



## VALUE ADDITION BY INDIAN BANKS: A STUDY

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### **Abstract**

*This paper studies Indian bank's profile to demonstrate a direct correlation between the investment in stakeholder relationships and corporate performance. Many Indian banking seems to have destroyed shareholder's wealth over a period of time and only a few have positively contributed to their wealth. With the help of EVA (Economic Value Added) and MVA (Market Value Added) which tell what the institution is doing with investor's hard earned money, the paper examines an appropriate way of evaluating bank's performance and also finds out which Indian banks have been able to create (or destroy) shareholders wealth since 2009-10 to 2013-14. The overriding message of this paper is that banks now have to digitize and invest rationally in creating technological architecture that should help them compete with non conventional players to be able maximize shareholders value without which their stocks can never be fancied by the market. This analysis helps us to dig below the surface numbers to tell us more about the underlying business and whether there is a prima facie case for using EVA as one of the range of performance measurement tools.*

**Keywords:** *EVA (Economic Value Added) and MVA (Market Value Added), Return on Invested Capital (ROIC), Value addition, Cost of Capital.*

### **INTRODUCTION**

Banks face competition no more from just banking peers these days, but from anyone and from anywhere. Banks are no more confined to the roles of performing credit appraisals and traditional banking roles. Their abilities are being judged by preparedness to deliver services online and through the mobile handsets. The discussions these days in their board rooms are dominated by big players like Paytm and Alipay, the payments company of Chinese retailer Alibaba, which last year had the biggest ever initial public offering in the world. Nearly half the valuation for Alibaba is derived from Alipay, which is yet to contribute significantly to earnings.

It may not be an exaggeration to say that some fear, with regulatory changes, that banks may be eclipsed by the nimbler startup e-commerce firms which are redefining the way business is being conducted. Just like the Alipays, Tencents and Baidus are stealing a march over established banks and retailers in offering customer convenience in China, payment enablers such as Paytm, Oxigen and others are an emerging threat for Indian banks. Lenders are reacting with apps such as Payzapp, ICICI's Pocket and SBI's tie-up with Amazon.

Paytm, a gateway and a market place backed by Alibaba is being valued at nearly \$2 billion without much revenue or profits to talk about when Indian Bank and Indian Overseas Bank together with more than 3,500 branches and a century old history, are valued lesser. For more than a decade, banks were split into state-run, old private sector and the new-age private sector banks such as HDFC Bank and ICICI Bank, which derived higher valuations due to their customer focus and snatching market share from nationalized banks.

In four years, state-run banks have lost a 1.5 percentage point market share in savings account deposits while private banks gained 3.2 percentage points, according to brokerage Morgan Stanley The loss in other segments is similar. For private banks too, future market share gains are not a given. A changing networking landscape and nimbler service providers can threaten their expansion.

In today's world, if banks are not able to compete in this digital space, their economic value and market cap is likely to be under threat. And if are able to compete in this space, their market cap could actually accelerate. Banks are usually valued on their book value per share, popularly known as 'price-to book- value per share.

Indian Banking has therefore undergone many changes in the past two decade like increased competition from other players, higher NPAs, new opportunities and entry of new private banks. This paradigm shift in the Indian banking sector can be seen in terms of two dimensions: One relates to operational aspect especially performance and risk-management system and the second dimension relates to structural and external environment or exogenous aspects. Is evaluating Indian bank's performance a rather straight forward issue? The answer is no. One might say that like a corporate, even banks can be judged from the behavior of their stock prices. However, as bank stocks have not been very active on exchanges, barring few on few occasions, should we conclude that Indian banks have by and large failed to add values to their shareholders' wealth. The answer is once again no as one needs to evaluate private and public sector banks in a more dynamic manner than just looking

at their stock prices, non-performing assets (NPAs), C/D ratios and others. Some may also argue that the general slow down in lending by banks and their eternal problem of recovery of non –performing assets (NPAs) has led to the sufferings of Indian banks.

The net Gross NPA figure banks in India stood at Rs. 2,64,200 crores in March 2014 (up from Rs. 1,94,100 crores in March 2013) and the Net NPA was Rs. 1,42,700 crores in March 2014 (Rs. 98,700 crores in March 2013). The Gross NPA was 3.92 pc of advances aggregating Rs. 67,35,200 crores in 2014 (3.30 pc of advances of Rs. 58,79,800 crores in 2013). The net NPA proportion of NPA stood at 2.11 pc & 1.68 pc in 2014 & 2013 respectively). Over Rs. 90,000 crore of NPAs are locked up in suit filed accounts. There will be very little that an ARF/ARC can do in recovering from suit filed accounts due to deficiencies in the legal system. Major corporate clients who are willful defaulters take shelter under protection of BIFR. Banks are fairly successful in recovering the overdue from non-corporate clients. The phenomenon of growing NPAs is not confined to public sector banks alone. The net NPA of old private sector banks stood at 7.3% of their advances, for new private sector banks it was 3.1% and for foreign banks operating in India it accounted for 1.9% in the year 2014 of their advances.

