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Empirical Evidences of Value Creation from Banking Industry of India

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Abstract

In wake of recent economic reforms in India with an aim of stabilizing the economy of India under the era of globalisation, banking industry has experienced a canonical shift in terms of value creation practices, methods and metrics for measuring bank's performance. Value based management has long been hailed as the major objective of financial management of banks. A new trajectory of value based performance evaluation metrics have evolved and became an imperative of evaluating the performance of banks. The present study has been undertaken with the objective to measure the performance and value creation in the selected banks. The selected sample was taken from the public and private sector banks listed on stock exchange in India. In this study, Economic Value Added (EVA) and Market Value Added (MVA) across the selected banks were calculated based on the accounting figures and their difference was determined. The results showed significant difference between economic value added and market value added in selected banks is quite meaningful and significant.

Keywords: EVA, MVA and Value Creation Matrix

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1. Introduction

A series of dramatic changes has been observed across the financial sector, primarily due to the imperative impact of globalisation followed by advent of new technologies in the field of global communications. Subsequently, some changes were also observed over the past few decades across the firms involved in providing financial services to their customers at global level, which inturn has resulted a paradigm shift in the way of doing of business among the financial services sector.

In pursuit of realising the goal of wealth maximisation and value creation a financial firm needs to understand that how the money could be earned through its financial products, financial services and business processes. The generalised classification of financial service firms is primarily categorised into four different categories, based upon the manner in which they make money. The basic four categories of financial firms are Bank, Investment Bank, Non- Financial Services Firms Insurance Company. The fundamental source of earning money in case of banks is the spread between the interest it pays over the interest it earns from borrowers and also includes income from other financial service offered to their customers. Thus, it becomes important for finance manager to understand the relative impact of earnings upon value creation in a firm i.e. productive utilisation of assets, value creation practices and business processes, altogether construct the framework of value creation. The basic reason behind this argument is that a business needs to manage assets as we all liabilities in order to be able to generate profit.

The fundamental difference between valuation of financial firms and other firms is observed on account of two reasons, nature of business and regulatory requirements imposed upon their business methods, processes and practices. Which in turn leads to some specific challenges before a financial analyst to gauge the valuation of business. As in case of financial firms, it becomes difficult to define explicitly debt and reinvestments and also the Impact of regulatory requirement on value of firm.

As per the objective of wealth maximization, firms operate to create values to their shareholders. Financial position of the

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firm reveals some of the valuable output of the firm towards the shareholders. From the shareholder's point of view, some of the value creating measures are: Economic Value Added (EVA) and Market Value Added (MVA). This study is conducted in order to find out the relative value created by the banks operating in India.

It is believed that bank's management creates value, when it takes decisions that provide benefits, in excess of costs. These benefits may come to banks in the near or distant future depending on the strategies involved in decision making process. In order to remain competitive under the present arena of globalsation, a new argument of profitability has evolved in banking sector, which explicitly laid greater emphasis upon improving and strengthening the capital position of a bank in order to overcome the unexpected losses through an increase in investment of retained earnings. Furthermore, value creation across all profit seeking originations is largely dependent on Return on Equity (RoE). In order to generate larger quantum of value creation, bank's investment strategy must focus upon enhancing the return on equity over its cost of equity over a period of time i.e. the fundamental principle of value creation suggests that return on equity should always be greater than the cost of equity.

Most recently, Performance Metrics have gained a new importance in the area of strategic financial decision making. The metrics of performance have a variety of users, which include all the stakeholders, whose interest largely survives on the continued wealth maximization by the bank. A proportional proposition is believed to exit between the Value Creation and Wealth Maximization i.e. larger would be the value creation and wealth maximization if greater balance is achieved between conflicting interest stakeholders and frims. This means maximization of the bank value without diluting the interest of stakeholders. Any one such metric that measures the value creation without being biased towards any of the stakeholders is generally considered as a true metric of performance. However, it is difficult, if not impossible, to develop such a metric. Most of the conventional performance measures emphasizes over the issue of the impact of net income of business upon its equity, total assets, net sales or similar financial inputs or outputs.

