Trend Shifting in Risk-Taking Behaviour of the Banking Sector: Islamic Bank's Perspective

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The previous decade has evidenced a paradigm shift in the banking industry from conventional banks to Islamic banking's system, particularly in Muslim countries worldwide. Consequently, the banking industry uses a different product mix, impacting corporate governance and banks' earnings volatility. This article contributes by investigating the nexus of product mix, internal corporate governance, and earnings volatility. Data was retrieved from the annual reports of fourteen banks of each conventional bank and Islamic banks of Pakistan ranging from 2010 to 2019. Earnings volatility is taken as the dependent variable. Loan based revenue, fee-based revenue, board size, board independence and CEO power are the independent variables. At the same time, bank age and rate of return are taken as control variables. Different techniques, such as multiple regression models, variance inflation factors, Ramsey RESET test and Coke Weisberg / Breusch Pagan test, are applied to analyse the data. The results indicate an increasing trend of risk-taking behaviour in the banking sector due to the system's induction of Islamic banks. Moreover, the impact of fee-based revenue is lesser on earnings volatility in conventional banks than Islamic banks.

Key words: *product mix, internal corporate governance, fee-based revenue, loan-based revenue, Islamic banks, conventional banks*

INTRODUCTION

In the recent crisis of COVID-19, corporate governance, especially in the banking sector, has become one of the most crucial issues around the globe. The global economy is already reeling from the financial crisis of 2007/2008, which hurt the United States (US) economy and triggered a tsunami in the financial markets (Bernanke, 2018). The problem of corporate governance makes the research agenda's economic concept worldwide and creates admirable debate in the media, political and educational environments. Corporate governance refers to a set of governing mechanisms that guide management to run a company. It understands the interests of all stakeholders, the economy and the social welfare of all. Corporate governance's fundamental goal is to provide a full advantage to all concerns and achieve good economic performance. Adams et al. (2010) indicate that organisations face countless governance conflicts. The appropriate structure of corporate governance is the best solution to these conflicts. Thus, considering the multidimensional governance issues faced by organisations, it is possible to introduce a culture of individual control for all organisations, including banks.

Corporate governance plays a significant role in banks as they are based on complex and pyramid rules for operations due to these institutions' unique nature. Due to their complicated nature and difficulties in these institutions' functioning, banks' corporate governance is different from other companies. Adams and Mehran (2004) advocate that banks' corporate governance as service institutions differs from manufacturing. They believe that each industry, due to its specific nature, adapts its governance structure for operations. However, the governance issues of financial institutions are not much different from other institutions' governance issues. Fama (1985) points out that financial institutions' corporate governance induces corporate governance over other industries. Good corporate governance in banks increases its value, reduces capital cost, and improves risk management's ability to handle risk management through strategic decision management. The low cost of capital enables banks to approve loans for other industries that encourage them to implement acceptable corporate governance practices in their operations (Levine, 2004). Thus, corporate governance in financial institutions is triggered for good governance to the rest of the industries.

Mollah et al. (2017) examine the differences in traditional and Islamic banks' governance strategy using data from 14 countries. They concluded that the management of conventional banks differs from Islamic banks in terms of risk-taking. They believe that the Islamic banks' governing way plays a pivotal role in generating a profit by taking risks due to their products' intrinsic transaction methods. However, on average, Islamic banks keep more capital than their counterparts. Their findings start a new debate on the understanding of different governance structures of Islamic and traditional banks. The current study takes the initiative to look at both types of banks in terms of their performance, risk-taking and investment behaviour.

In Islam, interest (riba) on money is forbidden, making Islamic banks different from traditional banks. Unlike conventional banking, in Sharia's law, we cannot receive money on an

investment in the form of cash. On the other hand, traditional banks charge (pay) their customers a loan (deposit). Ben and Bellallah (2012) point out that conventional banks earn from this spread; the difference between charging interest rates form lending and paying interest rates to depositors on its liabilities. However, Islamic banks work with their customers in different ways. The bank becomes a partner with its customers to buy anything other than money that the customer needs. The customer pays a reasonable rent to the owner (bank), and the bank's ownership gradually decreases. Thus, the corporate governance of both types of banks is different. The current study investigates by differentiating the fee-based revenue from the non-fee-based income in the context of revenue volatility and internal corporate governance.

