

Impact of Financial Performance Indicators on Shareholder Value Creation in Indian Banks

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ABSTRACT

This study examined the relationship between shareholder's value and financial variables. As the corporates' most vital objective at this moment is to maximize shareholder value, establishing a relationship between the financial variables and the corporate objective is imperative. The study is based on secondary data obtained from the various data sources including Ace-Knowledge and Research Portal for the period from 2004-05 to 2013-14. A sample of 35 has been taken from Indian Banking Sector during the period spanning 2004-05 to 2013-14. It is found that EVA is the highest contributing variable to shareholder value creation as compared to MVA and CVA. CVA has inverse relationship with value creation defined using accounting measures, which indicates that increase in CVA of banks, will lead to decline in value creation.

Key Words: Value Creation, EVA, MVA, CVA

Introduction:

Although businesses exist to create value for their owners, corporate executives and managers do not always act to maximize shareholder value, because of other conflicting goals. Shareholder value does not necessarily conflict with good citizenship toward employees, customers, suppliers, the environment and the local community. Companies that give importance to these constituencies tend to outperform others, suggesting that value can be delivered to shareholders only if it is first delivered to other stakeholders. In essence, adding to shareholder value improves the value of shareholders' investment, which is consistent with organisational objective of maximising shareholders' wealth. The origins of the shareholder value view can be dated all the way back to economist Adam Smith. In *The Wealth of Nations* Adam Smith argued that the individuals pursue of wealth will create a capitalistic society for everyone's benefit. The argument went that if everyone seeks to maximize his own benefits, capital will be distributed to the best investments.

The creation of shareholder value is seen as one of the most important objectives of the firms. For many years, the performances of the companies have been measured in terms of profit or earnings per share. However, increasing dissatisfaction with these measures has directed to the development and promotion of whole new array of metrics under the banner of shareholder value. These new measures have shifted the focus away from profits and towards cash flows. These measures

recognise the fact that capital invested in an organisation is not free, and it carries a charge for its use in the operations of organisation, in terms of cost of capital. Shareholder value is created by generating future returns for equity investors which is exceeding the returns that could have been earned by the investors from elsewhere. These excess returns will be reflected in the share price of the company and are measured in terms of cash flow. In essence, adding to shareholder value improves the value of shareholders' investment, which is consistent with organisational objective of maximising shareholders' wealth.

A banking system is a system which offers cash management services for customers, reporting the transactions of their accounts and portfolios and other banking services throughout the day. In modern era, the banking system in India faces new challenges posed by the technology and any other external or internal factors. The Banks are the main participants of the financial system in India. For the past three decades, India's banking system has several outstanding achievements to its credit.

This research made an attempt to evaluate the inter-relationship and predictive power of value based metrics on shareholder value. The models considered here include several variables starting from traditional accounting measures to the most contemporary value based measures.

Literature Review:

Amalendu Bhunia (2012) examined the relationship between shareholder's value and financial variables and tested whether value based frameworks are applicable in Indian condition or not. The study is based on secondary data obtained from the various data sources including CMIE prowest database for the period from 1996 to 2010. A sample of 155 top companies has been taken from Indian industries during the period spanning 1996-2010. Empirical results show that effect shareholder value creation might lead to more information and insight. **Anand,et.al. (1999)** revealed that EVA, REVA (Refined Economic Value Added) and MVA are better measures of business performance than NOPAT and EPS in terms of shareholders' value creation and competitive advantage of a firm. Since conventional management compensation systems emphasize sales / asset growth at expense of profitability and shareholders' value. Thus, EVA is a measure that shifts focus on an organizational culture of concern for value. **KPMG-BS Study (1998)** assessed top companies on EVA, sales, PAT (Profit after Tax), and MVA criteria. The survey has used the BSE 1000 list of companies using a composite index comprising sales, profitability and compounded annual growth rate of those companies covering the period 1996-97. Sixty companies have been found able to create positive shareholder value whereas 38 companies have been found to destroy it. Accounting numbers have failed to capture shareholder value creation or destruction as per the findings of the study. 24 companies have destroyed shareholder value by reporting negative MVA. **Madhu Malik (2004)** examined the relationship between shareholder wealth and certain financial variables like EPS, RONW and ROCE. By using correlation analysis, it was found that there was positive and high correlation between EVA and RONW, ROCE. There was a positive but low correlation between EVA and EPS. By using co-efficient of determination (r^2), EVA was compared with Traditional performance measures and it was found that not a single traditional performance measure explains to the fullest extent variation in shareholder wealth. **Shrikant Krupasindhu Panigrahi et al. (2014)** utilizes economic measures like Economic Value Added (EVA) and Market Value Added (MVA)

