

Economic value addition by Indian Banks: A study

Abstract

This research 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 1996-1997 to 2000-2001. 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. 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.

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Introduction

Indian Banking has seen many changes in the last decade like imposition of prudential standards, greater competition among banks, entry of new private banks, etc. 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 NPA figure of scheduled commercial banks of over Rs. 32,468 crore represents 6.2 percent of advances aggregating Rs. 5,58,766 crores in 2001 and 2.5% of the total assets. Over Rs. 30,000 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 2001 of their advances.

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, 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 1996-1997. 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 1996-97 to 2000-01.
- 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 28 Indian private and public sector banks that are listed on the Bombay Stock Exchange are collected from a financial database of Centre for Monitoring Indian Economy (CMIE) called "Prowess". As mentioned earlier, the period covered in the study is five years between 1996-97 to 2000-01. These banks are Bank of Baroda, Bank of India, Bank of Madras (Erstwhile), HDFC Bank, Bank of Punjab, Bank of Rajasthan, State Bank of Bikaner & Jaipur, Centurian Bank, City Union Bank, Corporation Bank, Dena Bank, Dhanalaxmi Bank, Federal Bank, Global Trust Bank, ICICI Bank, IDBI Bank, Indusind Bank, J&K Bank, Nedungadi Bank, Oriental Bank of Commerce, South Indian Bank, State Bank of India, State Bank of Mysore, State Bank of Teravancore, Timesbank (Erstwhile), United Western Bank, UTI Bank and Vysya Bank. This paper is divided into following three 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 following indicators for conducting overall analysis of 28 Indian bank's financial performance between 1996-97 to 2000-2001 that are listed on the Bombay Stock Exchange.

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)
3. The final section evaluates the performance of these For the purpose of analysis, for various ratios and indicators mentioned below, average for all the five years of each bank have also been calculated separately. To examine whether these ratios differ significantly among different banks, one way Analysis of Variance (ANOVA) is applied.

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 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

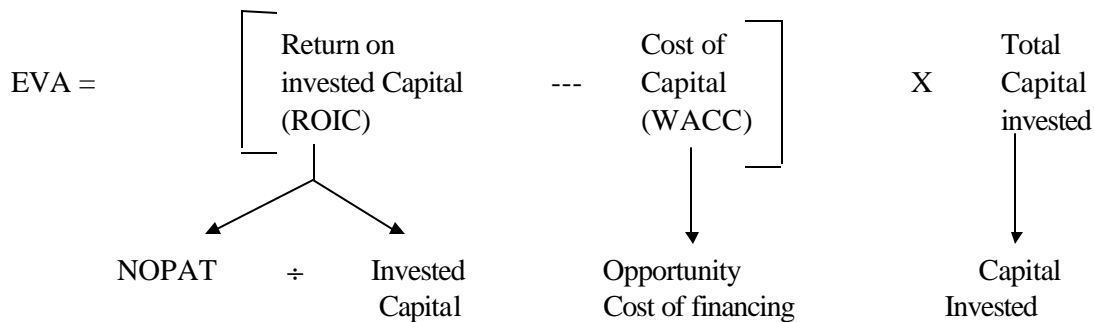
Most of the accounting based measures such as Price: Earnings, Book Value, Returns on Equity, Return on Net worth etc. fail to provide a clear understanding of the major variables that drive value, except to some extent Returns on Invested Capital. These methods are easily influenced by the smart and 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.

Section II: Average Ratios of Banks in India (1996-97 to 2000-01)

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

	2000-01	1999-2000	1998-99	1997-98	1996-97
ROIC	UTIBnk (45.5%) BOR (29.5%)	SBBJ (33.5%) GTB (26.2%)	Times Bk(28.7%) SBBJ (26.1%)	GTB (52.8%) Bank of Madura (34%)	GTB (50.1%) IndusInd Bank (45.6%)
Incremental ROIC	HDFCBank (86%) ICICI Bank (76%)	UTI Bank (81%) Vysya Bk (58%) GTB (50%)	IDBI Bk (128%) Times Bk (40%) SBI (34.3%)	HDFC Bk(594%) IDBI Bk (128%) GTB (83.5%)	-
ROCE	Indus (58) SBT 33.1	SBBJ (152%) J&K (141%)	BoP (83.3%) Federal (80.5%)	GTB (154.7%) South India Bank (151.8%)	SBBJ (176.9%) SBT (167%)
% Change in ROCE over last year	Indus 780.99 HDFC 50.71	UWB (31.5%) UTIBank (29.6%)	BoR (170.4%) ICICI Bk (38%)	IDBI Bk (351%) BoP (103.5%)	-
RONW	UTI Bank 28.4% HDFCBnk 23%	IDBI Bank (24%) UWB (24%)	HDFC Bk (24%) GTB (23%)	GTB (33.1%) SBBJ (26.5%)	Corp Bk (31%) GTB (31%)
Average ROIC - PSU Banks	17.6%	18.9%	17.6%	18.6%	19.2%
Average ROIC- Private Banks	20.3%	19.3%	23.2%	22.7%	24.1%
PER	HDFC 30.1 ICICI 22.6	HDFC Bk (66) ICICI Bk (41)	HDFC Bk (18) IDBI Bk (13)	HDFC Bk (26) ICICI (16)	HDFC Bk (34) BoI (17)