For the past two decades, Islamic banking's growth has been inclined, as it has invested in halal sectors (Kalim et al., 2016). Electronic methods and other features, especially the Sukuk bonds, are instruments of attraction for investing in Islamic financing methods. Factors that drive market growth are turning to invest in the Islamic sector and are growing exponentially. The combined value of the three Islamic sectors, banking, insurance (TAKAFUL) and capital markets, is estimated at US 2.05 trillion, with a growth rate of 8.3%. Islamic banking contains the largest share (71%) of the total percentage of Islamic sectors.

Islamic banks have emerged as a new type of organisation, which serves an economic purpose and income source (Zafar & Sulaiman, 2020). Their ideology is based on the principle of social well-being of ordinary people (Cebeci, 2012) regardless of the financial outcomes, profit and loss (Dusuki, 2008). This model could be used as an instrument of poverty reduction strategy in those countries where prevailing governance and socio-economic development issues exist, like Pakistan (Husain, 2018). The Constitution of Pakistan also emphasises Islamic financing modes in the country's banking sector (Hassan, 2007). In practice, the State Bank of Pakistan allowed Islamic financing methods in 2000 under the Companies Ordinance 1962 (Zafar & Sulaiman, 2020). Since 2000, the growth of Islamic banking in terms of its deposits is 15.5%; in terms of assets, it is 13.5%. There are seventeen conventional banks and five Islamic banks working in Pakistan (Zafar & Sulaiman, 2020).

Edwards and Mishkin (1995) point out the declining trend of bank deposits and market share in the 1980s. This trend is probably due to server competition of banking products, the introduction of digital technology, and easing regulatory restrictions in the banking sector. Financial institutions, especially banks, have responded to this trend by converting their income from loan-based revenue to fee-based revenue in many ways. First, banks start charging payment from service-based products such as letters of credit, insurance, trusts and mutual funds. Second, if the cash balance is below the minimum level, banks charge a service fee on each transaction. Third, the growth of many services' products due to the incorporation of digital technology creates an opportunity for banks to generate revenue from fee-based activities like text message charges, online banking charges and ATM charges. These charges vary from bank to bank. The state bank of Pakistan (SBP) provides a portion and allows the

banks to charge these expenses from customers within that portion. In this way, the internal governance of one bank differs from the others. Management of banks in which board size, board independence and CEO power play a crucial role to makes these decisions. There will likely be a surge in fee-based revenue in the coming days. Thus, the current study becomes important and provides deep insights to regulators, top management and other stakeholders of traditional banks and Islamic banks. In particular, the study attracts investors, depositors or clients who want to move their funds from one mode of financing to another.

Objectives of the Research

The objectives of the research study are as follows;
- To analyse the effect of product mix and internal corporate governance on revenue volatility;
- To make a comparative analysis between conventional and Islamic banks;
- To provide useful suggestions and recommendations to policymakers of financial institutions.

The remainder of the paper has been structured as follows. Section 2 demonstrates the development of a hypotheses through a review of the literature. In Section 3, we present variables and econometric models. Section 4 offers descriptive statistics, a variable inflation factor (VIF) test, a model specification test, and a heteroscedasticity test along with regression analysis. Finally, section 5 sums up and discusses the results of the research.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Product Mix and Risk

Product mix means the combination of interest revenue and non-interest revenue of banks. Previous studies have shown mixed results on the concomitant of product mix and revenue volatility of banks. For instance, De Jonghe (2010) shows a significant positive relationship between revenue volatility and fee-based revenue of banks in the EuropeanUnion (E.U) region. Zedda and Cannas (2020) show fee-based income positively associated with the revenue volatility of banks operating in the United States. Bostandzic and Weiß (2018) compare United States banks' revenue volatility with E.U. banks and conclude that United States banks' risk is higher than the risk of European banks. Also, they suppose that banks having more fee-based income ratio contains a higher risk than counterparts. However, De Jonghe et al. (2015) have concluded that fee-based income enhances small banks' risk and reduces large banks' risk. They also point out the inverse relationship between risk reduction in large banks and the country's perception of the corruption index, bank market concentration and disproportionate information.