**Non-performing asset (NPA) ratio:** The net NPA to loans (advances) ratio is used as a measure of the overall quality of the bank's loan book. An NPA are those assets for which interest is overdue for more than 90 days (or 3 months). Net NPAs are calculated by reducing cumulative balance of provisions outstanding at a period end from gross NPAs. Higher ratio reflects rising bad quality of loans.

*NPA ratio = Net non-performing assets / Loans given*

Many Indian banks are discovering that the key to their long-term growth does not lie in products and services alone but in assets that can never be replicated, that is, digitization and their unique relationship with customers, employees, suppliers and distributors, investors and the communities they serve. One of the most fateful errors bankers usually commit relates to their belief that merely reducing NPAs and thereby maximizing profit would solve “the problem of banking industry”. Not only is this belief still held by most of the bankers in India - and therefore professionally unacquainted by the changing profile of their shareholders and the capital market- it is held by virtually large number of myopic captains of the industry. That things are not going as well as they ought to be going for such banks could be due to economic recession, poor demand for credit, rising manpower costs, political uncertainty, inefficient ways of doing business. Or is it something else?

### OBJECTIVES OF THE STUDY

This research paper studies bank's profiles to demonstrate a direct correlation between the investment in stakeholder relationships and corporate performance. As briefly hinted earlier, both EVA (Economic Value Added) and MVA (Market Value Added) tell what the institution is doing with investor's hard earned money. If we look at the Indian banking industry, many of them seem to be destroying shareholder's wealth and only a few have positively contributed to wealth for its shareholders.

The purpose of this paper is examine an appropriate way of evaluating bank's performance and also see which Indian banks have been able to create (or destroy) shareholders wealth since 2000-2014. The overriding message of this paper is that banks must always strive to maximize shareholders value without which their stocks can never be fancied by the market. Banks which shrug off this as a trivial matter, they do so only at their own peril.

### Our purpose of analysis here is to establish:

- Which bank has created shareholders value (in terms of Economic Value Added) in each of the reporting periods since 2009-10 to 2013-14.
- Whether the analysis helps us to dig below the surface numbers to tell us more about the underlying business and
- Whether there is a prima facie case for using EVA as one of the range of price prediction tools.

### DATA & METHODOLOGY

For the present study data on 15 Indian private and public sector banks that are listed on the Bombay Stock Exchange are collected. As mentioned earlier, the period covered in the study is five years between 2009-10 to 2013-14. These banks are Bank of Baroda, Bank of India, HDFC Bank, Corporation Bank, Dena Bank, ICICI Bank, IDBI Bank, Indusind Bank, J&K Bank, Oriental Bank of Commerce, State Bank of India, Axis Bank, United Bank, Yes Bank & SBBJ. This paper is divided into following two sections.

1. The first section deals with theoretical background for Indian bank management to understand concept and relevance of “Economic Value Added” and its relevance in our context.
2. The second section calculates indicators for conducting overall analysis of 15 Indian bank’s financial performance between 2009-10 to 2013-2014 that are listed on the Bombay Stock Exchange.

With regard to the estimation of EVA for banks, one important difference between financial institution and other firms is the role of debt. For non banking firms debt forms an integral part of financing operations and therefore interest expense/income is excluded from NOPAT calculations so that returns are unlevered. Debt (including deposits) does off course help finance a bank’s assets but financial institutions are different atleast in two important ways. Deposits are value generating in themselves, or can be, since they usually represent funding a below market costs (that is it would be incorrect to calculate the value of whole enterprise and arrive at the value of the equity simply by excluding the liabilities). A bank’s debt funding is effectively the raw material which is intermediated (“manufactured”) into high yielding assets. Interest expense, on this view is the equivalent of the cost of goods sold.

The above has two consequences.

- Interest expense is included in NOPAT (see below) and, because of this,
- When calculating the cost of capital we define capital as equity and equity equivalents. (the cost of other funding – eg., debt and deposits – having been expensed in the income statement, thus allowing for the value creation of below market cost).