combined with the accounting measures to perform a comparative study in order to conclude the most appropriate measures for the creation of shareholder's wealth. The EVA of 28 construction companies from the total 43 construction companies listed in Bursa Malaysia were selected for the study and analysed during the period of 2003 to 2012. It was found that very few of the construction companies were having positive EVA for the creation of Shareholder's wealth. It was also found that there is a strong relationship between created shareholder's value and economic value added. **Bhayani(2006)** studied economic value added of Cholamandalam Investment and Finance Co. Ltd for the period of 1998-99 to 2002-03. The company has been successfully able to create value for its shareholders. The company's earnings are much higher than the overall cost of capital. The traditional performance indicators are showing quite high values of ROCE, EPS growth as compared to EVACE. It is observed that the traditional parameters indicated quite a rosy and healthy picture of the company during all five years of the study. **Sharma and Kumar (2010)** have analyzed effectiveness of Economic Value Added in selected companies for the period of 2001-02 to 2008-09. Researcher has used traditional measures along with EVA to measure effectiveness of the firm. The result of statistical tools reveals that except few majorities of the sample companies are able to continuously create value for their shareholders during the study period. The study finds that EVA is gaining popularity in India as important measures of firm performance. **Kaur and Narang (2009)** in his study an attempt has been made to explain the application of EVA for selected companies. The sample for the study was top 205 companies has been selected form BT-500 India's most valuable companies. The study period was of 12 years (1995-96 to 2006-07). The results of the study indicate negative EVA for eight years consecutively.

Research Methodology:

Objectives:

To examine the inter-relationship between financial indicators, value based metrics and shareholder value creation for Indian Banking Sector

SAMPLING DESIGN:

The study uses data of Banks listed on Bombay Stock Exchange (BSE) for the period from 2004-05 to 2013-14. Banks with missing data are excluded from the study. The classification of private sector banks into "OLD BANKS" and "NEW BANKS" is considered as given by Department of Financial Services, Ministry of Finance: Government of India. Our final sample size is 36 Banks, 22 from Public Sector and 14 from Public sector for each period from Indian Banking Sector. The study is based on secondary data collected from Ace-Knowledge and Research Portal and Annual Reports of the banks collected from bank websites. The list of the banks in the final sample is given in the table below:

Table-1 Sample Description

Public Sector Banks	Private Sector Banks
State Bank of India (SBI)	Old Private Sector Banks
Bank of Baroda (BOB)	Federal Bank Limited
DENA Bank (DENA)	ING VYSYA Bank Limited
CANARA Bank (CANARA)	Karnataka Bank Limited
IDBI Bank (IDBI)	KarurVysya Bank Limited
UNION BANK Of India (UBI)	Lakshmi Vilas Bank Limited (LVB)
Syndicate Bank	South Indian Bank Limited
Bank of Maharashtra(BOM)	City Union Bank Limited
Allahabad bank	New Private Sector Banks
Andhra Bank	Axis Bank Limited
Central Bank of India (CBI)	Development Credit Bank Limited (DCB)
Indian Bank	HDFC Bank Limited
Indian Overseas Bank (IOB)	ICICI Bank Limited
Punjab National Bank (PNB)	INDUSIND Bank Limited
UCO Bank	Kotak Mahindra Bank Limited
Vijaya Bank	YES Bank Limited
Bank of India(BOI)	
Corporation Bank	
Oriental Bank of Commerce (OBC)	
State Bank Bikaner & Jaipur (SBBJ)	
State Bank of Mysore (SB Mysore)	
State Bank of Travancore (SB Travancore)	

Model Specifications:

The Multiple Regression Analysis has been carried out on the following sub-models:

Sub- Model-I: Dependent variable: MVA
Independent variables: CVA, FGV and FCF

Sub- Model II: Dependent variable: EVA

Independent variables: CVA, RONA, FCF, NOPAT

Sub- Model III: Dependent variable: FGV

Independent variables: CFO, EBIT, NOPAT, EBITDA

Sub Model IV: Dependent variable: SHR

Independent variables: PE, EPS, ROCE

Sub- Model V: Dependent variable: SHR

Independent variables: EVA, MVA, CVA and FGV

The variables used for this study are as follows:

