (2001)	1990-1998	Trend & Ratio Analysis	market Better performance of IB than CB
Hassan (2006)	1995-2001	DEA	Lower performance of IB than CB
Bader et al. (2008)	1990-2005	DEA	Better performance of IB than CB
Ariss (2010)	2000-2006	H-Statistics & Lerner Index	Mixed results
Srairi (2010)	1997-2007	SFA	Lower performance of IB than CB
Loghod (2011)	2000-2005	Logit Model & FRA	Mixed results
Siraj and Pillai (2012)	2005-2010	FRA	Mixed results
Beck et al. (2013)	1995-2009	FRA	Better performance of IB than CB
Srairi (2013)	2005-2009	FRA	Mixed results
Rahim et al. (2013)	2006-2011	DEA	Asian IB performance better than MENA IB
Rosman et al. (2014)	2007-2010	DEA	IB perform better during crisis
	s measuring t	he performance of Islan	nic and Conventional Banks
Rosly and Bakar (2003)	1992-1999	FRA	Lower performance of IB than CB
Samad and Hassan (1999)	1984-1997	FRA	Mixed results
Mokhtar (2008)	1997-2003	DEA	Lower performance of IB than CB
Widagdo et al. (2008)	2004	FRA	No difference b/w performance of IB and CB
Masruki et al. (2011)	2004-2008	FRA	Mixed results
Elsiefy (2013)	2006-2010	FRA	Mixed results
Rahim et al (2013)	2006-2011	DEA	Foreign IB perform better than domestic IB
Onakoya and Onakoya (2013)	2007-2011	FRA	Mixed results
Studies measuring the	performance (of Islamic and Conventi	onal Banks in Pakistan
Jaffar and Manarvi (2011)	2005-2009	CAMEL Analysis	Mixed results
Usman and Khan (2012)	2007-2009	FRA	Better performance of IB than CB
Ansari and Rahman (2012)	2006-2009	FRA	Mixed results
Kakakhel et al. (2013)	2008-2010	FRA	Mixed results
Saeed et al. (2013)	2007-2011	FRA & DEA	Lower performance of IB than CB

FRA: Financial Ratio Analysis, DEA: Data Envelopment Analysis, SFA: Stochastic Frontier Approach

3 Methodology

3.1 Sample. This study aims to conduct a comparative analysis of financial performance of top 10 Islamic and Conventional banks in Pakistan. In order to make appropriate comparison, we utilize crosssectional data collected from annual reports of banks during 2006-2014, available at official websites of each bank (list of banks is given in appendix A). Even though Islamic banks commenced operation in 2002, complete data are accessible from 2006 to onward.

Measurement Technique. This paper utilizes widely used method 3.2 to measure banking financial performance called financial ratios. Cole (1972) introduced financial ratios to determine the bank's performance. Many standard studies in the literature for instance Patnam (1983). Meister and Elyasiani (1988), Spindler (1991), Sabi (1996) and Samad (1999) employ financial ratios to evaluate bank performance. Various recent studies have used this method to examine and compare the performance of Islamic and Conventional banks in different times (such as Samad and Hassan, 1999; Rosly and Bakar, 2003; Widagdo et al., 2008; Masruki et al., 2011; Usman and Khan; Siraj and Pillai, 2012; Elsiefy; Beck et al., 2013). This analysis usually compares profitability, liquidity, capital adequacy, risk and solvency ratios. The study also present descriptive statistics in term of mean, standard deviation and t-test to check the significance of each ratio for both Islamic and conventional banks. The theoretical framework in Figure 2 provides a clear picture of methodology for this study. The explanation of each indicator of performance is given below.