Contrary to the figures in their study, when they use data from different parts of the United States where corruption does not dominate, there is an indirect relationship linkage between fee-based revenue and the risk of large (small) banks.

Similarly, Toraman and Tuncay (2017) show that fee-based income is higher (lower) in countries where the market concentration of banks is lower (higher). Their results are inconsistent with the results of research conducted on the data of the United States. Some other research studies indicate an insignificant association between fee-based revenue and risk in European banks and United States banks (Weiß et al., 2014). Based on the above literature, we propose the first hypothesis of the study as:

H_1: Fee-based revenue contains more risk as compared to loan-based income in banks.

Internal Corporate Governance

Jackson Jr et al. (2006) classified corporate governance into internal and external mechanisms. Internal corporate governance mechanisms primarily address control of activities such as the board of directors, organisational management and ownership procedures. In contrast, external corporate governance deals with external markets, legal systems, rules and regulations. The current study focuses on three variables of the internal governance mechanism: board size, board independence and CEO power. Previous literature has studied board size association with negative performance in small and large banks (Eisenberg et al., 1998). This negative correlation identifies two possible reasons that hinder the decision-making process. First, the board may have a large-scale free-rider issue that allows the CEO to communicate easily without engaging in any associated opposition (Jensen, 1993). Second, the large-scale board potentially creates communication and coordination issues that hinder effective and efficient decision-making (Hambrick et al., 1996) that increase revenue volatility.

We expect negative correlations between board size and revenue volatility based on the theoretical concept and decision-making process. Past literature supports the notion that the big Board's decisions are fair, survive for the long run and are less volatile. Individual personality errors are reduced, and compact, diverse abilities often announce visionary choices that are ultimately less variable in different directions (Sah & Stiglitz, 1991). Several empirical studies affirm the antagonistic relation between the size of a board and the bank's performance in China (Liang et al., 2013), in Europe (Staikouras et al., 2007; Agoraki et al., 2010), in the United States (Pathan & Faff, 2013) in Ghana (Adusei, 2011) and Kuwait (Al-Saidi & Al-Shammari, 2013). This negative performance indicates that banks with large board sizes are less likely to take risky products that decrease revenue volatility. Based on the above evidence, we propose the second hypothesis as:

H_2: Large board size of banks is likely to decrease revenue volatility.

After implementing the Sarbanes-Oxley (SOX) Act (2002) on financial institutions, board independence has become a vital feature contributing to the decision-making process. Some studies indicate the inverse relation between board independence and stock volatility in the long run. Similarly, Ramly and Nordin (2018) suggest an indirect connection between higher freedom of boards in Malaysian Islamic banks and credit risk. Some other studies show non-significant relation of board independence with bank risk-taking behaviour. For example, by using a large sample of international banks, Erkens et al. (2012) affirm no association between board independence and risk.

On the other hand, Lu and Wang (2018) show the positive linkage between independence of Board and bank managerial risk-taking behaviour, especially in taking stock options. Our understanding regarding board independence and board effectiveness is connected with several outside directors. Indeed, an independent board contains more outsider than insider directors. Due to management's risk-averse behaviour, we expect the positive relation between board independence and revenue volatility. Thus, our third hypothesis is proposed as follows:

H_3: Higher board independence of banks is likely to increase revenue volatility.