### SECTION I: (RELEVANCE OF EVA FOR INDIAN BANKS)

In order to help management understand their own economics and arrive at value creating investment decision that adequately satisfies the two sensitive factors mentioned earlier, bankers must understand the concept and relevance of “Economic Value Added (EVA)”, a period based measure of value creation. EVA provides a unique insight into value creation and links theory of finance with the competitive strategy framework as enumerated by Michael Porter. EVA is also a quantifiable driver of value creation for the stock markets. Large number of International banks (such as Citibank, Deutsche Bank, Barclays, ABN AMRO) use value based frameworks such as EVA to run their banking operations. Although EVA an a yardstick in India may be at an evolving stage, banks like HDFC Bank, ICICI Bank etc. have gradually started adapting such measure to cater to the increasingly discerning investor base.

A 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. The bankers of today’s world therefore must be sensitive to two fundamental drivers that drive shareholders’ wealth. *First*, there must be an unrelenting focus to ensure that funds mobilized by the banks (whether through depositors, equity or debt issues) generate returns in excess of the cost of capital (*or can reasonably be expected to do so*) with an eye toward returning non productive capital back to providers of the capital or shareholders. *Second*, bankers should constantly seek to invest in technology that increases their reach and also be open to strategic alliances, mergers & acquisitions and restructuring.

In the same context it is worth considering that the capital mobilized by banks earn a satisfactory return. While it is true that substantial amount of value creation for a bank or corporate takes place from less than half of the capital employed, it proves that the entity can unlock huge amount of capital employed for adding to the value for the shareholders. The second point mentioned earlier, a necessary corollary to the first point, emphasizes on the importance of investing in value creating projects and strategies. It implies criticality of the fact that bankers must remain sensitive to all such balance sheet items that add value either through mergers or acquisitions or simply through restructuring, re-capitalization or any other method such as sell-off of unproductive assets. Further, bank’s management must be able to differentiate between *projects* and *strategies*. While projects are generally viewed financially from NPV or IRR point of view, they may not really convey the fact that whether value is being added to the shareholders. For example, what distinguishes HDFC Bank, the new futuristic bank from other savvy banks is its position in the new e-economy. The “anywhere-anytime” bank is not averse of accepting the fact that “customer is the king and the bank has to tailor its products as per his requirements” – even if the new product has a negative NPV as its alternative strategy of doing nothing may only destroy value for HDFC Bank. Having established a massive base of customers and holding extensive information about them, banks such as ICICI Bank and HDFC Bank have already made major head start. They are now all set to leverage these assets. As we all know the internet has already started radically affecting fundamental structures of even Indian banks, not only in retail operations, but in many other areas including private banking. The bankers in the new millennium therefore must attempt to make investment in “strategies” and not merely

“remain confined to borrowing and lending”. They should now play a role of “financial service providers” for increasing their shareholder’s value.

### LIMITATIONS OF TRADITIONAL METHOD

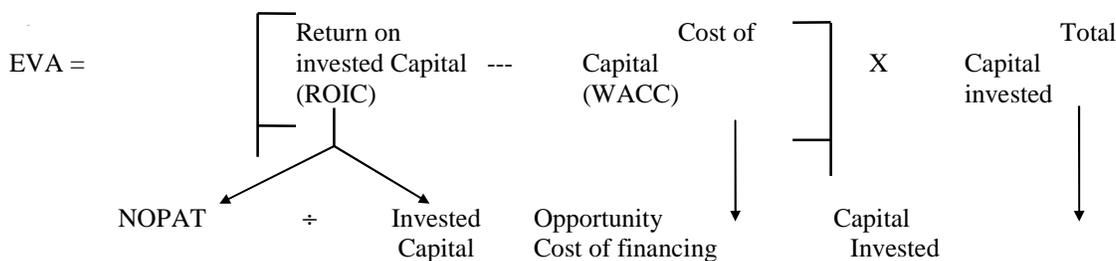
Most of the accounting based measures such as Price: Earnings, Book Value, Returns on Equity, Return on Net worth etc. fail to provide a clear understanding of the major variables that drive value, except to some extent Returns on Invested Capital. These methods are easily influenced by the smart and perhaps mischievous management through window dressings. They also do not incorporate risk or time value of money also and do not help investors understand the intricate process of value creation. In addition, these traditional measures use, for most part, historical data to measure current performance. Ideally, one would like to measure how current decisions will affect the firm’s future performance.

Unlike accounting measures, Economic Value Added, raises the issue highlighted in the Nobel Prize work of Franco Modigliani and Merton Miller: just as debt holders of a bank expect a specific return, the shareholders of the bank, expect a certain rate of return for taking risk of investing in the bank.

### EVA Defined

A bank’s invested capital multiplied by WACC gives the minimum level of operating profits the bank should generate to satisfy shareholders. EVA measures how much net operating profit (adjusted for tax and also called NOPAT) exceeds the capital charge. Mathematically, EVA can be estimated focusing both on *Management of Capital* as well as the *Management of Profits*.