Figure 2. Theoretical Framework



Source: Authors own analysis

- 3.2.1 Profitability. Profitability represents marginal efficiency. This efficiency is observed by considering return on assets, equity, expense and investment. Higher profitability promotes constant growth of capital to protect creditors against default risk. Profitability ratios are used to quantify the performance of banks (Elsiefy, 2013). Our study computes *return on assets (ROA), return on equity (ROE)*. Although ROE is correlated with ROA, different in term of magnitude and interpretation (Simpson and Kohers, 2002; Karr, 2005; Castelli *et al*, 2006). These profitability ratios have also been considered by Reger *et al*, (1992); Ansari and Rahman (2012); Elsiefy (2013). Higher value of ratios represents more profit.
- **3.2.2** Liquidity. Liquidity risk involves withdrawal of money deposited in current and saving account at any time. Bank face liquidity problem in case of excessive withdrawal as compared to new deposits, even in short period. Liquidity of bank determines its ability to manage liquidity crisis. Weak liquidity position can lead to bank's failure. Following the studies by Hays et al. (2009); Rose and Hudgins (2010); Ansari and Rahman (2012); Onakoya and Onakoya (2013), our study quantifies *loan to asset ratio* (LAR), and *loan to deposits ratio* (LDR) to estimate liquidity.
- **3.2.3** Capital Adequacy. Capital adequacy describes the ability of bank to fulfill its financial obligations at the time of economic stress. To protect against unanticipated failure, capital of bank must be adequate. According to State Bank of Pakistan (SBP) bank must have minimum 10% CAR. Higher value of CAR represents financial soundness and lower risk for the bank. To inspect capital adequacy, like other studies by Hays et al. (2009); Rose and Hudgins (2010); Masruki et al. (2011); Siraj and Pillai (2012), we use equity to liability ratio (ELR) and equity to asset ratio (EAR)
- **3.2.4** *Risk and Solvency.* It indicates ability of bank to produce cash flow and to pay long-term financial obligations. If total bank assets exceed its equity, then bank is called solvent. Several methods can be used to measure solvency ratios. Our study calculates *Debt to Asset Ratio (DAR) and Debt to Equity Ratio (DER).* These ratios have also been computed by Oslon and Zoubi (2008); Samad and Hassan, 1999; and Elsiefy, 2013.

It is worth mentioning that each indicators of financial performance can be computed by using one formula. However, in order to check robustness, we use two formulas for each indicator of financial performance. All formulas are given in Table 2.

Indicators FP	of	Measurements	Formulas
Profitability		ROA	Profit after tax / Total asset * 100
		ROE	Profit after tax / Total equity *100
Liquidity		LDR	Due to financial institutions /deposits and
		LAR	other accounts * 100
			Due to financial Institutions / Total assets *
			100
Capital		EAR	Total Equity / Total Asset * 100
Adequacy		ELR	Total Equity / Total Liability * 100
Risk	and	DAR	Total Liability / Total Assets * 100
Solvency		DER	Total Liability / Total Equity * 100

Table 2. Measurement Methods

Sources: Rosly and Bakar, 2003; Masruki et al. 2011; Ansari and Rahman, 2012; Siraj and Pillai, 2012; Elsiefy, 2013

4 Empirical Findings

This section presents the statistical and graphical analysis of each financial ratio. To evaluate the financial performance of Islamic banks, first we consider profitability ratios such as return on assets (ROA) and return on equity (ROE). Figure 3 shows that ROA is positive for IB in initial years but turns into loss during financial crisis (2008-2010). A careful study of annual report of Bank Islami (2014) reveals that financial crisis increase their operating expenses and administration cost. Nevertheless, after crisis ROA of Islamic as well as Conventional bank restored to positive condition and continued to increase till 2013. It is observed that ROA for IB decreases in 2014 because of decline in investment. Indeed, Islamic banking bulletin (2014) discloses that investment remain low due to non-availability of Ijara sukuk.

Similarly, Figure 3 shows that ROE of IB is reasonable at 8.3% in 2006. This indicates that initially Islamic banks perform well. ROE of IB also increased in next year. Nonetheless, like ROA, ROE also declines badly in 2008 and becomes negative for further two years due to crisis. Later on, ROE of IB restore to some extent after crisis. Finally, it improves in 2013 up to 9.5%. In contrast, ROE of CB is high and remains

positive. However, it also declines sharply during crisis, then restores after crisis. ROE for IB declines sharply in 2014 than for CB during the same period because of decline in investment and financing. Higher ROE for CB is due to their efficient management of equity.

