Full Length Research Paper

Compliance of Core Risk for Smooth Banking Operation

Mohammed Ziaul Haider, Ph.D[*1] and Belal Hossain[2]

[1]Professor, Economics Discipline, Khulna University, Khulna-9208, Bangladesh
[2]Graduate, Economics Discipline, Khulna University, Khulna-9208, Bangladesh

*Corresponding author e-mail address: haidermz@yahoo.com

ABSTRACT

Compliance to core risks is very important for a bank to operate smoothly. The Pubali Bank Limited (PBL) of Bangladesh has been trying to establish itself as a reputed bank through strengthening and expanding compliance activities. This study considered randomly selected forty branches of PBL from all over Bangladesh. It attempted to measure the impact of compliance culture on bank deposit and profit using regression model analysis. It considered six types of risks as core risks, namely Credit Risk (CR), Asset Liability Management Risk (ALMR), Anti Money Laundering Risk (AMLR), Foreign Exchange Risk (FER), Internal Control and Compliance Risk (ICCR) and Information Technology Risk (ITR) to present compliance culture. The regression results revealed that CR, ICCR and ITR positively and significantly influenced bank deposit, while CR and FOR positively and significantly influenced bank profit. The data analysis results also indicated that PBL had been doing well in complying with core risks. Therefore, it could be said that if the bank expands and strengthens compliance activities, it might play a significant role for smooth operation of the bank along with increasing deposit and profit.

Keywords: Compliance, Core risk, Deposit, Profit, Pubali Bank Limited

INTRODUCTION

Risk is inherent in commercial operations. Banking sector plays a significant role for economic development through meeting up capital need which is important for investment acceleration in a country. However, high risks are associated with this sector. A bunch of available literatures focus on bank operation including risk management. For example, Rikhardsson and Rosmann (2006) highlight on efficient management of internal control for smooth banking operation. It identifies three main areas, namely business process, risk management and internal control development for management attention. Adams (2004) and Gangadahran (2006) also emphasize on internal control as a part of the management process focusing on implementing strategies and achieving objectives.

Borodzciz (2005) describes risk management including preparation of disaster recovery plans, crisis management and emergency procedures. Harmon (2003) finds differences in risk perception both at organizational level and process level. Sinha (2002) identifies credit management as an indispensable task to the financial institutions including banks. Bernnan (2005) and Salehi and Mansoury (1991) narrate various methodologies including subjective, judgment and scientific methods for predicting and evaluating credit risk in banking system.

Lehar (2004) attempts to estimate risk measures and finds that a high correlation between bank assets implies a higher probability of multiple bankruptcies and that larger and profitable banks accrue lower system risk. Vassalou and Xing (2004) find evidence that bankruptcy risk represents a systematic risk which affects stock return. Baity and William (2000) and Baker and Raymond (1999) describe the burning issue of money laundering that undermines financial institutions.

Habib (2003) and Malakar et al. (2005) state the importance of asset liability management for the financial institutions to manage risks. Gomes (2009), Salazar

Table 1. Sample distribution

Division	Population (No. of branches)	Sample (No. of branches)
Dhaka	127	10
Chittagong	109	5
Rajshahi	23	5
Sylhet	76	5
Khulna	25	5
Barisal	23	5
Rangpur	18	5
Total	**401**	**40**

Source: PBL (2012)

(2009) and Sanayei and Norooz (2009) highlight the pros and cons of IT issues in banking operation. Giddy and Dufey (1992), Wan et al. (1992) and Wetmore and Brick (1994) analyze the foreign exchange risk management aspect in banking operation.

Based on the above said literatures, it may be concluded that compliance with various types of risks is important for smooth operation of a bank. It not only assists to run day to day banking operation, but also minimizes the weaknesses belonging to banking operation and enhances the operational strength of a bank. Core risk refers to the risk involved with smooth operation of the core banking activities. In other words, core risk is the risk which affects the business of a bank. Bangladesh Bank, the central bank of Bangladesh considers six types risks as core risks, namely Credit Risk (CR), Asset Liability Management Risk (ALMR), Anti Money Laundering Risk (AMLR), Foreign Exchange Risk (FER), Internal Control and Compliance Risk (ICCR) and Information Technology Risk (ITR).