Table-2 Description of Variables

Variable Name	Description
Market Value Added (MVA)	Market Value of Equity – Total Capital
Cash Value Added (CVA)	Cash Flows Of Operating Activities – Taxes – (Interest + Dividend).
Economic Value Added (EVA)	$NOPAT - (IC_{t-1} * WACC\%)$
Future Growth Value (FGV)	$MVA - COV$
Current Operations Value (COV)	$COV = NOPAT / WACC$
Free Cash Flow (FCF)	$FCF = NSL - OPC - ITX - IEX - FCI - RCI - WCI$
Cash Flow from Operations (CFOP)	Cash Flow From Operating Activities
Earnings Before Interest and Taxes (EBIT)	Revenue – Operating Expenses
Earnings Before Interest, Depreciation and Taxes (EBIDT)	$EBIT + Depreciation$
Net Operating Profit After Tax (NOPAT)	$Operating Profit(1 - Tax Rate)$
RONA	
ROCE	$EBIT / Total Capital Employed$
Earnings Per Share (EPS)	$NOPAT / Number of Equity Shares$
P/E RATIO	Market Price per Share / Earning Per Share
Shareholder Return (SHR)	$((P_t - P_{t-1}) + Dividend_t) / P_{t-1}$ Where, P= Market Price

Data Analysis and Interpretation:

Sub- Model-I: Dependent variable: MVA

Independent variables: CVA, FGV and FCF

$$MVA=96.855+0.135CVA + 1.004FGV - 0.117FCF$$

Table-3 Regression Analysis Sub- Model-I

	Dependent Variable: MVA	p-Value
(Constant)	96.855	0.523
CVA	0.135*	0.000
FGV	1.004*	0.000
FCF	-0.117*	0.002
R Square	0.873	
F Change	524539.635*	
Sig.F Change	0.000	

The results of Regression analysis shows that FGV is the highest contributing variable followed by CVA. It shows that FCF is having a significant negative impact on MVA. The significant parameter estimates at 5% significance level are indicated by a star against their values. R-square value indicates that the model is good and 83.7% of the variation in MVA is explained by the selected independent variables. F-test for R-square indicates that R-square is significant.

Sub- Model II: Dependent variable: EVA

Independent variables: CVA, RONA, FCF, NOPAT

Regression Analysis:

$$EVA= -81.594 + 0.028CVA + 58.357RONA - 0.027FCF +0.787NOPAT$$

Table-4 Regression Analysis Sub- Model-II

Dependent Variable: EVA		
	Coefficients	p-Value
(Constant)	-81.594	0.137
CVA	0.028*	0.000
RONA	58.357	0.063
FCF	-0.027*	0.002
NOPAT	0.787*	0.000
R Square	0.944	
F Change	1488.020*	
Sig.F Change	0.000	

The result of Regression analysis shows that RONA is the highest contributing variable. It shows that FCF has a significant negative impact on EVA whereas NOPAT and CVA have a significant positive impact on EVA. The significant parameter estimates at 5% significance level are indicated by a star against their values. R-square value indicates that the model is good and 94.4% of the variation in EVA is explained by the selected independent variables. F-test for R-square indicates that R-square is significant.

Sub- Model III: Dependent variable: FGV**Independent variables: CFO, EBIT, NOPAT, EBIDT****Regression Analysis:**

$$FGV = -798.930 + 0.042CFOP - 4.720NOPAT + 1.302EBIDT$$

Table-5 Regression Analysis Sub- Model-III

Dependent Variable: FGV	Coefficient	p-Value
(Constant)	-798.930	0.833
CFOP	0.042	0.938
NOPAT	-4.720*	0.003
EBIDT	1.302*	0.000
R Square	0.897	
F Change	1038.839*	
Sig.F Change	0.000	

The result of Regression analysis shows that NOPAT is the highest contributing variable with significant negative effect on FGV. It shows that EBIDT has significant positive effect on future growth value whereas, CFOP has insignificant positive impact on FGV. The variable EBIT is excluded from the estimated model due to high multicollinearity problem. The significant parameter estimates at 5% significance level are indicated by a star against their values. R-square value indicates that the model is good and 89.7% of the variation in FGV is explained by the selected independent variables. F-test for R-square indicates that R-square is significant.

Sub- Model IV: Dependent variable: SHR**Independent variables: PE, EPS, ROCE****Regression Analysis:**

$$SHR = -0.355 + 0.041PERATIO + 0.0001EPS + 0.080ROCE$$

Table-6 Regression Analysis Sub- Model-IV

Dependent Variable: SHR	Coefficient	p-Value
(Constant)	-0.355	0.558
PERATIO	0.041*	0.004
EPS	0.0001	0.941
ROCE	0.080*	0.008
R Square	0.037	
F Change	4.496*	
Sig.F Change	0.004	

The result of Regression analysis shows that ROCE is the highest contributing variable followed by PERATIO with significant positive effect on shareholder return. EPS has insignificant positive effect on SHR. The significant parameter estimates at 5% significance level are indicated by a star against their values R-square value indicates that the model is weak and only 3.7% of the variation in SHR is explained by the selected independent variables. F-test for R-square indicates that R-square is significant.