Table 3Descriptive	Statistics:	Islamic	&	Conventional	Banks
Financial Performance	e (2006-2013)				

	Mean	Std.	Mean	Std.	t-test for equality		- 0
Ratios	IB (%)	Deviation IB	CB (%)	Deviation CB	of mean <i>t -value</i> (2-tailed) <i>p- value</i>	Sig.	Inference
ROA	0.4	0.65	0.9	0.37	-2.7	.011	REJ H ₀
ROE	4.6	4.6	11.4	04	-3.2	.003	REJ H ₀
LDR	04	0.92	10.2	02	-5.2	.000	REJ H ₀
LAR	03	0.72	7.9	1.3	-3.0	.000	REJ H ₀
EAR	17.7	9.8	8.5	1.3	3.9	.000	REJ H_0
ELR	25.8	18.8	9.6	1.2	4.3	.000	REJ H ₀
DAR	81	13.8	91.1	1.1	-3.0	.005	REJ H_0
DER	772	294.5	1258	100	-4.1	.000	REJ H ₀

Sources: Computer Generated

Similarly mean values of profitability ratios such as ROA and ROE indicate that profitability of IB remains low at 0.4% and 4.6% respectively as compared to 0.9% and 11.4% respectively for their counterpart throughout the tenure of research. *P-values* shows that difference in mean values is significant at 5 percent level. Our results are in line with Masruki et al; Jaffar and Manarvi (2011); Elsiefy; Onakoya and Onakoya (2013).

The reason of lower profitability of Islamic banks is three fold. First, small size of IB is obstacle in way of getting benefit from economies of scale that ultimately leads to lower profitability. Lindblom (2002) emphasize that if the size of comparable banks is different, then profitability ratios cannot be estimated accurately. Second, interest-free transactions and services cause lower profitability. Third, lower quality of their assets is attributed to lower profitability of IB. in contrast, higher profitability of conventional bank is not surprising because they are large in assets size and offer interest based services and prefer finance to profitable business.

Figure 3. Profitability Ratios



Liquidity ratios help to understand that whether banks are able to repay short-term debts and meet the obligations to creditors. First, we consider loan to assets ratio (LAR), it represents proportion of bank's assets that are financed through loan. Lower this ratio means better liquidity position of bank. Empirical results in Figure 4 reveals that LAR of IB remains low with slight fluctuations throughout the study period. It is observed that IB starts financing their assets by taking loan after 2007. However, LAR for IB does not cross 5%. On the other hand, LAR for CB is higher than 5% from 2006 to 2014. It implies that if more creditors demand for repayment of loan, risks of default for CB increase. Moreover, higher LAR negatively affects the borrowing ability of CB. On average lower LAR highlights better liquidity position of IB than CB.

Moreover, loan to deposits Ratio (LDR) represents the proportion of loan offered by bank out of deposits. Higher value of this ratio specifies that bank faces financial pressure by advancing huge loan. Thus lower ratio of LDR reveals better liquidity position of bank. Estimated results in Figure 3 shows that LDR for IB remain between 3% and 5 % from 2006 to 2014. It is because that IB do not grant too much loans from their deposits. Contrary, same ratio of CB remain between 9% and 14% during the tenure of study. It indicates that CB are granting more loans from deposits than IB. In addition, Table 3 shows that mean values for liquidity ratios such as LAR and LDR are higher at 7.9% and 10.2% respectively for conventional banks than 3% and 4% respectively for IB. *P-value* of LDR and LAR is .000. It ascertains the significant difference between liquidity position of IB and CB.

Higher ratio for CB reveals that CB offer huge loans and face financial pressure throughout the study period. Indeed, Conventional banks are interested in making profit without considering legality of contract. They often prefer to invest or finance in highly profitable business such as derivative market, tobacco and entertainment industry. Contrary, Islamic banks are concerned with divine restrictions¹ and also do not offer loan in form of money rather purchase contract and services for their clients. Financing in Islamic banks is always backed by real assets. On average results show better liquidity position of IB than CB. These findings are consistence with Haron (1996), Jaffar and Manarvi (2011).





¹ Like prohibition of unethical investment that include investment in gambling, tobacco, alcohol, pornographic magazines and entertainment industry.