Adams et al. (2005) indicate an essential component of board effectiveness is CEO power. Past studies use many CEO power proxies like CEO's positions, tenure, duality and the organisation's performance during the CEO's tenure compared to its peers (Adams et al., 2005). Increasing CEO power is likely to decline the independence of board decision-making process and decrease effective monitoring management. On the other hand, Adams et al. (2005) advocate the positive association between CEO power and revenue volatility. The reason for this positive link is that powerful CEO pursues comparatively risky policies that generate revenue volatility. The mix results from previous studies make our article more interesting for investigating CEO power to the concomitant of earning volatility. Based on the provided arguments, along with empirical evidence, we propose the hypothesis as follows:

H_4: The higher the level of CEO's power is likely to decline the earnings volatility.

DATA AND METHODOLOGY

This study analyses the impact of product mix and internal corporate governance on revenue volatility in conventional banks and Pakistan's Islamic banks. For the desired objectives, data is retrieved from the annual reports of 14 Islamic banks (I.B.s) and 14 traditional banks (C.B.s) for 2010-2019. Multiple regression models are used to analyse the results. To test the

multicollinearity in the data, we use the variance inflation factor (VIF). The study also applies the Ramsey RESET test and the Coke Weisberg / Breusch Pagan test to check for heteroscedasticity in the data. The details of the variables used in the research study are given in Table 1:

Table 1: Variables Description

Variable Name	Proxy	Measurement	Source
Dependent Variables: Earnings Volatility			
Earnings Volatility	i. Revenue Volatility (R.V.)	i. Standard Deviation of %Δr Where: %Δr is the percentage change in revenues.	De Young and Roland (2001)
	ii. Degree of Total Leverage (DTL)	ii. %Δπ / %Δr Where: %Δr is the percentage change in revenues and %Δπ percentage change in profit.	
Independent Variables: (a) Product Mix			
i. Lending Activities	i. Loan-based Revenue (LBR)	i. Revenue from Loans / Total Assets	De Young and Roland (2001)
ii. Fee-Based Activities	ii. Fee-Based Revenue (FBR)	ii. Revenue from Fee-Based / Total Assets	
(b) Corporate Governance			
iii. Size of Board	iii. Board Size (BSIZE)	iii. Strength of Total Directors on the Board	Mamatzakis and Bermpei (2015)
iv. Independence of Board	iv. Board Independence (BIND)	iv. Independent Members / Total Members	
v. CEO Power	v. CEO Power (CEOP)	v. '1' if CEO is in Board, '0' otherwise	
Control Variables			
Control Variables	i. Bank Age (BAGE)	i. Logarithm of Numbers of Years Since the Bank was Incorporated	
	ii. Return on Assets (ROA)	ii. Net Income / Total Assets	

For testing the hypotheses of the study, the following econometric models are applied:

$$RV_{it}=\beta_0+\beta_1(LBR)_{it}+\beta_2(FBR)_{it}+\beta_3(BSIZE)_{it}+\beta_4(BIND)_{it}+\beta_5(CEOP)_{it}+\beta_6(BAGE)_{it}+\beta_7(ROA)_{it}+E_{it}\text{---------}1$$

$$DTL_{it}=\beta_0+\beta_1(LBR)_{it}+\beta_2(FBR)_{it}+\beta_3(BSIZE)_{it}+\beta_4(BIND)_{it}+\beta_5(CEOP)_{it}+\beta_6(BAGE)_{it}+\beta_7(ROA)_{it}+E_{it}\text{---------}2$$

Whereas, R.V. means revenue volatility and DTL is a symbol of degree of total leverage. LBR and FBR are loan-based revenue and fee-based revenue, respectively. BIND, CEO Power and BSIZE are internal governance variables, namely board independence, CEO power and board size. BAGE and ROA are the bank age and return on assets. β_0, β_1 …. β_7 are the regression coefficients, and E represents error term. "i" indicates the numbers of banks and t shows the time in years.