Thus in order to understand the relative impact of economic decision making upon the value of business, one needs to understand the concept and relevance of new metrics of performance evaluation to reveal the value created by the business over a performance period. Most commonly used, value based metrics of performance evaluation are; Economic Value Added (EVA) and Market Value Added (MVA).Large number of International banks have begun to use value based frameworks such as EVA and MVA to run their banking operations.

2. Review of the Literature

It becomes imperatively important for finance manager to understand the underlying process and methods of valuation creation in context of a business or the firm. The term "business" is more comprehensive than the assets deployed in it. The reason is that the valuation of business is to reckon all types of assets (tangible and intangible) as well as all liabilities. Irrespective of this difference in scope, the business valuation exercise is akin to the valuation of an asset or a security which is dependent on some basic financial concepts like time value of money, risk and return and future cash flows.

In general, the interpretation of the term "valuation" stands for estimating the worth or value of an asset or a security or a business under consideration. The value of a firm or a business believed to be an outcome of what an investor or a firm is willing to pay in order to purchase specific asset or security belonging to business. Obviously, two different buyers may not have the same valuation for an asset or a business as their perception regarding its worth or value may vary i.e. one may perceive the asset or a business to be of higher worth and hence may be willing to pay a higher price than the other.

In context of present globalized economy, it was observed that a new definitive position has been attained by banking sector, revealing that the major constituents of performance and value creation are financial knowledge, intellectual resources and intangible assets held by a bank. Thus greater emphasis begun to evolve in banking sector for adopting new value based performance metrics as a yardstick to benchmark performance.

It was observed that in context of literature concerning Value Creation is somewhat ascorbic emphasizing more upon some of the traditional measures like accounting profits, earnings and accruals. Whereas, most recently cash flows and residual income have gained greater attention amongst academicians and researchers. Some of the recent empirical studies in the area of value creation revealed that major axiom of research studies, was the Structure-Conduct-Performance (SCP) paradigm. The Structure-Conduct-Performance tries to explain the relationship between conduct and performance of the firms and the industrial structure behavior in which they operates.

According to Petty and Martin (2001) shareholder value is managed by identifying important factors that drive shareholders value in the capital market. According to Mason, (1939, 1949) and Bain (1951) an impairment of competition was observed to exit in banking industry due to increase in bank concentration, which laid to lowering of deposits rates, higher loan rates and greater profitability. Rhoades (1985) observed a positive relationship between bank's profitability and its market share, concentration and profitability, profitability and risk and between market growth and profit growth, which arise due to

barriers of entry in banking industry. Furthermore, suggested that advantage of product differentiation is a critical factor determining the relationship between the profit and the market share among the banks and not to be associated with the efficiency of banks. According to Dalborg (1999), shareholders' value creation is found to be achieved through excellence in banking operations and practicing the optimal financial structure in order to ensure credible growth in earnings of bank.

The conclusive reflections of some of the major studies in the area of Value creation did suggest that value creation can be enhanced by a business entity through the greater emphasis upon: (1) Improving each value adding function, (2) Linking customers and suppliers to increase their switching costs, and (3) Creating new business through new services or products.

3. Need of the Study

An exhaustive review of literature concerning value creation across banking industry, revealed that there exists a fundamental emphasis laid upon traditional accounting metrics as a measure to evaluate the performance of banks. However, it was observed that none of the previous studies focused upon the issue of determining the impact of strategy services, and technologies on value creation across the financial services sector. In context of value creation, one of the imperative fact is that value creation greatly various across industry and within industry as well.

Since, the objectives of the present study required an understanding of the various value creating measures and their impact on the value of an organization. Thus, the investigators sought to gather quantitative data related to value creation measures and also sought to calculate comparative results from both valuation techniques i.e. EVA and MVA The researchers have also prioritized both valuation tools and ranked them as per their outcomes.

4. Objectives

This research study is aimed at attaining the following objectives:

- To identify and analyze the value creating measures.
- To map the comparative results of value creation measures using value creation matrix.

5. Database and Methodology

The scope of the study is confined to Public and Private sector banks, ten each from both the sectors were selected as study sample. Furthermore, in this study only those banks, which are listed on the National Stock Exchange and covered under 'Bank Nifty-50' group were selected as the sampling unit of this study sample. The data for the period from 2011 to 2015 was analyzed to make a comparison between the selected banks. Furthermore, financial data for the present study have been collected from the official websites of the respective banks, NSE and Reserve Bank of India (RBI).