Bangladesh Bank emphasizes extensively on compliance of core risks. It inspects the branches, regional offices and head office of the commercial banks in the country throughout the year to ensure proper compliance of the core risks. Bangladesh Bank makes the Capital, Asset, Management, Earnings, Liquidity and Sensitivity (CAMELS) rating on the basis of the performance of core risk compliance. Bangladesh Bank charges fine on the commercial banks if they fail to comply with the core risk management. A poor grade in CAMELS rating makes a negative impression to the mind of the clients about the concerned bank.

Pubali Bank Limited (PBL) has been operating in Bangladesh since more than 50 years. It has more than four hundred branches, sixteen regional offices and nine corporate branches along with 300 online branches. It has a reputation as a well compliance bank. It has owned second position as recognition of the performance on core risk management according to the Internal Control and Compliance (ICC) rating 2010 published by the Bangladesh Bank. It is committed to maintain its success

in core risk compliance for the upcoming days. The target of the bank is to emerge as a role model for the banking sector in the arena of core risk management by extending its current compliance activities for the greater interest of smooth operation of the bank. The objective of this study is to figure out the influence of such compliance activities on bank operation. More specifically, it tries to measure the impact of compliance on bank deposit and profit considering Pubali Bank Limited as a case study.

MATERIALS AND METHOD

More than four hundred branches of Pubali Bank Limited are operating in seven divisions of Bangladesh (PBL, 2012). We select randomly 10 percent of total branches, i.e. fourty branches as samples for this study. We have followed a stratified random sampling procedure in selecting sample branches. Location, i.e. division is the strata of this study. Being the largest division, we have picked ten samples from Dhaka and five samples from each of the remaining six divisions (Table 1). Random sampling procedure is applied for selecting samples within a division. We have collected the required data on core risk compliance at the branch level from the inspection report prepared by the ICC division of Pubali Bank Limited.

Mitigation of core risks is one of the prime activities of any commercial bank. Pubali Bank Limited has been trying to comply with core risks associated with baking operation. Credit Risk (CR) is the first element of six core risks which explains the possibility that a borrower might fail to meet its obligation in accordance with agreed terms. It arises from the bank's dealing with or lending to corporate, individual and other bank or financial institutions. This risk generally arises from two fundamental activities of the bank, collecting deposit from depositors and lending money to the clients. Asset Liability Management Risk (ALMR) is the second element of core risks faced by the banks. It covers balance sheet risks including liquidity and interest rate risks, market

Table 2. Deposit and Profit Scenario of Pubali Bank Limited in 2011

Division	Deposit (Million BDT)	Profit (Million BDT)
Dhaka	26,308	2,430
Chittagong	11,175	48
Rajshahi	858	42
Sylhet	707	50
Khulna	478	20
Barisal	421	22
Rangpur	263	22
Total	**40,210**	**2,634**

Source: PBL (2012)

risks and operational risks. Anti Money Laundering Risk (AMLR) is the third element of core risks which broadly refers to earning money from illegal sources. Internal Control and Compliance Risk (ICCR) is the fourth element of core risks which arises from day to day operation of a bank. Foreign Exchange Risk (FER) is the fifth element of core risks which refers to the risks encountered in the trading environment and the bank's policies and processes keeping consistency with the overall national and global trade scenario. Information Technology Risk (ITR) is the sixth element of core risks which refers to the threats in protecting information from any unauthorized access, modification, disclosure and destruction.

This study collects branch lelvel data on the six types of risk (CR, ALMR, AMLR, FER, ICCR and ITR) to represent core risks following the explanation of Bangladesh Bank. It also collects branch level data on deposit and profit. In addition, data on age of branches and number of loanee per brach are also collected in this study. Finally, it attempts to quantify the influence of various types risks on bank deposit and profit through regression analysis (Equation 1 and 2).

3=Satisfactory, 2=Marginal and 1=Dissatisfactory. Based on the literatures, this study assumes positive sign of all the regression coefficients.

RESULTS AND DISCUSSION

Total deposit of Pubali Bank Limited was 40.21 billion BDT in year 2011 and the bank earned 2.634 billion BDT profit in the same year (PBL, 2012). Table 2 illustrated division-wise deposit and profit scenario of Pubali Bank Limited. The data indicated that Dhaka division was far away from all other divisions in case of getting deposit and earning profit in year 2011.

Table 3 depicted the estimated regression results for deposit equation. The results indicated that CR, ICCR, ITR and age of a branch significantly and positively influenced bank deposit. The influences of ALMR and FER on bank deposit were not statistically significant. Although AMLR was statistically significant, it did not possess the expected directional effect on bank deposit.