Capital adequacy ratios (CAR) give true picture of financial strength of bank. Higher value of CAR represents financial soundness and lower risk for the bank. Equity to asset ratio (EAR) represents the relative proportion of total equity from total asset of bank. Higher ratio reveals that assets of company are independent of external funds. Figure 5 discloses that EAR of IB is significantly high than those of CB in 2006. This represents the good financial health of IB in 2006. The reasons are lower investment activity and their independency on external funds. However, after 2006 Islamic banks cannot maintain good financial health with the spread of Islamic Banking Industry. In fact, the extension of branch network increases the dependency of Islamic banks on external funds. In addition, investment activity at IB also increases after 2006. As a result, EAR of IB declines continuously till 2014. On the other hand, EAR for CB remains low but stable. This clearly indicates the higher dependency of CB on external funds during 2006 to 2014.

Equity to Liability Ratio (ELR) represents the adequacy of shareholders' equity that absorbs possible loss of credit risk against loan portfolio of banks. Higher ratio indicates that bank has high ability to absorb credit losses. Figure 5 shows that ELR of IB is very high in 2006. This shows that bank's initial capacity to absorb credit losses is much high. But this decreases sharply in 2007 and continues to decrease up to 2014. It attributes to the expansion of investment activities at IB after 2007. In contrast, value of ELR for CB remain stable with slight fluctuations. Moreover, the means values for capital adequacy in Table 3 also point out that EAR and ELR are considerably higher for Islamic banks than conventional banks. This difference is significant at 1%.

Overall, capital adequacy ratio of IB declines throughout the study period. However, they are still meeting the criteria of capital adequacy. On average, capital adequacy of Islamic banks is higher as compared to Conventional banks. These results are consistence with Elsiefy (2013), who comparatively determines the performance of Islamic versus Convention banks in Qatar over the period 2006-2010. Better capitalization of Islamic banks is attributed to efficient management of risk.

Figure 5 Capital Adequacy Ratios



Risk and solvency ratios are often used to evaluate soundness of banks. There ratios are valuable tools to analyze bank's present and future position of financial stability such as debt to assets ratio (DAR) describes that how much total assets are financed by liabilities and creditors. Higher value of DAR implies more leverage and high risk for the bank. Figure 6 reveals that DAR for IB is lower in 2006. It means at initial stage IB are less risky. However, with the passage of time IB start financing their assets by liabilities. This resulted into increase their risk from 50% in 2006 to 92% in 2013.

In contrast, DAR for CB remains between 89 and 92 during the study period. This suggests higher risk for CB. It is also observed that DAR for IB is itself not small, nevertheless it is shorter than those of CB. This leads to the conclusion that that both type of banks face higher risk of default and this also lessens their borrowing capacity. On average IB prove less risky as compared to CB during 2006 to 2014.

Table 4. Summary of Results

Indicators	СВ	Logical Reasoning	IB	Logical
of FP				Reasoning

Profitability	High	Size of bank, Loan to	Low	More non-
		profitable business, high		performing loans,
		quality of assets,		interest free,
		interest-based operation		ethical investment
Liquidity	Low	More financial	High	Strict financial
		Instruments	-	policy
Capital	Low	Mismanagement of risk	High	Efficient
Adequacy		-	-	management of
1 2				risk
Risk &	High risk,	Take more loans,	Low risk,	Do not grow
Solvency	low	Heavy loan default	high	through debt,
	solvency	2	solvency	minor default

Debt to equity ratio (DER) specifies the proportion of equity that is used by the bank to finance its assets. Higher DER indicates that bank is aggressively financing its growth by debt. This results into lower profitability because of additional interest expenditures. Our estimated results show lower DER for Islamic banks in initial years. This suggests that IB utilize less leverage and has strong equity position. However, in recent years IB exploit more leverage and their liquidity position become weak. In contrast, results uncover that DER for CB is very high during the study period. This shows that CB forcedly financing their growth by debt. Such financing increases the burden of interest that results into lower earning.

Furthermore, Table 3 indicates that mean values of DAR and DER are smaller for Islamic banks than conventional banks disclosing small risk and more solvency for Islamic banks. P-values are 0.005 and 0.000 for DAR and DER respectively supporting that difference is significant. In sum, IB are less risky and more solvent than CB. These finding are confirmed with Samad and Hassan (1999); Ansari and Rahman (2012); Elsiefy (2013); Onakoya and Onakoya (2013). In fact, interest-free payments contribute to lower risk for Islamic banks. However, it also restricts their access to funding. Besides, IB employs fewer loans to acquire assets and do not finance growth through debt. Next we present descriptive statistics to examine the significance of each ratio. The brief summary of overall results is given in Table4.