Value creation matrix is a mix of two value creating measures i.e. Market Value Added (MVA), and Economic Value Added (EVA). This value creation matrix ranked the results or outcomes of value creation measures in ascending order, from higher to lower across the selected banks over the study period. The effectiveness of each measure is checked based on its results or outcomes. In this study, value creation matrix was constructed using the Market Value Added (MVA) and Economic Value Added (EVA).

The MVA approach is based upon the concept of determining the change in the market value of a firm's equity vis-à-vis equity investment (consisting of equity share capital and retained profit). The concept of MVA is normally used in the area of equity investments. However, it can also be adapted to measure value creation through the perspective of providers of funds. In this study, the MVA was calculated by subtracting book value of firm's equity (equity capital investment of funds) from the market value of the firm's equity. This creates the following equation as given below:

MVA= Market value of the firm's equity - Equity capital investment of funds (1)

Where, market value of the firm was calculated by multiplying current market price of the firm by the total number of outstanding shares.

EVA as a concept of measuring the performance, measures the residual income that is the difference between firm's Cost of Capital (Ko) and Return on Capital Invested (ROIC). EVA being a tool of evaluation of performance emphasizes on maximization of shareholder wealth. It is expressed as the difference between company's "Net Operating Profit After Taxes" (NOPAT) and the product of Weighted Average Cost of Capital (WACC) and Capital Employed by the bank. In this study, EVA across the selected banks was estimated by focusing on Management of Capital approach, which is expressed as:

EVA= NOPAT-(WACC*Total Capital invested)(2)

6. Data Analysis and Findings

The underlying concept of MVA, as a measure of value creation focuses upon the issue of measuring the change in the market value of firm's equity in relation to a subsequent rise in the equity investment in a firm over a stated period of time. The significance

of this concept in context of its applicability is normally observed to be dominant in the field of equity management .While it can equally be good in terms of its application to understand the perspective of investors about measurement of firm's value .

The EVA as a concept is based on the past performance of the corporate enterprise. The underlying economic principle, involved in this concept is to determine whether the firm is earning a higher rate of return (ROI) over its Cost of Capital (measured in terms of the weighted average cost of capital, WACC)during a said period of time.

7. EVA of Public Sectors Banks

Over the study period, the spread of EVA across public sector banks revealed that only Central Bank of India, has performed well having higher and positive EVA value, as compared to other banks. Apart from this, it was observed that over the study period, almost all public sector banks shown a negative trend in EVA value. The Canara bank had the highest value spread over the time frame of five years.

8. EVA of Private Sectors Banks

It was quite clear and evident from figure given below that in relation to selected private sector banks, it was observed that they have performed well in terms of value creation. Almost, on an average most of the private sector banks had positive EVA from the difference of last five years. The quantum of EVA across the private sector banks revealed that ICICI bank created maximum of EVA value; which dominated over the other banks.

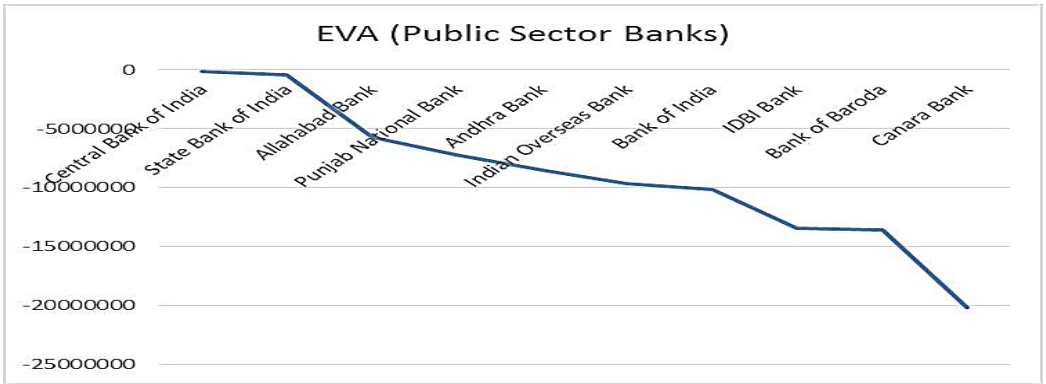

Figure 1. Variations in EVA (in Rs) of Public Sectors Banks from 2011to 2015.