### EVA - (As a measure of Value creation through Management of Profits)



Alternatively,

### EVA - (As a measure of value creation through Management of Capital)

$$\text{EVA} = \text{NOPAT} - (\text{WACC} \times \text{Total Capital Invested})$$

When, EVA is greater than zero, value is created during the period for the bank and if EVA is less than zero, value is destroyed during the period. In order to create values, ROIC for a bank must be greater than weighted average cost of capital (WACC).

### Uses of EVA

While EVA examines three fundamental principles of value creation related to Cash Flow, Risk and sustainability of return, it has three distinct applications. They are

- To measure a bank’s historical success in creating values
- To determine how bank’s stock will perform in the future
- To examine the excess returns in future and its impact on the value of the bank
- To calculate an intrinsic value of a stock by discounting future value of EVAs

A bank’s present value should equal its invested capital plus the present value of future EVA and if the bank’s present value is lower, the stock is undervalued and vice versa. Value of a bank’s share is also said to equal the market value of assets and the sum of EVAs of all future periods discounted back to the present. A bank once it reaches a period when it no longer earns a return on its incremental investments greater than its cost of capital, from this period onward no EVA is added or destroyed from new investments. While competitive forces are likely to drive returns to WACC for Indian banks, the emergence of indifference vary from bank to bank and is determined by several factors such as industry structure, a bank’s position in the industry, capital spending for strategic investments etc.

1. Net Operating profit after Taxes (NOPAT): (PBDT + Interest on RBI loans + Interest on others + Total other Income) Less Cash Taxes
2. Cash Taxes (excluding cost of goods sold): Tax liabilities as if there were no debt during the period
3. NOPAT (T) – NOPAT (T-1): Incremental NOPAT
4. Invested capital: (Total equity & Reserves + Total borrowings)
5. Invested capital (t) – Invested Capital (t-1): Incremental Invested capital
6. Return on invested capital (ROIC): (NOPAT / Invested capital)
7. Beta: Calculated based on stock prices vis a vis SENSEX for each year separately
8. Cost of Equity ( $K_e$ ): ( $R_f + \beta (R_m - R_f)$ )
9. Weighted Average Cost of capital (WACC): Weighted cost of Equity + Weighted cost of Debt
10. Economic Value Added (EVA): (ROIC – WACC)
11. Returns on Capital Employed (ROCE): (PBIT / (Equity + Borrowings))
12. Returns on Net Worth (RONW): (PAT / Total Equity & Reserves)
13. Enterprise Value: Value of the firm
14. Market Value Added (MVA): (Market capitalization less Invested Capital)

**Credit to deposit ratio (CD ratio):** This ratio indicates how much of the advances lent by banks is done through deposits. It is the proportion of loan-assets created by banks from the deposits received. The higher the ratio, the higher the loan-assets created from deposits. Deposits would be in the form of current and saving account as well as term deposits. The outcome of this ratio reflects the ability of the bank to make optimal use of the available resources.

**Capital adequacy ratio (CAR):** A bank's capital ratio is the ratio of qualifying capital to risk adjusted (or weighted) assets. The RBI has set the minimum capital adequacy ratio at 9% for all banks. A ratio below the minimum indicates that the bank is not adequately capitalized to expand its operations. The ratio ensures that the bank do not expand their business without having adequate capital.

$$CAR = \text{Tier I capital} + \text{Tier II capital} / \text{Risk weighted assets}$$

It must be noted that it would be difficult for an investor to calculate this ratio as banks do not disclose the details required for calculating the denominator (risk weighted average) of this ratio in detail. As such, banks provide their CAR from time to time.

Tier I Capital funds include paid-up equity capital, statutory and capital reserves, and perpetual debt instruments eligible for inclusion in Tier I capital. Tier II capital is the secondary bank capital which includes items such as undisclosed reserves, general loss reserves, subordinated term debt, amongst others.