Figure 6. Risk and Solvency Ratios



5 Conclusion and Policy Implications

This study concludes that Islamic banks have higher liquidity, better capitalized and less risky than Conventional banks. Higher liquidity is attributed to stringent financial policy. Liquidity of IB is high on the cost of shortage of Islamic financial instruments. This shortage creates problem for Islamic banks to dispose their surplus liquid funds in the market. Better capitalization is owed to efficient management of risk. Risk remains low because Islamic banks employs fewer loans to acquire assets and do not finance growth through debt. Furthermore, the reason of better practice is that State Bank of Pakistan (SBP) has taken various steps to ensure improvement of Sharia'h supervisory board. Moreover, recently SBP has lunched two standards prescribed by Audit and Accounting Organization of Islamic Financial Institutions (AAOIFI). Indeed, these steps ensure standardization and harmonization of Islamic financial system.

Moreover, we find that Islamic banks have lower profitability than Conventional banks. It is because of several reasons such as large proportion of their loan goes to non-performing loans. Interest-free operation and low quality of their assets contribute to lower profitability. Relatively small assets size of Islamic banks is also hurdle in achieving economies of scale. In the same manner, being emerging industry Islamic banks bear high costs of marketing, promotional activities and investment in technology. In addition, Islamic banks do not have separate central bank and taxation system is also not supportive towards Islamic banking. As Chaudhary (2001) criticizes that core Islamic financial contracts such as *Musharakah* and *Mudarabah* are jumbled with ethical and technical problems. All these factors contribute to lower profits for Islamic banks in Pakistan.

In sum, with a small share in financial industry, Islamic banks are performing better in Pakistan with the support of central bank. This suggests, that there is pace to improve performance by increasing share of Islamic banks. On this ground, merger of Islamic banks with Islamic financial instututions is suggested. As up-to-date evaluation of Islamic and Conventional banks needs to be undertaken every year, this represents as noticeable area for future research. Data on customer satisfaction, products and services offered by both types of banks should be considered to compare the performance of Islamic and Conventional banks.

References

- Abdelkader, I. B., & Salem, A. B. (2013). Islamic vs Conventional Microfinance Institutions: Performance Analysis in MENA Countries. International Journal of Business and Social Research, 3(5), 1-15.
- Ahmed, E.-G., & Khiyar, K. A. (2012). Islamic Banking and Economic Growth. *The Journal of Applied Business Research*, 28, 1-14.
- Ansari, S., & Rehman, A. (2012). Financial Performance of Islamic and Conventional Banks in Pakistan: A Comparative Study. 8th International Conference on Islamic Economics and Finance, 1-19.
- Ariss, R. T. (2010). Competitive Conditions in Islamic and Conventional Banking: A Global Perspective. *Review of Financial Economics*, 101–108.
- Bader, M., Shamsher, M., Mohamed, A., & Hassan, T. (2008). Cost, Revenue and Profit Efficiency of Islamic versus Conventional Banks. *Islamic Economic Studies*, 15(2), 1-54.