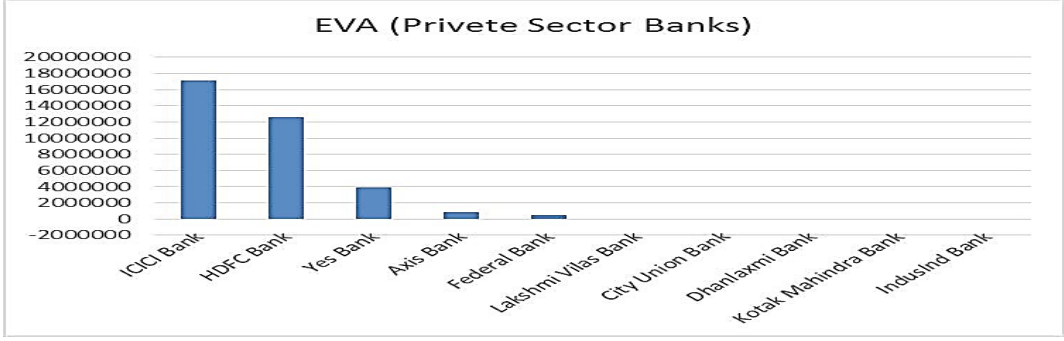

Figure 2. Variations in EVA (in Rs) of Private Sector Banks from 2011 to 2015.

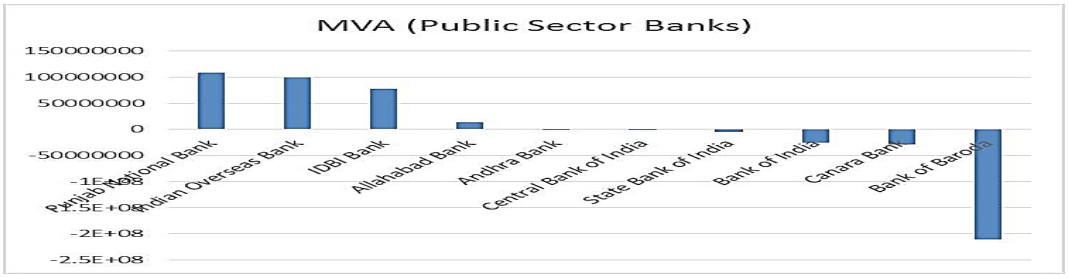

Figure 3. Variations in MVA (in Rs) of Public Sector Banks from 2011 to 2015.