**Provision coverage ratio:** The key relationship in analyzing asset quality of the bank is between the cumulative provision balances of the bank as on a particular date to gross NPAs. It is a measure that indicates the extent to which the bank has provided against the troubled part of its loan portfolio. A high ratio suggests that additional provisions to be made by the bank in the coming years would be relatively low (if gross non-performing assets do not rise at a faster clip).

$$\text{Provision coverage ratio} = \text{Cumulative provisions} / \text{Gross NPAs}$$

**Return on assets (ROA):** Returns on asset ratio is the net income (profits) generated by the bank on its total assets (including fixed assets). The higher the proportion of average earnings assets, the better would be the resulting returns on total assets. Similarly, ROE (returns on equity) indicates returns earned by the bank on its total net worth.

$$ROA = \text{Net profits} / \text{Avg. total assets}$$

## SECTION II: AVERAGE RATIOS OF BANKS IN INDIA (2009-10 TO 2013-14)

To spot emerging trends in a bank's performance, the return on invested capital can be measured incrementally from one year to the next. This measure shows how much additional profits a company is able to generate for every additional rupee put into the business. This measure which equals  $\text{NOPAT}_{(t)} - \text{NOPAT}_{(t-1)} / (\text{Invested Capital}_{(t)} - \text{Invested Capital}_{(t-1)})$  is analogous to first derivative in calculus. This method is likely to smooth out any time events present in the data. This measure assumes that all incremental value creation results from the new innovations undertaken during the year. With this caveat in mind, the results can highlight changes that are less visible in the annual data.

As mentioned earlier an important difference between banks and others is the role of debt. For other firms debt is a part of the financing operations and interest expenses are excluded from Net Operating Profit After Taxes (NOPAT) so that returns

are unlevered. A bank's debt funding is effectively the raw material which is intermediated into higher yielding assets. Interest expense, on this view, is equivalent of the cost of goods sold. This has an important consequence. In our analysis NOPAT for each year was therefore arrived at after adding interest on RBI loans and other loans to Profit before Depreciation and Taxes less Cash Taxes. The component of cash taxes represented as if banks were debt free. In order to calculate cash taxes, tax shield on the interest paid on RBI loans and others were added back to Tax Provision and tax paid on other incomes were deducted from tax provision of the year. A tax rate of 30 percent per year was assumed for maintaining consistency over years in our analysis.

The economic capital of a bank is defined as the shareholders funds plus reserves excluded from equity, such as loan losses or contingency reserve which in economic terms, function as capital. In this fund total long term borrowings of the bank are added to arrive at the Invested Capital (IC). In our analysis we have first attempted to critically evaluate bank's performance in generating Return on Invested Capital (ROIC) over years, we have first taken four most critical indicators viz. Return on Invested Capital (ROIC), Incremental ROIC, Return on Capital Employed (ROCE) and the Price Earnings performance through Price Earnings Ratio (PER).

**Table – 1,ROIC, Incremental ROIC, ROCE and PER of Indian Banks**

	2013-14	2012-13	2011-12	2010-11	2009-10
<b>ROIC</b>	HDFC Bank - (35.5%) BOR (25.5%)	ICICI Bank (23.5%) CB (24.2%)	HDFC (27.9%) ICICI (22.4%)	Axis (32.8%) J & K (2%)	Aixs(35.6%) IndusInd Bank (33.2%)
Incremental ROIC	HDFC Bank (74%) ICICI Bank (63%)	Axis Bank (64%) Yes Bk (47%)	IDBI Bk (74%) SBI (44 %)	HDFC Bk(65%) IDBI Bk (54%)	-
ROCE	Indus (48) SBI 33.1	SBI (52%) J&K (43%)	BoI (3.3%) CB (80.5%)	Axis (154.7%) Yes Bank (151.8%)	SBI (176.9%) ICICI (167%)
% Change in ROCE over last year	Indus 780.99 HDFC 50.71	CB (31.5%) Axis Bank (29.6%)	CB (170.4%) ICICI Bk (38%)	IDBI Bk (351%) ICICI(103.5%)	-
RONW	Axis Bank 28.4% HDFCBnk 23%	IDBI Bank (24%) ICICI (24%)	HDFC Bk (24%) ICICI (23%)	HDFC (33.1%) ICICI (26.5%)	Corp Bk (31%) Yes (31%)
Average ROIC –PSU Banks	14.8%	15.9%	16.6%	18.9%	19.2%
Average ROIC- Private Banks	21.3%	20.3%	23.4%	23.7%	24.8%
PER	HDFC 31.1 ICICI 23.6	HDFC Bk (69) ICICI Bk (42)	HDFC Bk (23) IDBI Bk (13)	HDFC Bk (29) ICICI (17)	HDFC Bk (31) IDBI (18)

It can be seen in Table –1 HDFC Bank enjoyed highest Return on Invested Capital (ROIC) in the industry followed by ICICI Bank, SBI and Corporation Bank. Lowest ROIC in the industry for the years between 2009-14 have been reported by banks such as Bank of India, UB and Yes Bank. The incremental ROIC clearly shows the dominance of private sector banks in all the these five years between 2009 to 2014. All these three years were dominated by the HDFC Bank and ICICI Bank and SBI amongst the only bank from the Public sector.