- Beck, T., Demirgüç-Kunt, A., & Merrouche, O. (2013). Islamic vs. Conventional Banking: Business Model, Efficiency and Stability. *Journal of Banking & Finance*, *37*, 433–447.
- Castelli, A., Dwyer, J., & Hasan, G. P. (2006). Bank Relationships and Small Firms'Financial Performance. *Federal Reserve Bank of Atlanta Working Paper Series*.
- Chapra, M. U. (1992). Islam and Economic Challenge. *Leicester, UK; The Islamic Foundation*, 1-16.
- Choudhury, M.A. (1992). The Principles of Islamic Political Economy, A Methodological Enquiry, Macmillan, London, and St. Martin's Press, New York, NY, 92-116.
- Choudhury, M.A. and Malik, U.A. (1992), Mudarabah, the profit-sharing system in Islam, The Foundations of Islamic Political Economy, Macmillan, London and St. Martin's Press, New York, NY, 147-200.
- Choudhury, M.A. (2001). Islamic Venture Capital: A Critical Examination. *Journal of Economic Studies*, 28(1), 14-33.
- Choudhury, M.A. & Harahap, S.S. (2008). Interrelationship between Zakat, Islamic bank and the economy: A theoretical exploration. *Managerial Finance*, 34(9), 610-617.
- Choudhury, M.A. and Hoque, M.Z. (2004), The Paradigm of Socio-Economic Development, chapter 2, An Advanced Exposition of Islamic Economics and Finance, The Edwin Mellen Press, Lewiston, New York, NY.
- Choudhury, M.A. (1998a), Money in Islam, Routledge, London, Ch. 3.
- Cole, D. W. (1972), Return on Equity Model for Banks, The Bankers Magazine, 155.
- Elsiefy, E. (2013). Comparative Analysis of Qatari Islamic Banks Performance versus Conventional Banks Before, During and After the Financial Crisis. *International Journal of Business and Commerce*, 3(3), 11-41.
- Haron, S. (1996). Competition and other External Determinants of the Profitability of Islamic Banks. *Islamic Economic Studies*, 4(1), 1-16.
- Hassan, M. K. (2006). The X-Efficiency in Islamic Banks. Islamic Economic Studies, 13(2), 1-30.
- Hays, F., Lurgio, S. D., & A.H. Gilbert Jr. (2009). Efficiency Ratios and Community Bank Performance. *Journal of Finance and Accountancy*.

- Iqbal, M. (2001). Islamic and Conventional Banking in the Nineties: A Comparative Study. *Islamic Economic Studies*, 8(2), 1-28.
- Iqbal, Z. (1997). Islamic Financial System. *Finance and Development*, 1-4.
- Iqbal, Z., & Mirakhor, A. (2006). An Itroduction to Islamic Finance -Theory and Practice. *Wiley Finance Editions, John Wiley & Sons, Inc., Hoboken, New Jersey.*
- Jaffar, M., & Manarvi, I. (2011). Performance Comparison of Islamic and Conventional Banks in Pakistan. *Global Journal of Management and Business Research*, 11(1)., 1-7.
- Johnes, J., Izzeldin, M., & Pappas, V. (2012). A Comparison of Performance of Islamic and Conventional Banks 2004 to 2009. *JEBO Islamic Finance Conference* 29th, 1-36.
- Kakakhel, S. J., Faryal, R., & Muhammad, T. (2013). A Study of Performance Comparison between Conventional and Islamic Banking in Pakistan. *Abasyn Journal of Social Sciences*, 6(2), 1-15.
- Karr, J. (2005). Performance Measurement in Banking: Beyond ROE. Journal of Performance Measurement, 18(2), 56-70.
- Lindblom, T. V. (2002). Cross-Border Bank Mergers and Acquisitions in the EU. *The Service Industries Journal*, 22(4), 41-72.
- Loghod, H. A. (2011). Do Islamic Banks Perform Better than Conventional Banks? Evidence from Gulf Cooperation Council Countries. *API Working Paper Series*, 1-28.
- Lopez, J. (1999). Using CAMELS Ratings to Monitor Bank Conditions. *FRBSF Economic Letter*.
- Majeed, M. T., & Zanib, A. (2016). Efficiency Analysis of Islamic Banks in Pakistan. *Humanomics*, 32(1), 19-32.
- Masruki, R., Ibrahim, N., Osman, E., & Wahab, H. A. (2011). Financial Performance of Malaysian Founder Islamic Banks Versus Conventional Banks. *Journal of Business and Policy Research*, 6(2)., 1-13.
- Meinster, D., & Elyasian, E. (1994). An Empirical test of Test of Association between Production and Financial Performance: The case of Commercial banking industry. *Applied Financial Economics*, 4, 55-59.
- Mokhtar, A., Abdullah, N., & Alhabshi, S. M. (2008). Efficiency and Competition of Islamic Banking in Malaysia. *Humanomics*, 24(1), 1-21.