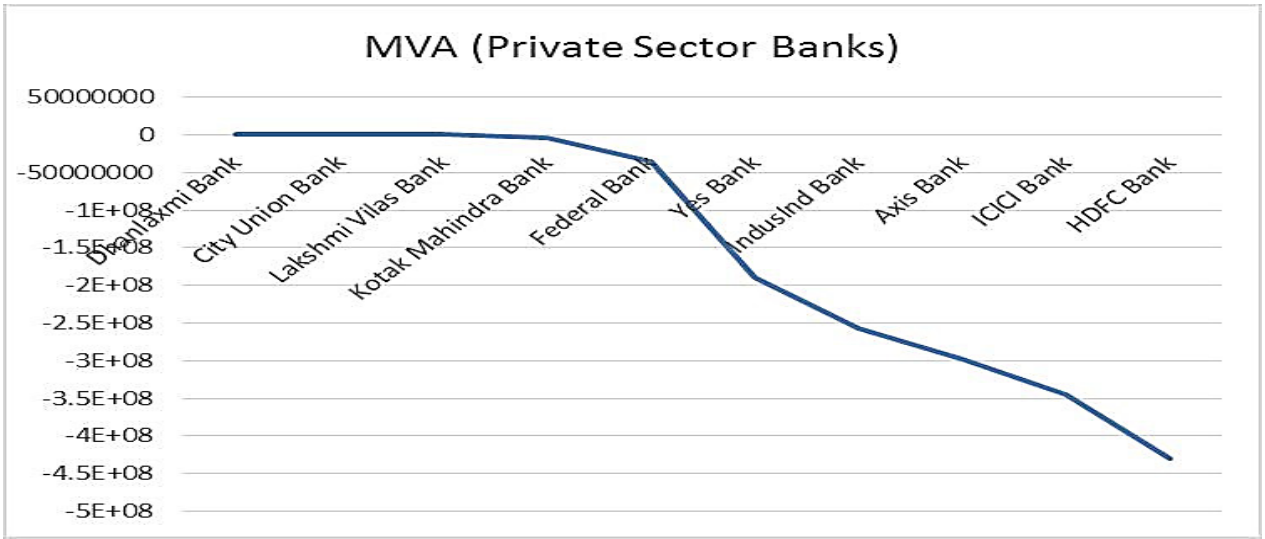

Figure 4. Variations in MVA (in Rs) of Private Sector Banks from 2011 to 2015.

Table 1. Value Creation Matrix based on EVA in Public Sector Banks from 2011 to 2015 (Amount, in Rs)

Public Sector Banks	2011	2012	2013	2014	2015
Allahabad Bank	-14506.41	-595832.83	-103611.72	-5261305.06	-5736703.89
Andhra Bank	2022496.28	1090373.65	353032.02	-7284412.12	-6475274.96
Bank of Baroda	2473463.71	4022025.52	586224.82	-7930411.30	-11119944.63
Bank of India	-3524042.26	-2202426.40	-4992788.32	-6894091.76	-13651700.35
Canara Bank	2267575.14	3170552.79	-5759725.18	-9093657.97	-17892280.14
Central Bank of India	6330.28	10621.09	-81927.75	-102911.77	-147184.12
IDBI Bank	-2484099.34	-2864376.07	-5643676.12	-7970079.65	-15934366.41
Indian Overseas Bank	-3685828.11	-2393437.13	-5365041.59	-10286795.53	-13322811.28
Punjab National Bank	5607808.39	6033563.60	1496638.39	681135.18	-1621873.31
State Bank of India	-96222.42	-182468.70	-131108.60	-104676.13	-538889.20

9. MVA of Public Sector Banks

In context of market value added, it was observed that PNB was the only bank who had performed well in the stock market, having the higher value spread over the time frame of the study. Apart from this Bank, it was Bank of Baroda who had performed well in a concerning manner in the stock market over the study period.

10. MVA of Private Sector Banks

MVA in private sector banks did not indicate a good sign of performance. It was observed that such banks which have performed well over the economic value added front; have not performed so well in the stock market over the study period. Furthermore, it was quite clear and evident as revealed through figure(4) given below, that majority of private sectors banks had a negative spread in the stock market, over the study period.

11. Snapshot of Value Creation Matrix

As one of the intended objective of this study was to construct Valve Creation Matrix. It was constructed based upon the computed values of EVA and MVA across the selected banks of this study. The constructed value creation matrices of selected banks are represented through tables1to4 given below. The constructed value creation matrices, reflected the total sum of EVA and MVA calculated for all public sectors banks and private sector banks during the period of 2011-2015.

It is clearly evident from the Tables 1 to 4 in explicit manner that the majority banks of have created negative value, which is a

Table 2. Value Creation Matrix based on EVA in Private Sector Banks from 2011 to 2015 (Amount, in Rs)

Private Sector Banks	2011	2012	2013	2014	2015
Axis Bank	-1608632.09	1796792.81	3409228.88	-1583443.64	-707283.53
City Union Bank	10933.72	-2053.42	1941.49	1525.50	-693.07
Dhanlaxmi Bank	5895.23	-6427.52	-14748.10	-14974.57	-31724.24
Federal Bank	-3146760.01	-2827245.89	-1733064.97	-1970535.92	-2680996.63
HDFC Bank	-6831378.94	-5715907.70	-3306816.72	2598088.96	5743233.30
ICICI Bank	-26946743.36	-22101887.41	-17788190.73	-12314259.44	-9786618.27
IndusInd Bank	-130042.57	-613550.83	395305.77	-1306922.88	-183229.39
Kotak Mahindra Bank	-12291.49	-17860.35	-8785.65	-5856.49	-53181.35
Lakshmi Vilas Bank	-7387.64	-2816.12	-3698.02	-6843.43	-9588.39
Yes Bank	-151804.53	808911.98	1920111.03	3168298.54	3782122.95