EMPIRICAL RESULTS

This section provides a comparison between conventional and Islamic banks in Pakistan. The data analysis includes descriptive statistics, variance inflation factor (VIF), Ramsey RESET test, Cook-Weisberg/Breusch-Pagan test. Besides, we apply regression analysis to examine the impact of internal governance and product mix on revenue volatility in both types of banks.

Descriptive Statistics

Table 2 provides descriptive results for Islamic banks (I.B.s) and conventional banks (C.B.s) under study. The average reported values of revenue volatility (R.V.) for I.B.s and C.B.s are 0.71 and 0.67, respectively. It means that the fluctuations in revenue for selected banks have remained at 71% in I.B.s and 67% in C.B.s. The average value (standard deviation) of the degree of total leverage (DTL) for I.B.s and C.B.s is 0.42 (2.23) and 0.52 (2.18) respectively. The mean value of loan based revenue (LBR) is 0.04 for both I.B.s and C.B.s. The maximum (minimum) value for IBs is 0.33 (0.001) and for CBs is 0.41 (-0.06). The average value for fee-based revenue (FBR) is 0.008 for I.B.s and 0.007 for C.B.s with the ±1.1 per cent variations in I.B.s and ±1.2 per cent variations in C.B.s. The maximum value of board size (B.S.) is 14 and 12 for both I.B.s and C.B.s, respectively. Board independence (BIND) shows an average value of 0.36 and 0.38 for I.B.s and C.B.s, respectively. The average value of CEO power for I.B.s is 0.85 and for C.B.s is 0.71. The maximum age for I.B.s (CBS) is depicted as 43 (71) years. The average ROA in I.B.s (with 5.7 per cent variations) is 2.6 per cent and for CBS (with 26.4 per cent variations) is 4.6 per cent.

Table 2. Descriptive Statistics

Variables	ISLAMIC BANKS					CONVENTIONAL BANKS				
	Mean	Median	Max	Min	S.D.	Mean	Median	Max	Min	S.D.
RV	0.7099	0.2053	8.3438	0.0032	1.5166	0.6735	0.1402	5.9961	0.0216	1.4207
DTL	0.4235	0.8210	8.9983	-7.1597	2.2372	0.5204	0.7538	8.7583	-8.0167	2.1835
LBR	0.0401	0.0283	0.3342	0.0015	0.0552	0.0442	0.0278	0.4103	-0.0626	0.0722
FBR	0.0085	0.0053	0.0741	0.0001	0.0118	0.0071	0.0043	0.1085	0.0009	0.0129
BS	9.7582	10.000	14.0000	7.0000	2.1620	8.5385	8.0000	12.0000	6.0000	1.3769
BIND	0.3647	0.3636	0.7143	0.2143	0.0989	0.3802	0.3750	0.5714	0.2500	0.0833
CEOP	0.8571	1.0000	1.0000	0.0000	0.3519	0.7143	1.0000	1.0000	0.0000	0.4543
BAGE	18.0000	17.0000	43.0000	1.0000	10.2263	37.1429	25.0000	71.0000	13.0000	20.3211
ROA	0.0266	0.0167	0.4413	-0.0295	0.0579	0.0460	0.0183	2.5105	-0.0905	0.2643

Multicollinearity

Table 3 provides the test results of the multicollinearity of all variables used in the research study. The study uses a VIF test to detect multicollinearity. VIF is an advanced technique for multicollinearity testing and is considered the best measure. 1/VIF is called tolerance. The higher (lower) the value of VIF (tolerance), the more collinear the variables are, and vice versa. O'Brien (2007) suggested the expected value of less than five, and the tolerance value more than 0.1. For all variables used in the study, VIF and tolerance's expected value is within limits for both I.B.s, and C.B.s expect CEO power and bank age (BAGE). The VIF value of CEOP is about five, and BAGE is the control variable. Thus, it indicates no multicollinearity problem. The recent study of Salmerón Gómez et al. (2020) allows regression if the value of VIF is less than 10. Therefore, we conclude that the study variables meet the requirements of tolerance and VIF, indicating that multidimensionality does not exist.

