IMPACT ON ECONOMIC VALUE ADDED ON FINANCIAL PERFORMANCE: A STUDY ON SELECTED PRIVATE COMMERCIAL BANKS IN BANGLADESH

Jewel Kumar Roy[1]
Fahmida Emran[2]

Abstract:The performance of the company is required to be assessed, evaluated and observed to gain information about what needs to be done in order to develop further. As one of the most crucial business segment in the economy, banks, and their performances are considered to be taken into further study.

This study attempts to classify how good the banks sampled performance. Then, by measuring its performance through ratio analysis in the form of return on assets, net interest margin, return on equity, capital adequacy ratio, non-performing loan, loan-to-deposit ratio, and a market measure in form of economic value added, this study expects to observe the influences of those measurements toward banks' performances in terms of total assets, total debts, and interest expense.

This research uses historical data on financial reports of the banks that compiled over a period of 8 years (2008-2015).Authors observed that value added is created when a company's project yields profit, as reflected in a positive influence on PER. They also found that there are causal relationships and the respective contribution and magnitude of each variable that affects performance. Authors suggested that each variable comprising, assets, earnings, capital, liquidity and sensitivity may be analysed separately in order to gain an understanding of how each respective variable actually contributes to performance.

Keywords: economic value added, performance, ratio analysis

JEL Classification: E40, G30, l21, M10, N20

Introduction

It has become public knowledge that a nation's income is generated from various industrial sectors within a nation, such as; mining, agriculture, export/import, and services. To maintain sustainable economic growth, companies must adhere to efficiency and effectiveness in utilizing limited resources. The better the business does, the more positive the impact on the economy. This is deemed required to continually enhance the competitiveness and contribute to the national economy. To do so, companies are in-need of funding, both internally and externally. In such cases, on the external funding source, banks play a very important role.

---

1. Lecturer, Department of Finance and Banking, Faculty of Business Administration, Jatiya Kabi Kazi Nazrul Islam University, Trishal, Mymensingh-2220, Bangladesh. Email: roy.jkkniu@gmail.com

2. Lecturer, Department of Business Administration, Faculty of Business and Economics, Daffodil International University, Email: fahmida@diu.edu.bd

Be dependent on their lending operations, banks take-on the role as financial intermediaries for companies across industrial sectors (Shaher, Kasawneh, & Salem, 2011). In essence, the banking sector contributes also to the country's national income and growth, not only via credit extensions, but also from analysing, evaluating, and monitoring companies' performance (Dash & Das, 2009). The mechanisms of a bank's situation that are measured by capital adequacy ,assets ,management Capability ,earnings, liquidity ,sensitivity(CAMELS).

With the emergence of various businesses in Bangladesh the role of banks and financial institutions, in general, becomes increasingly important. As previously mentioned, growth and expansion intention rely on the monetary supports of financial institutions. The increase in business activities fuels the emergence of new financing sources, from both banks and financial institutions, including other alternatives. For existing banks and financial institutions, the emergence of new banks and financial institutions, undoubtedly, create new threats. An alternative financing mechanism, such as from the stock market, especially through IPO is certainly available, particularly for established companies (Schiozer, Oliveira, & Saito, 2010). Aside from strict and heavily enforced rules and regulations from the stock market, some potential benefits include; dividends yield and capital gain. With such potential benefits, it means that more companies decide to go public to finance growth (Soemitro, 2012). As for existing publicly-listed companies, the stock market provides the perfect vehicle to increase the companies' market capitalization (Mensah, Awunyo-Vitor, and Sey, 2010).