Sub- Model V: Dependent variable: SHR

Independent variables: EVA, MVA, CVA and FGV

CVA has significant positive effect on both MVA and EVA implying that increase in CVA leads to increase in EVA and thereby increase in MVA. Shareholder Return is explained by the variables PERATIO and ROCE with positive relationship. To identify the relationship between dependent variables, SHR is considered as a variable dependent on the other variables: CVA, MVA, EVA and FGV which are the dependent variables of the previous Sub-Models I to IV. The results indicate a weak but significant relationship between these variables. CVA and FGV have emerged to be the most effective variables in explaining Shareholder Returns (SHR). The value of R-Square for this model was found to be 2.8% which is less than that of Sub-Model –IV. This indicates that the total shareholder return is still explained more significantly by the accounting measures than by the value based measures.

FINDINGS:

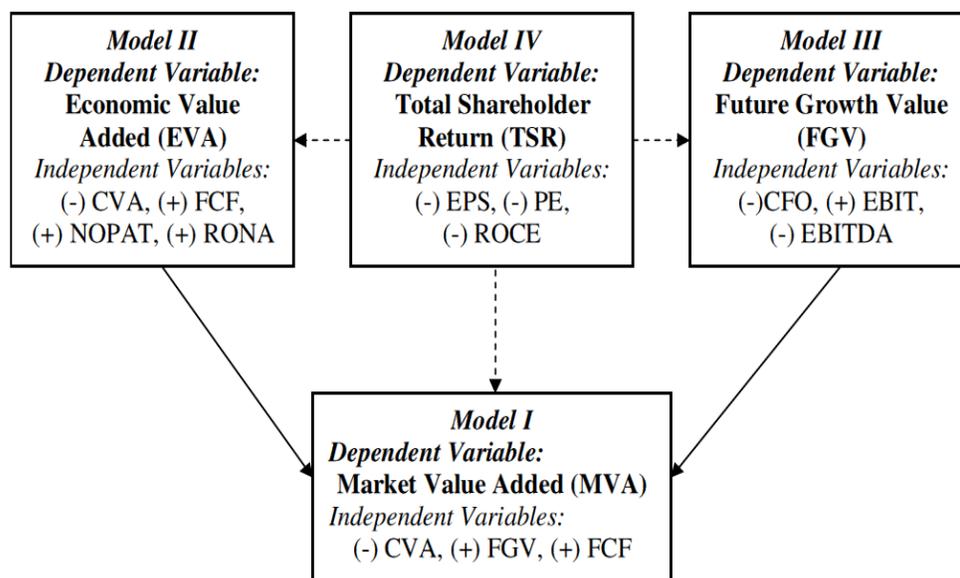
The major findings of this study are summarized below:

- The results of Regression analysis of Sub-Model-I show that FGV is the highest contributing variable followed by CVA. It shows that FCF is having a significant negative impact on MVA.
- The results of Regression analysis of Sub-Model-II show that RONA is the highest contributing variable. It shows that FCF has a significant negative impact on EVA whereas NOPAT and CVA have a significant positive impact on EVA

- The results of Regression analysis of Sub-Model-III show that NOPAT is the highest contributing variable with significant negative effect on FGV. It shows that EBIDT has significant positive effect on future growth value whereas; CFOP has insignificant positive impact on FGV. The variable EBIT is excluded from the estimated model due to high multicollinearity problem.
- The result of Regression analysis of Sub-Model-IV shows that ROCE is the highest contributing variable followed by PERATIO with significant positive effect on shareholder return. EPS has insignificant positive effect on SHR.
- The result of Regression analysis of Sub-Model-V shows that CVA has significant positive effect on both MVA and EVA implying that increase in CVA leads to increase in EVA and thereby increase in MVA. Shareholder Return is explained by the variables PERATIO and ROCE with positive relationship. The results indicate a weak but significant relationship between these variables. CVA and FGV have emerged to be the most effective variables in explaining Shareholder Returns (SHR). The value of R-Square for this model was found to be 2.8% which is less than that of Sub-Model –IV. This indicates that the total shareholder return is still explained more significantly by the accounting measures than by the value based measures.

Thus the above results are summarised in the Chart below:

Value Based Measures relation with Shareholder Value Creation



CONCLUSION:

The analysis of the value based measures indicates that EVA is the highest contributing variable to shareholder value creation as compared to MVA and CVA. CVA has inverse relationship with value creation defined using accounting measures, which indicates that increase in CVA of banks, will lead to decline in value creation. They have a better scope of applying value based measures to generate economic profit rather than accounting profit in order to create higher shareholder value.

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