Table 3. Variance Inflation Factor (VIF)

Variables	ISLAMIC BANKS		CONVENTIONAL BANKS	
	VIF	1/VIF	VIF	1/VIF
LBR	1.554183	0.643425	1.555016	0.643080
FBR	1.845831	0.541761	1.359779	0.735414
BS	1.462580	0.683723	1.606092	0.622629
BIND	1.634867	0.611671	1.539398	0.649605
CEOP	2.409484	0.415027	5.041940	0.198336
BAGE	2.843053	0.351735	5.080418	0.147484
ROA	1.235733	0.809236	1.385294	0.721868

Model Specification

Bera and Jarque (1982) discover a technique for testing model specification error. This technique determines whether any relevant (irrelevant) variables are missed (included) in the study. The acceptance of the null hypothesis indicates no omitted variables in the study. Table 4 presents that there is no specification error in the model. For both R.V. and DTL models, null hypotheses are accepted, indicating no omitted variables in the regression model. Therefore, there is no error in the models.

Table 4: Ramsey Reset Test

Particular	Islamic Banks	Conventional Banks
F (7, 83)	0.8960	0.0563
Probability	0.0761	0.3561

H_0: There are no omitted variables that existed in the model.

Heteroscedasticity

Breusch and Pagan (1979) introduced Cook-Weisberg / Breusch-Pagan Test to check the heteroscedasticity of variables in the study. Heteroscedasticity is a problem with the OLS regression model. Table 5 shows the results that indicate the lower value of chi-square from the probability value in conventional and Islamic banks. Therefore, we reject the alternative hypothesis and consequently accept the null hypothesis. The results show that the variables are constant, and there is no heteroscedasticity.

Table 5: Cook-Weisberg / Breusch-Pagan Test

Particular	Islamic Banks	Conventional Banks
Chi2	0.0837	0.0607
Probability	0.5478	0.4798

Regression Analysis

Table 6 displays the regression model outcomes of Islamic banks for both dependent variables: revenue volatility (R.V.) and the degree of total leverage (DTL). The table shows that the fee-based Revenue (FBR) fluctuations positively affect the 5% significance level. The positive coefficient of FBR represents that an increase (decrease) of one unit leads to an increase (decrease) of R.V. to 7.03 units. However, the result is not significant when we use DTL as the dependent variable. The outcomes are not much different in the case of conventional banks (see Table 7). The positive coefficient of FBR represents that one-unit increase (decrease) in FBR causes to increase (decrease) R.V. by 4.55 units. FBR also has a significant positive impact on DTL at 1% levels of significance. It shows that one-unit incline in FBR causes 4.64 units to increase in DTL.

Table 6: Regression Analysis of Islamic Banks

Variable	Equation 1 (RV= Dependent Variable)				Equation 2 (DTL= Dependent Variable)			
	Coeff	S.E.	T.Stat.	P.Value	Coeff	S.E.	T.Stat.	P.Value
C	0.7319	1.4391	0.5085	0.6124	-0.0634	2.0074	-0.0316	0.9749
LBR	0.6312	1.5155	0.4164	0.6781	-2.1385	3.8353	-0.5575	0.5786
FBR	7.0384	7.6925	1.9149	0.0429[**]	-1.1252	14.3463	-0.0784	0.9377
BS	0.0494	0.0574	0.8617	0.3913	-4.0206	0.1232	-2.1676	0.0073[***]
BIND	1.2280	0.4131	2.9721	0.0031[***]	-2.2204	2.5749	-0.8623	0.3910
CEOP	-0.9387	0.5513	-1.7026	0.0924[*]	1.0445	1.0402	1.0040	0.3183
BAGE	0.4004	0.0184	2.1954	0.0309[**]	0.0328	0.0355	0.9253	0.3575
ROA	-0.4262	0.5572	-0.7650	0.4464	1.2469	1.6584	3.7668	0.0003[***]
R-Square	0.5599				0.8350			
Adjusted R-Square	0.3450				0.6214			

Note: "***, **, * shows levels of significance at 1%, 5%, and 10% respectively."