In our analysis Return on Capital Employed (ROCE) has shown a rather mixed performance of private banks and other scheduled banks. However in terms of percentage change in the ROCE over the previous year, once again we can notice the edge which private sector banks have over their counterparts in the public sector. Both HDFC Bank & ICICI bank showed exceptional change in their ROCE over the last few years. Analogously, HDFC Banks showed the best PER in all the four years that we studied. Its PER over years varied between 17 to 32. The other private banks that came after HDFC were ICICI Bank and IDBI Bank.

All the above indicators clearly show that private sector banks have outperformed almost all public sector banks with regard to value creation and overall performance by them.

#### **Establishing credible WACC**

Both creditors and shareholders expect to be compensated for the opportunity cost of depositing/investing their funds in a business instead of investing in others with equivalent risk. The weighted average cost of capital (WACC) is the minimum

rate of return on capital required to compensate debt and equity investors for bearing risk. Managers should evaluate business by considering investors opportunity cost of capital. Establishing credible and meaningful WACC therefore involves careful estimation of cost of equity ( $K_e$ ) as per CAPM, Cost Of Debt ( $K_d$ ), Risk Free Rate ( $R_f$ ), Market Premium ( $R_m$ ), Betas ( $\beta$ ), Target Capital Structure and then estimation of the cost meaningfully.

As seen earlier, in order to calculate cost of capital for banks, we needed to find out weighted costs of deposits, borrowings and equity. The cost of equity was calculated using CAPM and taking inputs such as  $R_f$ ,  $R_m$  and  $\beta$ . Risk free for the years were assumed to be same as the closing yield on one year Government paper for respective years. Accordingly risk free rate for the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 were assumed to be 7%, 8%, 9%, 9.5% and 11% respectively. Market premium is generally based on the historical data for average returns and some of the studies suggest this return to around 20%. We have assumed the same rate for our analysis. Betas for all the respective years were calculated by taking the weekly closing prices of banks vis a vis Sensex.

**Table – 2, Cost of Capital for banks and CAPM parameters**

Cost of Capital	2013-14	2012-13	2011-12	2010-11	2009-10
<b>Cost of deposits- Industry</b>	9.1%	9.6%	9.4%	8.7%	8.9%
Cost of Equity-Industry	19%	22%	19%	18%	20%
Weighted Cost of Capital-Industry	8.5%	7.3%	7.5%	7.0	7.4%
<b>Cost of deposits- PSU Banks</b>	7.4%	7.3%	9.4%	8.3%	8.6%
Cost of Equity- PSU Banks	17.4%	17.8%	18.1%	16.6%	19.2%
Weighted Cost of Capital- PSU Banks	6.7%	6.9%	7.1%	6.9%	7.1%
<b>Cost of deposits- Private Banks</b>	8.2%	7.8%	9.9%	8.7%	8.2%
Cost of Equity- Private Banks	19.9%	18.5%	21.4%	17.7%	22.9%
Weighted Cost of Capital- Private Banks	6.9%	6.9%	7.5%	7.2%	7.3%

As per Table –2, Cost of Capital for the industry went up to a high of 7.5% in the year 2009-10 and subsequently rose to 8.5% in 2013-14 due to general rise in the interest rates. Further, the analysis shows that weighted cost of capital for PSU banks have been lower than the private banks for all the four years considered. However, equity cost for state run banks have always been higher than the private banks primarily due to the fact that these banks have not been considered to be best pick from the market by the investors.

#### **Value addition by banks**

While conducting the EVA analysis for banks, all 15 banks were ranked on the basis of EVA, % Change in EVA over last year, Market Capitalization (MC), Enterprise Value (EntV), % Change in EntV over last year, Market Value Added (MVA) and % Change in MVA over last year. The study shows that over 87% of the banks were unable to earn a return sufficient to meet their cost of capital. Further, as per Table –3, contrary to popular belief that only HDFC Bank and ICICI Bank have been able to add values, the study shows impressive performance in terms of EVA by banks such as Jammu & Kashmir Bank, Axix Bank and Indusind Bank. Axis Bank is the real turnaround case as it added the greatest amount of EVA in terms of percentages over the years. State Bank of India by virtue of being the largest bank managed to have largest amount of market capitalization and enterprise value followed by other emerging and powerful private banks such as HDFC Bank and ICICI Bank. The reason why HDFC Bank continued to be liked by the stock operators has been purely due to the fact that this bank has been the leader in terms of MVA followed by ICICI Bank.