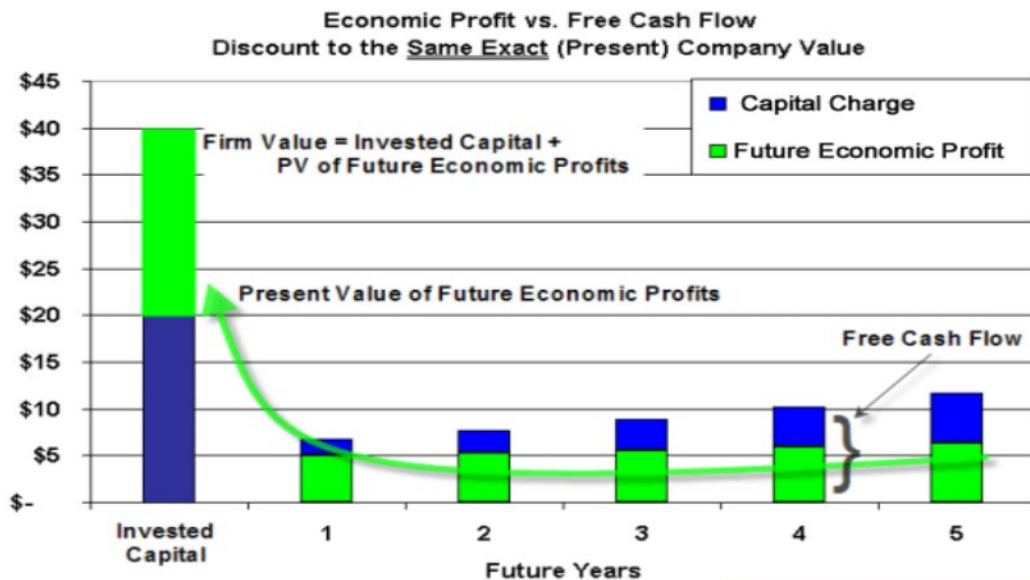The study has shown in Figure:1 Economic profit versus Free cash flow.

Figure:1

(Source: http://i.investopedia.com/inv/articles/site/EVAChp1Grafic2version2.GIF)

The entrance of private commercial banks is now a days is in a   greater extent at the banking sector of the country, so this research work is planned to measure the impact of EVA of nine selected private commercial banks of three generations which are listed of Stock Exchange of the country.

Literature Review

 Pfeiffer (2000) considered mathematically EVA vs. discounted cash flow methods for resolving internal agency problems in decentralized decision-making. Besides the theoretical discussion, understanding is needed about the numerical behavior of the EVA under different conditions and about EVA's numerical relationship to the accounting measures like Return on Investments (ROI), Return on Equity (ROE) and to economic profitability measures like the Internal Rate of Return (IRR).

Girotra et al (2001) emphasized that the importance of the EVA. They compare the EVA with Return on Equity (ROE), Return on Net worth (RONW), Return on Capital Employed (ROCE) and Earnings per Share (EPS). They argue that EVA is not a tool to create value but it encourages managers to think like owners, and, in the process may impel them to strive for better performance. The study concluded that EVA has been helpful because it forces companies to pay attention to capital employed and especially to excess working capital.

Popa et al. (2009) argued that EVA can be an important tool that bankers can use to measure and improve the financial performance of their bank. They emphasize the advantages of EVA by comparing to other performance indicators. Since EVA takes the interest of the bank's shareholders into consideration, the use of EVA by bank management may lead to different decisions than if management relied solely on other measures. They investigate the Romanian Banking systems to compare the advantages of EVA to other measures of bank performance such as return on assets (ROA), return on equity (ROE), net banking income and the efficiency ratio, which do not consider the cost of equity capital employed.

EVA may be distinguished from other financial performance measures such as net profit and earnings per share (EPS), as it determines the profits remaining after the capital costs of a company – both debt and equity – have been deducted from the operating profit (McClure, 2011).

 Inguva, Djeddi, & Djeddi(2012) illustrated that total income increased as the value of interest expenses increases. Profit or income contains interest expenses as part of the calculation. (Sapariyah, 2010), found that Bank Performance in terms of profit is influenced by Financial Ratios consisting of capital, assets, earnings, and liquidity differently. Capital and assets are positively and significantly influencing profit growth. Earnings are negatively and insignificantly influencing profit growth. Liquidity is negatively and significantly influence profit growth.

Wibowo & Berasategui (2008), shown that EVA influences the reported earnings in Indonesian listed companies. The relationship between EVA and reported earnings is not as high as in growth prediction model.

In this study, the applicable limitations are financial reports of the banks that comprise of 9 banks, which are publicly listed on the Dhaka Stock Exchange (DSE), the focus is on the performance, which is generally used within the banking industry, including other relevant key performance indicators typically used by companies across industries, and the data spans only during 2008 - 2015.