Unlike to FBR, loan-based revenue (LBR) shows the negative impact on R.V. in conventional banks. Table 7 depicts the outcomes of regression analysis of traditional banks for both models 1 and 2. This table shows that LBR has a significant negative effect on R.V. at the significance level of 0.05. One-point increase (decrease) in LBR causes to decrease (increase) R.V. by 2.68 units. However, the impact of LBR is not significant in the case of Islamic banks for both dependent variables (see Table 6).

Moreover, this impact is also not significant when we use DTL as the dependent variable in conventional banks. Overall, the results support the hypothesis-1 in Islamic banks and traditional banks, i.e. (H1: Fee-based revenue contains more risk than loan-based income in banks). The coefficients of FBR indicate a low risk of this product in conventional banks compared to Islamic banks. However, the significant coefficient (see Table 7) shows the inverse relation between LBR and R.V. Overall; our results indicate that conventional banks are less risky as compared to their counterparts.

Table 7: Regression Analysis of Conventional Banks

Variable	Equation 1 (RV= Dependent Variable)				Equation 2 (DTL= Dependent Variable)			
	Coeff	S.E.	T.Stat.	P.Value	Coeff	S.E.	T.Stat.	P.Value
C	1.4606	0.3303	1.3945	0.0669*	0.1353	0.5139	0.2632	0.7930
LBE	-2.6896	2.5331	-2.6670	0.0566**	4.6642	3.9416	1.1833	0.2401
FBR	4.5545	1.7644	3.2371	0.0196***	4.6406	1.3061	2.2535	0.0005***
BS	0.1543	0.1741	0.8861	0.3782	-0.1159	0.2709	-0.4280	0.6697
BIND	1.8337	2.6602	2.3134	0.0548**	1.5577	4.1394	0.3763	0.7076
CEOP	-0.7692	0.3951	-1.9464	0.0550**	-0.6546	0.6149	-1.0646	0.2902
BAGE	0.0210	0.0091	2.2939	0.0244**	0.0121	0.0142	0.8502	0.3977
ROA	-3.2613	3.9334	-0.8291	0.4094	10.1437	6.1206	1.7572	0.0913**
R-Square		0.5115				0.5820		
Adjusted R-Square		0.4248				0.4587		

Note: "***, **, * shows levels of significance at 0.01, 0.05, and 0.10 respectively."

Table 6 indicates a significant inverse relation between B.S. and earnings volatility when we use DTL. There is a significant indirect impact of board size (B.S.) on the degree of total leverage (DTL) at 1% level of significance. It means that increasing board size by one unit causes to decrease the DTL by 4.02 units and vice versa. Overall, results do not support the hypothesis-2 (H2: large board size of banks likely to reduce the revenue volatility) for both types of banks. Table 6 & 7 display the results of BIND for both conventional and Islamic banks. In Islamic banks, board independence (BIND) is positively correlated with R.V. at 1% levels. Any addition in BIND boosts up R.V. by 1.22 units.

BIND has a significant positive impact on R.V. at 5% levels for conventional banks. Any addition in BIND boosts up R.V. by 1.83 units. The study results are likely to accept the

hypothesis-3 (H3: Higher board independence of banks likely to increase the revenue volatility).

There is an inverse affiliation between CEO power (CEOP) and R.V. Which shows that any increase in CEOP causes to decline R.V. by 0.93 units and vice versa (see Table 6). There is a negative impact of CEOP on R.V. at significance levels of 0.05, which shows that any increase (decrease) in CEO power causes to decline (incline) R.V. by 0.76 units (see Table 7). The study results accept the hypothesis-4 (H4: A higher level of CEO power likely to decline the earnings volatility). However, the results are not significant when we use DTL as the dependent variable for both banks.