#### **Correlation between EVA and other variables of Indian banks**

The study also finds that the only variable with which EVA strongly correlates is ROIC. However, increasing correlation between EVA and EV/IC (Enterprise Value/Invested Capital) from 0.18 in 2009-10 to 0.56 in 2013-14 clearly shows that market is increasingly focusing on value creation and rewarding banks which increases shareholders value. Traditional methods such as EPS in our study displays its poor correlation of just 0.03. Similarly, even price earnings displays poor correlation of just 0.09 in 2009 0.21 in 2014 with EVA. However, the correlation of overall cost of capital appears to be stronger in Table –3 with EVA as against cost of equity.

**Table – 3, EVA and Other Variables**

	2013-14	2012-13	2011-12	2010-11	2009-10
<b>EVA and EV/IC</b>	0.69	0.58	0.49	0.23	0.19
EVA and ROIC	0.99	0.99	0.99	0.99	0.97
EVA and Cost of Capital	0.51	0.51	0.56	0.26	0.47
<b>EVA and Cost of Equity</b>	0.14	0.11	0.11	0.16	0.07
EVA and EPS	0.07	0.09	0.18	0.07	0.03
EVA and PE	0.37	0.27	0.38	0.29	0.29

**Table – 4, EVA and its correlation with Banks various financial variables**

	Incom	PAT	NOPAT	ROIC	Deposit	Borrow	Equity	WAC	EVA	ROCE	RONW	Ent V	MVA	EPS	MPS	PER
Income	<b>1.000</b>	0.397	<b>0.839</b>	0.127	0.364	-0.039	0.076	0.371	0.008	-0.064	0.055	0.389	<b>0.425</b>	0.204	0.291	0.203
PAT (crs)	0.397	<b>1.000</b>	<b>0.560</b>	0.444	0.274	-0.152	-0.033	0.052	0.484	0.326	0.238	0.379	0.208	0.177	0.203	0.040
NOPAT	<b>0.839</b>	<b>0.560</b>	<b>1.000</b>	0.414	0.156	-0.109	0.004	0.330	0.345	0.090	-0.037	0.395	0.322	0.153	0.088	0.121
ROIC	0.127	0.444	0.414	<b>1.000</b>	0.179	0.405	0.042	0.497	<b>0.949</b>	<b>0.590</b>	0.325	-0.220	-0.115	-0.401	-0.420	0.178
Cost of deposits	0.364	0.274	0.156	0.179	<b>1.000</b>	0.103	0.012	0.613	0.068	0.026	0.176	-0.098	-0.062	-0.085	-0.082	0.164
Cost of borrowings	-0.039	-0.152	-0.109	0.405	0.103	<b>1.000</b>	0.125	0.276	0.296	0.296	0.283	-0.341	-0.182	-0.246	-0.151	0.085
Cost of Equity	0.076	-0.033	0.004	0.042	0.012	0.125	<b>1.000</b>	0.195	0.003	0.246	-0.099	0.098	-0.106	0.130	0.067	-0.082
Total Cost of Capital	0.371	0.052	0.330	0.497	<b>0.613</b>	0.276	0.195	<b>1.000</b>	0.261	0.247	0.060	-0.336	-0.369	-0.346	<b>-0.510</b>	0.115
EVA	0.008	0.484	0.345	<b>0.949</b>	0.068	0.296	0.003	0.261	<b>1.000</b>	<b>0.577</b>	0.319	-0.153	-0.031	-0.343	-0.317	0.153
ROCE	-0.064	0.326	0.090	<b>0.590</b>	0.026	0.296	0.246	0.247	<b>0.577</b>	<b>1.000</b>	0.165	-0.234	-0.210	-0.044	-0.125	<b>-0.069</b>
RONW	0.055	0.238	-0.037	0.325	0.176	0.283	-0.099	0.060	0.319	0.165	<b>1.000</b>	0.024	-0.090	-0.008	0.171	0.151
Enterprise Value	0.389	0.379	0.395	-0.220	-0.098	-0.341	0.098	0.336	-0.153	-0.234	0.024	<b>1.000</b>	<b>0.537</b>	0.328	<b>0.575</b>	0.145
MVA	<b>0.425</b>	0.208	0.322	-0.115	-0.062	-0.182	-0.106	0.369	-0.031	-0.210	-0.090	<b>0.537</b>	<b>1.000</b>	-0.004	<b>0.498</b>	0.492
EPS	0.204	0.177	0.153	-0.401	-0.085	-0.246	0.130	-0.346	-0.343	-0.044	-0.008	0.328	-0.004	<b>1.000</b>	<b>0.586</b>	<b>-0.649</b>
MPS	0.291	0.203	0.088	-0.420	-0.082	-0.151	0.067	0.510	-0.317	-0.125	0.171	<b>0.575</b>	<b>0.498</b>	<b>0.586</b>	<b>1.000</b>	0.073
PER	0.203	0.040	0.121	0.178	0.164	0.085	-0.082	0.115	0.153	-0.069	0.151	0.145	<b>0.492</b>	<b>-0.649</b>	0.073	<b>1.000</b>