Hypothesis Testing

Based on the background and literature studies, the research model is as illustrated to note the relationships among variables. Referring to the previously stated research questions, the following hypotheses are formulated. Following hypotheses are formulated to find out the impact of economic value added on financial performance and relationship among them.

H1: There is an impact of economic value added on financial performance.

H1a: There is an impact of economic value added on Return on Equity.

H1b: There is an impact of economic value added on Return on Assets

H2: There is a relationship between Ratio Analysis and financial performance.

Objectives of the Study

- To find out the impact of Economic Value Added on performance.

- To reveal the relationship between economic values added and financial performance and to make a suggestion to increase the value of bank's financial performance.

Research Methodology

This research follows a descriptive quantitative research method (Zikmund, 2003). The data in this research is solely based on secondary data, particularly from annual reports/financial statements of those publicly-traded banks, including references, such as; books, journals, and other articles on previous studies on banks performance analysis. Though this study is primarily based on quantitative method, a qualitative approximation to study the issues surrounding those publicly-traded banks is also conducted. The purposive sampling method is used to emphasize on publicly-listed banks.

The study has chosen total nine private banks of three generations which is given in Table:01.

Table 01: Selected Banks for the study

Genera-tion	Bank Name	Trading Code	Incor-cor-pora-tion	List-ing Year	Mar-ket Cate-gory	Source of Data
1st	AB Bank Limited	ABBANK	1981	1983	A	http://www.abbank.com.bd
	Pubali Bank Limited	PUBALIBANK	1959	1984	A	http://www.trustbank.com.bd
	United Commercial Bank Limited	UCB	1983	1986	A	http://www.ucb.com.bd
2nd	Al-Arafah Islami Bank Ltd	ALARABANK	1995	1998	A	http://www.al-arafahbank.com
	Dutch-Bangla Bank Limited	DUTCHBANGL	1995	2001	A	http://www.dutchbanglabank.com
	Eastern Bank Limited	EBL	1992	1993	A	http://www.ebl.com.bd
3rd	Bank Asia Ltd.	BANKASIA	1999	2004	A	http://www.bankasia-bd.com
	BRAC Bank Limited	BRACBANK	2001	2007	A	http://www.bracbank.com
	Trust Bank Limited	TRUSTBANK	1999	2007	A	http://www.trustbank.com.bd

(Source: Websites are mentioned in the last column)

Variables

The indicators for all the variables used in this study are taken from banks' annual report/financial statements. The details are summarized below.

Table 02: Variables and Indicators for the analysis

Variables	Indicators	Explanation
Ratio Analysis	Capital	Capital Adequacy Ratio
	Asset Quality	Non Performing Loan
	Earnings	Return on Assets, Net Interest Margin and Return on Equity
	Liquidity	Loan to Deposit Ratio
Economic Value Added	NOPAT	Net operating profit after tax
	Capital Charge	Capital employed = Fixed asset + Invest-ment + Working WACC= proportion of debt * Cost of debt
Performance	Interest Expense	It is expected that the lower level of interest expense mirrors better performance

Source: Authors Computation

Estimated Results

Table 03: Descriptive Statistics

Statistics	EVA	CAR	NPL	ROA	NIM	ROE	LDR	Interest Expense
Mean	1112709070	0.271146	0.034006	0.03173	0.350739	0.19124	0.873852	7998511690
Standard Error	127914332	0.15239	0.001961	0.012663	0.012281	0.011704	0.010667	458129433.6
Median	1085977914	0.11745	0.03068	0.014623	0.340112	0.169718	0.856904	7136092428
Standard Deviation	1085389099	1.293074	0.016638	0.107448	0.104211	0.099311	0.09051	3887357150
Sample Variance	1.17807E+18	1.672041	0.000277	0.011545	0.01086	0.009863	0.008192	1.51115E+19
Kurtosis	0.00759067	71.97627	-0.049098	59.70268	-0.074183	-0.052957	-0.229337	-0.92349467
Skewness	0.492127039	8.483212	0.521243	7.556947	0.573549	0.71176	0.280742	0.380457272
Confidence Level(99.0%)	338571769.3	0.403356	0.00519	0.033517	0.032507	0.030979	0.028233	1212606051