DISCUSSIONS AND CONCLUSIONS

Undoubtedly, banks are the pillars of any economy that provide services to the people who want to invest aside and help the government implement its fiscal policy to achieve profitable economic growth. The primary purpose of conventional banks is to offer a system for lending and borrowing. Traditional banks receive deposits from their customers and lend this amount to borrowers. They charge interest on lending amounts of borrowers and pay interest to depositors. The spread of interest rates is their earnings, which is the core product of convention banks.

On the other hand, Islamic financial institutions are grounded on Sharia law principles that introduce an interest-free banking system. Their main product is equity investment or participation in purchasing its creation as a partnership contract that requires consumers to pay banks a share of the profits instead of interest. Islamic banks' emerging economic growth instead of conventional banks indicates their better performance (Salman & Nawaz, 2018). This growth forces financial institutions, especially traditional banks, to transfer some of their income to relatively risker products, non-interest payment, through their internal governance decisions. The present study analyses the revenue fluctuations of conventional and Islamic financial banks in the context of product mixing and internal corporate governance.

This study's findings show that Islamic banks contain higher risks than conventional banks in earnings volatility. This risk may occur due to the following reasons. First, the bank's rules and regulations are the same for both types of banks instead of their different operational characteristics. The operating mechanism of Islamic banks is compelled to keep as much cash as possible due to the risk of withdrawal and rely more on customers' deposits that enhance the earnings volatility. Second, Islamic banks are more uncertain than conventional banks. In this way, they show greater credit risk and earnings fluctuations than their counterparts (Salman and Nawaz, 2018). When we look into the components of earnings volatility, the study's findings indicate that FBR contains less risk in conventional banks than in Islamic

banks. It means the Islamic financial system is more vulnerable than the design of traditional banks. Our findings are consistent with the study of Jalbani and Shaikh (2009).

The study uses CEO power, board size and board independence for the banking system's internal governance. Our results indicate no impact of B.S. on earnings volatility in Pakistani conventional banks as well as Islamic banks. This may be due to the non-linear effect of board size. Increasing additional one or two directors to the board size may not provide the significant impact of decision-making. Also, the average board size of Islamic banks (conventional banks) is ten (twelve) with standard deviations of (two) one. This minimal variation may not generate a significant impact on earnings volatility. Our results are consistent with Yaqub & Ayub (2016).

On the other hand, board independence affects earnings volatility positively. An independent board implies more outside independent directors that could recommend the risky projects for a good profit, enhancing earnings volatility. Our results are consistent with Fama and Jensen's (1983) agency theory, which advocates that the (management) insider directors are risk-averse. Moreover, the study focuses on CEO power, an essential internal governance variable. Our results show the indirect relation between CEO power and earnings volatility. Overall findings of the study indicate that internal corporate governance influences both types of banks' decision-making processes. Consequently, it controls the earnings volatility. Our results are also consistent with the findings of Htay et al. (2011).

Managerial Implications

The study reveals many administrative implications. First, the top management of both types of banks can gain insight from the research and manage to redesign their policies to deal with banks' risk. Using a blend of FBR and LBR linked to equity with internal corporate governance, they can control their banks' stability, which is an essential component of sustainable growth. Second, academia can use this article as a case study in the classroom to provide students and research scholars with an understanding of risk management. The Institutes of Corporate Governance, notably the Pakistan Institute of Corporate Governance (PICG), may incorporate this study's results in formulating corporate governance policies and regulations for Pakistan.

Limitations and Future Research

Limitations of our study point out the future direction of research. Future research may extend the data of all conventional and Islamic banks for the generalisation of results. Future studies may also incorporate other risk management variables such as credit risk, systematic and unsystematic risks and internal corporate governance, and external corporate governance

variables to expand the scenario. The future studies may use modern techniques like fuzzy set qualitative comparative analysis (fsQCA) and Tosmana for the robustness of results.

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