**Table - 5**

<b>Indian Banking Sector at a Glance</b>					
(Amount in ` Billion)					
Sr. No	Items	Amount Outstanding (As at End-March)		Percentage Variation	
		2013	2014	2012-13	2013-14
<b>1</b>	<b>Balance Sheet Operations</b>				
1.1	Total Liabilities/assets	95,900	109,635	15.2	14.3
1.2	Deposits	74,297	85,331	15.1	14.9
1.3	Borrowings	10,104	11,008	19.7	9.0
1.4	Loans and advances	58,798	67,352	15.9	14.5
1.5	Investments	26,131	28,829	17.0	10.3
1.6	Off-balance sheet exposure	138.3	122.0	-	-
1.7	Total consolidated international claims	3,312	3,777	17.9	14.0

<b>2</b>	<b>Profitability</b>				
2.1	Net profit	912	809	11.5	-11.3
2.2	Return on Asset (RoA) (Per cent)	1.04	0.81	-	-
2.3	Return on Equity (RoE) (Per cent)	13.84	10.68	-	-
2.4	Net Interest Margin (NIM) (Per cent)	2.6	2.5	-	-
<b>3</b>	<b>Capital Adequacy</b>				
3.1	Capital to risk weighted assets ratio (CRAR) @	13.88	13.02	-	-
3.2	Tier I capital (as percentage of total capital) @	74.1	77.5	-	-
3.3	CRAR (tier I) (Per cent) @	10.29	10.09	-	-
<b>4</b>	<b>Asset Quality</b>				
4.1	Gross NPAs	1,941	2,642	35.8	36.1
4.2	Net NPAs	987	1,427	51.4	44.6
4.3	Gross NPA ratio (Gross NPAs as percentage of gross advances)	3.2	3.8	-	-
4.4	Net NPA ratio (Net NPAs as percentage of net advances)	1.7	2.1	-	-
4.5	Provision Coverage Ratio (Per cent)**	47.6	44.3	-	-
4.6	Slippage ratio (Per cent)	2.8	3.8	-	-
<b>5</b>	<b>Sectoral Deployment of Bank Credit #</b>				
5.1	Gross bank credit	49642	56572	13.6	14.0
5.2	Agriculture	5899	6694	7.9	13.5
5.3	Industry	22302	25229	15.1	13.1
5.4	Services	11519	13370	12.6	16.1
5.5	Personal loans	8976	10367	14.7	15.5
<b>6</b>	<b>Technological Development</b>				
6.1	Total number of credit cards (in million)	20	19	10.8	-1.7
6.2	Total number of debit cards (in million)	331	394	19.1	19.0
6.3	Number of ATMs	114,014	160,055	19.2	40.4
<b>7</b>	<b>Customer Services*</b>				
7.1	Total number of complaints received during the year	70,541	76,573	-3.2	8.6
7.2	Total number of complaints addressed	69,704	78,745	-4.4	13.0

## CONCLUSION

The performance of Indian bank majors, particularly Public sector banks such as Punjab National Bank, Union Bank of India, Bank of India and Syndicate Bank have by and large been not very encouraging and disappointed stock market, investors and the analysts alike. Most of these banks have reported lower profits as a result of higher provisioning and rise in non-performing assets (NPAs) over years. Despite optimism, Indian economy is yet to come out of stress and five sectors, infrastructure, mining, power, iron and steel, continue to account for over 40 per cent of the total stressed assets of banks. Amongst the private sector institutions, HDFC Bank has fared much better than other competitors such as ICICI bank, Kotak Bank, Yes Bank etc in adding values to its shareholders.

The metamorphosis of Banking industry in India is likely to face deeper challenges. Their role as a traditional banker was replaced long ago with financial services provider for the clients. Most of the PSU and private sector banks in our country have already started looking at their portfolio of services offered and what they should do in the future for remaining competitive in the industry. As public sector banks are likely to undergo major consolidation, suddenly for many Indian



banks things have changed. The current trend points at the possibility of further consolidation in the industry for adding values. While in all cases of M&A, market may react positively in the short run, economic value will be added only in the long run by embracing changes in their business model. This just goes on to prove that among other factors, bankers now will have to constantly seek to invest in technology and also be open to strategic alliances, M&A, restructuring and other exercises for adding EVA to shareholders wealth all the time.

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