Source: Authors Computation

Table 04: Correlation

	EVA	CAR	NPL	ROA	NIM	ROE	LDR	Interest Expense
EVA	1							
CAR	-0.21255	1						
NPL	0.268119	-0.01543	1					
ROA	-0.09326	-0.02964	0.007054	1				
NIM	0.459228	-0.15145	-0.14129	-0.18708	1			
ROE	-0.06736	-0.15099	-0.35582	-0.20185	0.090924	1		
LDR	0.138339	0.183236	-0.0714	0.01475	-0.01735	-0.02086	1	
Interest Expense	0.028279	0.265952	0.524945	0.020192	-0.31534	-0.27394	-0.00446	1

Source: Authors Computation

Table 05: Regression Statistics

Regression Statistics	Output
Multiple R	0.620201128
R Square	0.384649439
Adjusted R Square	0.317345472
Standard Error	896780060
Observations	72

Source: Authors Computation

Table 06: ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	7	3.21732E+19	4.59617E+18	5.715107933	3.68588E-05
Residual	64	5.14697E+19	8.04214E+17		
Total	71	8.36429E+19			

Source: Authors Computation

Table 07: Descriptive

	Coefficients	Standard Error	t Stat	P-value	Lower 99.0%	Upper 99.0%
Intercept	-3626465354	1245309100	-2.912100582	0.004937116	-6932579618	-320351089.8
CAR	-160405099	89732820.8	-1.787585608	0.07857745	-398632667.5	77822469.51
NPL	20114966924	8006246857	2.512409033	0.014522385	-1140452270	41370386119
ROA	-145738096.5	1036987013	-0.140539944	0.888674791	-2898787565	2607311372
NIM	5193149361	1101027995	4.716636985	1.3432E-05	2270080414	8116218309
ROE	-115164991.6	1195681037	-0.096317486	0.923569399	-3289523979	3059193996
LDR	2450429624	1199773465	2.042410251	0.045235262	-734794164.1	5635653413
Interest Expense	0.020321046	0.035200267	0.577298056	0.565763501	-0.073130536	0.113772627

Source: Authors Computation

Analysis of the Findings:

Hypotheses tested results are as follows:

The result of hypothesis 1 is that EVA positively influences PER. Value added is created when a company's project yields profit, as reflected in a positive influence on PER.

As several indicators in RA have an inverse relationship to one another, then, those indicators must be separately analysed when performing such a statistical analysis. For instance, the LDR, NPL, and CAR should not be bound in the ratio analysis composite to prevent inverse relationship among indicators. As a result of non-statistical analysis, which in this study used 4 (four) indicators, namely capital (CAR), assets quality (NPL), earnings (NIM, ROE and ROA), and liquidity (LDR), individually shows that majority of banks were able to maintain the standard requirement of banks healthiness in the span of 8 years from 2008 to 2015. As such, the resulting of non-statistical analysis of the 5 ratios indicator combined as one should also show similar results.

The variety of performance measurements that are widely used to measure banks performance or other firms can provide information on several aspects and perspectives, which then contribute to the higher level of performance in the future.

Several modern measurements such as Shareholder Value Added and Market Value Added then can be applied to discover the best measurement among banks, in terms of maximizing values. Value added generated or created from banks performance, can be measured by Shareholder Value Added that represents shareholders benefits from banks performance. Market Value Added that represents value created from a company performance listed in the stock exchange market, by considering the general market, as well as the potential shareholder's benefits, can also be analyzed further.

Hypothesis 2 is that RA negatively influences PER. Based on data analysed, there are causal relationships and the respective contribution and magnitude of each variable that affects performance. The construct of RA impacts on the indicators in varying magnitude, and while LDR and NPL are inversely related, other indicators specifically NIM and CAR show a positive relationship. Hence, the negative relationship between RA and PER is not an inverse relationship by itself but is contributing negative relationship indicators within the RA composite. The logical expectation to support that ROA and NIM both strongly influences RA is that banking assets are mainly loans and investment, from which revenue is derived. The more interest income from loans generated, the more potential revenue derived.