If the borrowers of a bank found that people were getting loan from the bank quickly and the loan

$$D = \alpha_0 + \alpha_1 CR + \alpha_2 ALMR + \alpha_3 AMLR + \alpha_4 FER + \alpha_5 ICCR + \alpha_6 ITR + \alpha_7 AGE + \varepsilon_1 \ldots\ldots (1)$$
$$P = \beta_0 + \beta_1 CR + \beta_2 ALMR + \beta_3 AMLR + \beta_4 FER + \beta_5 ICCR + \beta_6 ITR + \beta_7 NOL + \varepsilon_2 \ldots\ldots (2)$$

Where, D = Deposit (in million BDT[1] per year); P = Profit (in million BDT per year); CR = Credit Risk, ALMR = Asset Liability Management Risk, AMLR = Anti Money Laundering Risk, FER = Foreign Exchange Risk, ICCR = Internal Control and Compliance Risk and ITR = Information Technology Risk; AGE = Age of a branch (in years); NOL = Number of loanee in a branch; αs and βs are regression coefficients. Each of the six types of risk is measured in rating value with 5=Very good, 4=Good,

repayment system of the bank was easier, it created a positive impression among the borrowers to repay the loan in time and to deposit their accumulated money in the concerned bank. CR was very important in this regard. The depositor could deposit their money within a very short time as well as they could deposit their money in any branch of the bank throughout the country if computerized and online banking facility was available. As a result, people were driving towards the IT based banking in lieu of manual banking which explained the positive influence of ITR on bank deposit. The effort of

[1] BDT is the currency of Bangladesh. 1 US$ = 77.68 BDT (as on 20 December, 2013).

Table 3. Regression Results of Core Risk Model for Deposit

Variables	Coefficients (α)	Standard error (se)	t-value	p-value
CR	916.14	366.78	2.51	0.01
ALMR	-41.31	288.49	-0.13	0.90
AMLR	-602.54	351.23	-1.72	0.09
FER	-299.53	372.53	-0.81	0.42
ICCR	1377.25	579.65	2.39	0.02
ITR	1066.22	626.77	1.70	0.09
AGE	1.18	23.50	0.05	0.08
Constant	-7090.57	2535.38	-2.80	0.09
R^2 = 0.35				

Source: Authors' Compilation

Table 4. Regression Results of Core Risk Model for Profit

Variables	Coefficients (β)	Standard error (se)	t-value	p-value
CR	48.67	40.98	1.19	0.09
ALMR	40.57	33.36	1.22	0.37
AMLR	-21.44	40.35	-0.53	0.82
FER	32.63	42.96	0.76	0.08
ICCR	63.83	64.65	0.99	0.29
ITR	-3.26	69.78	0.05	0.99
NOL	0.43	0.34	1.24	0.06
Constant	-139.83	298.55	-0.47	0.36
R^2 = 0.32				

Source: Author's Compilation

ICC division in a bank played a key role to hold a good position in the CAMLES rating and depositors had an intention to deposit in a bank having higher CAMLES rating. Similarly, staying in a certain locality for a longer time helped to get deposit easily, because a good relation was established between the depositors and the bank with the passage of time. Therefore, it may be said that age of the branch was positively linked with the deposit.

Table 4 depicted the estimated regression results for profit equation. The estimated regression coefficients of CR, ALMR, FER, ICCR and number of loanee had expected directional effects on bank profit. However, all the coefficients were not statistically significant. CR, FER and number of loanee had statistically significant positive influence on bank profit. The influences of the rest explanatory variables on bank profit were not statistically significant. CR and FER were directly involved with profit. The findings signaled that if credit disbursement and volume of foreign exchange of a bank increases, the probability of earning profit by the bank increases.

In brief, it may be said that the effect of credit risk, internal control and compliance risk, information technology risk and age of the branches positively influenced the deposit of the bank, while credit risk, foreign exchange risk and number of loanee positively influenced profit of a bank and all these influences were statistically significant.

CONCLUSION

The concept of core risk compliance is a widely discussed issue in the banking sector. Bangladesh Bank has introduced a guideline on core risk compliance in 2004. According to that guideline, every commercial bank has to establish a strong ICC division for the compliance of core risk. Following this guideline, Pubali Bank Limited has established an ICC Division in 2005. Such an initiative helps to diversify risks associated with banking operation.