Table 3. Value Creation Matrix based on MVA in Public Sector Banks from 2011 to 2015 (Amount, in Rs)

Public Sector Banks	2011	2012	2013	2014	2015
Allahabad Bank	-8207764.00	-39809592.23	-20061676.00	-56072153.62	5019906.87
Andhra Bank	1780565.00	-29838470.92	-8838356.86	312594819.00	1333050.71
Bank of Baroda	-71824732.19	-159719980.50	-203306379.70	-263469981.30	-282619263.40
Bank of India	16421088.28	-42695916.98	-12557659.50	-80266125.11	-8851092.64
Canara Bank	37249166.00	-75361438.00	-6772856.00	-87304389.00	8344990.70
Central Bank of India	1048456.67	341884.11	917634.12	220034.64	0.00
IDBI Bank	-48608950.02	-80241377.76	-51794988.54	-108464737.50	28341697.00
Indian Overseas Bank	43493329.00	-21381568.81	39565219.26	36337856.74	143182237.40
Punjab National Bank	-108146407.30	-175392171.50	-219065467.20	0.00	0.00
State Bank of India	-4615046.72	-5376876.50	-6794354.08	-8780855.03	-9728944.82

Table 4. Value Creation Matrix based on MVA in Private Sector Banks from 2011 to 2015 (Amount, in Rs)

Private Sector Banks	2011	2012	2013	2014	2015
Axis Bank	43114977.84	-83283296.12	-115979072.90	-255447792.70	-255337426.10
City Union Bank	-44941.66	-142433.50	-101512.03	-83575.49	-60718.60
Dhanlaxmi Bank	-17911.16	-49812.02	-16249.47	-35002.42	86676.89
Federal Bank	-20958778.90	-36710108.25	-38651759.16	-52124075.97	-55915033.05
HDFC Bank	220392722.30	56006984.35	0.00	-154841984.00	-209625784.40
ICICI Bank	-122516282.50	-297793999.00	-341600864.50	-509047349.10	-467539217.70
IndusInd Bank	305570108.40	155609532.10	147747539.80	41894727.33	48895955.21
Kotak Mahindra Bank	3946149.46	2003516.30	1612802.17	662548.15	0.00
Lakshmi Vilas Bank	9276.03	-29753.18	-13567.88	-33907.06	-20873.04
Yes Bank	231344636.00	90573105.42	117037443.00	27562300.24	41588780.08

sign of value destruction in the Banking sector of India. One of the conclusions that can be drawn on the basis of above shown tables, is that across banking industry of India, Irrespective of public or private sector banks, poor performance was observed in terms of value creation over the study period.

12. Conclusions and Implications

The comparison of select value creation measures used in this study, revealed that all the private sector banks have shown a growing trend in EVA, i.e. shown a sharp increase in its value.

Whereas in case of public sector banks a declining trends in EVA was observed. However, in context of MVA a declining trends was revealed across the selected banks .Thus, we can say that there is an inverse relationship between the EVA and MVA across the selected banks. Thus, one can conclude that financial performance of bank plays an important role in the expectations of market behavior and market movement of stock prices, which investors seek to achieve. The select measures of value creation used in this study fundamentally revealed that across the selected banks performance was significantly poor over the study period i.e. most of the selected banks failed to provide adequate values to their financial investors. In particular, over the study period bank's EVA and MVA shown a negative trend during the period 2011-2015.Furthermore, it was observed that most of the selected banks could not even recover the invested capital in them.

One of the contrasting fact that we could observe through the results of this study is that one bank across the study sample created significantly more value than the other selected banks. So a fundamental question arises that can be raised based upon this result is that what did this bank do inorder to create much more value than other banks. Thus, one of the possible proposition of enhancing value creation could presumably be that financial excellence is the underlying essence of creating value. Thus, it can be concluded that the potential for creating value can be increased by banks through the optimum utilization of its unique resources, process and information contents.

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