Conclusions and Implications

The banks' performance indicated that performance as represented by CAR, NPL, LDR, NIM, ROA and ROE were consistently fulfilled Bank's standard of banks healthiness. Hence, the performance of banks was relatively fit and well for the periods of 2008-2015. Taking into account the banks' crucial role in the economy, some tight regulations must be implemented to prevent unexpected conduct in the banking industry. Rivalry expected in the near-term at the banking scenario in Bangladesh, may substitute other performance actions with EVA and in due course, will acquire to be adjudicated by the level of worth created for stockholders.

Therefore, both ROA and NIM as earnings indicators can be determined by bank's assets. The strong influences of ROA and NIM toward RA are even more obvious within the banks sampled since the sample consists of banks in terms of total assets.

In addition, banks performance can also be measured by their interest income or net interest income, and net income, in order to gain such deep understanding of the best measurement between income generated and cost incurred.

Further analysis is suggested where each variable comprising, namely assets, earnings, capital, and liquidity, is analyzed separately in order to gain an understanding of how each respective variable actually contributes to performance. In future a study should be undertaken to assess whether the more activity performed such as earning assets are invested, the more potential profit is being generated or not.

References

Dash, M., and Das, A. (2009), "A CAMELS Analysis of the Indian Banking Industry", Retrieved   October 2, 2012, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1666900

Girotra A. and Yadav, S. S. (2001). "Economic Value Added (EVA): A New Flexible Tool for Measuring Corporate Performance", Global Journal of Flexible Systems Management, Vol 2. No.1, pp7-18.

Inguva, S., Djeddi, A. and Djeddi, M. (2012), "The Impact of Interest Expenses and Non-Interest Expense on Net Income: An Analytical Study on Select UAE Banks", Retrieved November 14, 2012, from www.sign-ific-ance.co.uk: http://www.sign-ificance. co.uk/dsr/index.php/JASR/article/view/285/291

Mensah, M., Awunyo-Vitor, D. and Sey, W. E. (2010), "Challenges and Prospects of the Ghana Stock Exchange", Retrieved October 26, 2012, from www.iiste.org: http://www.iiste.org/Journals/index.php/DCS/article/view/3180

McClure, Ben. (2011), "All about EVA", Investopedia. http://www.investopedia.com\ /articles/fundamental/03/031203.asp.

Pfeiffer, T. (2000), "Good and bad news for the implementation of shareholder-value concepts in decentralized organizations: A critical study comparing the DCF method and the EVA method", Schmalenbach Business Review, 52(1), 68 - 91.a

Popa G, Mihailescu L, and Caragea C. (2009), "Advanced Method for Performance Evaluation in Banks", Economia serial Management Vol.12, Nr.1 special/2009.

Sapariyah, A. R. (2010), "Pengaruh Rasio Capital, Assets, Earning Dan Liquidity Terhadap Pertumbuhan Laba Pada Perb,nkan Di Indonesia (Study Empiris Pada Perbankan Di Indonesia)", Retrieved November 2, 2012, from e-journal.stie-aub.ac.id: http://ejournal. stie-aub.ac.id/index.php/probank/article/view/82

Schiozer, R., Oliveira, F. R. and Saito, R. (2010), "Why Do Banks Go Public? Evidence From The 2005-2007 Wave Of Brazilian Bank IPOs", Retrieved November 5, 2012, from www.ssrn.com: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1470994

Shaher, A. T., Kasawneh, O., and Salem, R. (2011), "The Major Factors That Affect Banks' Performance In Middle Eastern Countries", Retrieved November 4, 2012, from www.eurojournals.com: http://www.eurojournals.com/JMIB_20_09.pdf

Soemitro, I. A. (2012), "FAJ: Finance & Accounting Journal", Retrieved December 24, 2012, from http://faj-hbbs.blogspot.com: http://faj-hbbs.blogspot.com/2012/10/man- industrial-analysis-in-indonesian.html

Wibowo, P. P., and Berasategui, G. R. (2008), "The Relationship between Economic Value Added (EVA®) And Market Value Added (MVA) With Reported Earnings: An Empirical Research Of 40 Listed Companies In Indonesia Stock Exchange For The Year 2004-2007", Retrieved October 10, 2012, from http://bbs.binus.edu/journal/rnddata/journal/data/20110923083800.pdf