This study finds that compliance of core risk is directly associated with the enhancement of deposit and profit of the bank along with ensuring smooth operation of the daily banking activities. More specifically, this study finds that credit risk, internal control and compliance risk and information technology risk significantly and positively influence the deposit of the bank, while credit risk and foreign exchange risk significantly and positively influence profit of a bank. A sound depository and profit position of the banking sector can ensure financial

stability of an economy where good compliance of core risk might play an important role. Therefore, there is no alternative of maintaining and expanding current effort of compliance of core risks for banks.

This study finds that Pubali Bank Limited has been working with this compliance of core risks issue. Such an effort creates a positive impression among the mass people about the bank. The bank has achieved second position in the ICC rating 2011 published by Bangladesh Bank. Moreover, Pubali Bank Limited is selected as one of the strong banks in the CAMELS rating 2011 as recognition of core risk compliance. Note that, five banks of Bangladesh have been selected as strong category bank in the CAMELS rating 2011 by the Bangladesh Bank. Moreover, Pubali Bank Limited has a strong IT division. It operates IT functions using own software, whereas most of the commercial banks have to depend on imported software for IT operations.

This study finds that PBL is doing well in complying with core risks. Therefore, it can be said that if the bank expands and strengthens compliance activities, it might play a significant role for smooth operation of the bank along with increasing deposit and profit.

Acknowledgement

REFERENCES

Adams S (2004). Internal Control-Integrated Framework: Performance Measurement, Evaluation and Incentives, 3rd ed., Prentice Hall, London.

Baity J, William A (2000), Banking on Secrecy: The Price for Unfettered Secrecy and Confidentiality in the Face of International Organized Crime and Economic Crime. J. Fin. Crime 12(5): 112-125.

Baker MF, Raymond W (1999). Breaking the billion dollar barrier – Learning the lessons of BNL, Daiwa and BCCI. J. Money Laundering Control 18(2): 130-164.

Bernnan M (2005). Credit Risk Assessment in Banking System – Promise of Artificial Intelligence Remains Elusive in Banking Today. J. Fin. Risk Assess. 85(1): 266-281.

Borodzciz S (2005). Management Control System, 2nd ed., McGraw Hill, New York.

Gangadahran D (2006). Toward an Integrative Framework of Organizational Control. J. Account. Organizations and Society 15(4): 202-289.

Giddy H, Dufey D (1992). Managing Corporate Foreign Exchange Risk: A Value Maximising Approach. J. Foreign Exchange and Int. Fin. 12(1): 35-44.

Gomes M (2009). Security of Internet Banking Services and its Linkages with users' Trust: A Case Study of Parsian Bank of Ira and IMB Bank of Malaysia. J. Electronic Banking 15(4): 121-156.

Habib A (2003). Banking Law and Practice, 4th ed., Dhaka.

Harmon N (2003). Assessing Empirical Research in Managerial Accounting: A Value Based Management Perspective. J. Account. Econ. 32(2): 349-410.

Lehar A (2004). Measuring Systemic Risk: A Risk Management Approach. Journal of Banking & Finance 6(4): 224-302.

Malakar J, Ahmed N, Khan A (2005). Managing Core Risks of Financial Institutions: Industry Best Practices, 1st ed., Dhaka.

PBL (2012). Annual Report-2012, General Service and Development Division and Central Accounts Division, Pubali Bank Limited, Millennium Press, Dhaka.

Rikhardsson P, Rosmann M (2006). Business Process Risk Management: A Research Agenda. J. Corporate Account. Fin. 10(1): 35-50.

Salazar P (2009). Risk management Principles for Electronic Banking, 5th ed., Amman, Jordan.

Salehi M, Mansouri A (1991). An Evaluation of Iranian Banking System Credit Risk: Neural Network and Logistic Regression Approach. Int. J. Physical Sci. 6(25): 6082-6090.

Sanayei K, Norooz H (2009). Finance and Administrative Sciences. European J. Econ. 31(2): 545-605.

Sinha RM (2002). Credit Management, 3rd ed., Dhaka.

Vassalou M, Xing Y (2004). Default Risk in Equity Returns. J. Fin. 59(1): 831–868.

Wan SJ, Ceuster D, Marc JK (1992). Derivatives and Corporate Risk Management: Participation of Foreign Exchange Management in the Banking Industry. J. Applied Corporate Fin. 7: 51-90.

Wetmore L, Brick R (1994). Commercial Bank Risk: Market, Interest Rate, and Foreign Exchange. J. Fin. Res. 17(4): 585-596.