- Olson, D., & Zoubi, T. (2008). Using Accounting Ratios to Distinguish between Islamic and Conventional Banks in the GCC Region. *The International Journal of Accounting*, 43(1), 45-65.
- Onakoya, A. B., & Onakoya, A. O. (2013). The Performance of Conventional and Islamic Banks in the United Kingdom: A Comparative Analysis. *Journal of Research in Economics and International Finance*, 2(2), 29-38.
- Putnam, B. H. (1983). Concept of Financial Monetary. *Federal Reserve Bank of Atlanta Economic Review*, 6-13.
- Rahim, R., Kadri, N., & Ismail, F. (2013). Efficiency Performance of Malaysian Islamic Banks. *Munich Personal RePEc Archive*, 1-30.
- Reger, R. K., Duhaime, I. M., & Stimpert, J. L. (1992). Deregulation, Strategic Choice, Risk and Financial Performance. *Strategic Management Journal*, 13(3), 189-204.
- Rose, P., & Hudgins, S. (2010). Bank Management and Financial Services. McGraw-Hill/Irwin.
- Rosly, A., & Bakar, A. (2003). Performance of Islamic and Mainstream Banks in Malaysia. *International Journal of Social Economics*, 30(12), 1-17.
- Rosman, R., Wahab, N. A., & Zainol, Z. (2014). Efficiency of Islamic Banks During the Financial Crisis: An Analysis of Middle Eastern and Asian Countries. *Pacific-Basin Finance Journal*, 1-15.
- Sabi, M. (1996). Comparative Analysis of Foreign and Domestic Bank Operation in Hungary. *Journal of Comparative Economics*, 22, 179-188.
- Saeed, S., Ali, F., Adeeb, B., & Hamid, M. (2013). Examining Efficiency of Islamic and Conventional Banks in Pakistan: Using Data Envelopment Analysis. *Global Journal of Management and Business Research*, 13(10).
- Samad, A. (1999). Comparative Efficiency of the Islamic Bank Malaysia vis-à-vis Conventional Banks. *Journal of Economics and Management*, 7(1).
- Samad, A., & Hassan, M. K. (1999). The Performance of Malaysian Bank During 1984-1997: An Exploratory Study. *International Journal of Islamic Financial Services*, 1(3), 1-14.
- Siddique, M. A., & Rahim, M. (2013). Efficiency Analysis of Full-fledge Islamic Banks and Standalone Islamic Branches of Conventional Banks in Pakistan: A Comparative Study for the Period of 2007-2012. *Journal of Islamic Business and Management*, 3(2), 1-21.

- Sillah, B. M., khokhar, I., & Khan, M. N. (2014). The Performance of Saudi Banking Industry 2000 -2011: Have the Banks Distinguished themselves from one another? *International Journal of Financial Research*, 5(2), 1-12.
- Siraj, K., & Pillai, P. S. (2012). Comparative Study on Performance of Islamic Banks and Conventional Banks in GCC region. *Journal of Applied Finance & Banking*, 2(3), 123-161.
- Spindler, A. (1991). The Performance of Internationally Active Banks and Securities Firms based on Conventional Measure of Competitiveness. *Federal Reserve Bank, NY*.
- Srairi, S. A. (2010). Cost and Profit Efficiency of Conventional and Islamic Banks in GCC Countries. *J Prod Anal*, *34*, 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), 1-5.
- Widagdo Kuncara, A., & Ika, S. R. (2008). The Interest Prohibition and Financial Performance of Islamic Banks: Indonesian Evidence. *International Business Research*, 1(3), 1-12.
- World Islamic Banking Competitive Report (2014-2015), available at <u>http://emergingmarkets.ey.com/wp-</u> <u>content/uploads/downloads/2013/12/World-Islamic-Banking-</u> Competitiveness-Report-2014-15.pdf
- Yudistira, D. (2004). Efficiency in Islamic Banking: An Empirical Analysis of Eighteen Banks. *Islamic Economic Studies*, 12(1), 1-19.

Appendix (A)

List of Financial Institutions selected for this study

Islamic Banks

- 1) Meezan Bank Limited (MBL)
- 2) Burj Bank (BB)
- 3) Al-Baraka bank (ABB)
- 4) Dubai Islamic Bank (DIB)
- 5) Bank Islami (BI)
- Conventional Banks
 - 1) Habib Bank Limited (HBL)
 - 2) Fysal Bank (FB)

- 3) Bank Alfalah (BA)
- 4) Askari Bank (AB)
- 5) Bank of Khyber (BoK)