It can be seen in Table –1 that UTI bank and HDFC Bank enjoyed highest Return on Invested Capital (ROIC) in the industry ticking 50.1% and 52.8% for both 1996-97 and 1997-98 respectively followed by IndusInd Bank at 45.6% in 1996-97 and Bank of Madura at 34% in 1997-98. Lowest ROIC in the industry for the years 1996-97 and 1997-98 was shown by IDBI Bank at 2.7% and Bank of Rajasthan at (-) 41.6% respectively. For the year 1998-99 however, Times Bank clocked highest ROIC at 28.7% followed closely by State Bank of Bikaner & Jaipur at 26.1%. Lowest ROIC in the industry for the year was shown by Bank of Rajasthan. The incremental ROIC clearly shows the dominance of private sector banks in all the three years between 1997-98 to 1999-2000. All these three years were dominated by the HDFC Bank, IDBI Bank and UTI Bank in the years 1997-98, 1998-99 and 1999-2000 respectively.

In our analysis Return on Capital Employed (ROCE) has shown a rather mixed performance of both emerging 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 ICICI bank and IDBI Bank showed exceptional change in their ROCE over the last year during 1998-99 and 1997-98. Analogously, HDFC Banks showed the best PER in all the four years that we studied. Its PER over years varied

between 18 to 34. The other private banks that came after HDFC were ICICI Bank and IDBI Bank in the years 1997-98 and 1998-99 respectively.

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 (β), 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 β . 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 1996-97, 1997-98, 1998-99 and 1999-2000 were assumed to be 9%, 8%, 10% and 10% 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	2000-01	1999-2000	1998-99	1997-98	1996-97
Cost of deposits- <i>Industry</i>	8.1%	7.6%	9.4%	8.7%	8.9%
Cost of Equity- <i>Industry</i>	18%	20.2%	18.1%	17.2%	19.5%
Weighted Cost of Capital- <i>Industry</i>	6.5%	6.2%	7.5%	7.0	7.4%
Cost of deposits- <i>PSU Banks</i>	7.1%	7.3%	9.1%	8.7%	8.7%
Cost of Equity- <i>PSU Banks</i>	19.4%	18.8%	18.1%	16.6%	19.5%
Weighted Cost of Capital- <i>PSU Banks</i>	6.4%	6.7%	7.0%	6.8%	7.0%
Cost of deposits- <i>Private Banks</i>	8.2%	7.8%	9.9%	8.7%	8.2%
Cost of Equity- <i>Private Banks</i>	19.9%	18.5%	17.4%	17.7%	17.9%
Weighted Cost of Capital- <i>Private Banks</i>	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 1998-99 and subsequently fell to 6.2% in 1999-2000 due to general ease 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 26 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 80% 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 State Bank of Bikaner & Jaipur, Jammu & Kashmir Bank, Timesbank, Global Trust Bank and Indusind Bank. UTI Bank however turned out be the real turnaround case as it added the greatest amount of EVA in terms of percentages over the year 1998-99. 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 for the last three years followed by ICICI Bank.

Table – 3
Value creation/destruction by the banks

	2000-01	1999-2000	1998-99	1997-98	1996-97
EVA	Indus 39.5% SBT 21.4%	SBBJ (27%) J&K Bk(24%)	Times(21%) SBBJ (19%)	GTB (40%) Indus (37%)	GTB (40%) Indus (37%)
% Change in EVA over last year	HDFCBk 78%	UTIBk (363%)	Vysya (193%)	GTB (131%)	GTB (41%)
Market Capitalization (Ranking Highest to the next highest)	SBI/HDFC ICICI/BOB	SBI/HDFC Bk ICICI Bk	SBI/HDFC Bk ICICI Bk	SBI/BoI/BoB /OBC	SBI/BoI/BoB /OBC
Enterprise Value (EntV) (Ranking Highest to the next highest)	SBI .HDFC ICICI	SBI HDFC Bank ICICI Bank	SBI/BoI/BoB /HDFC	SBI/BoI/BoB	SBI/BoI/BoB
% Change in EntV over last year	SBM/HDFC 43.4 42.6	J& K Bank ICICI Bank	J& K Bank UTI Bank	SBI/BoI/BoB	SBI/BoI/BoB
Market Value Added (MVA)	HDFC 32.38 cr ICICI 759 cr	HDFC Bk BoI	HDFC Bk BoI	BoI/HDFC/ OBC	BoI/HDFC/ OBC
% Change in MVA over last year	BOR 67 GTB54 UTI 34	ICICI Bank 76 HDFC Bank65	ICICI Bank54 HDFC Bank45	ICICI Bank65 HDFC Bank45	ICICI Bank33 HDFC Bank23
Worst EVA destroyer (in%)	Nedung 134 Dean 15.1 IDBI 12.4	Indus 1.8 ICICI0.5	BOR 84 WB – 10.2	BOR32 WB22	BOR43 WB21

Correlation between EVA and other variables of Indian banks

It is evident from the table – 4 & 5 given below 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 1996-97 to 0.56 in 1999-2000 clearly shows that market is increasingly focussing 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 in 1996-97 and 0.09 in 1999-2000 with value creation. Similarly, even price earnings displays poor correlation of just 0.09 in 1996-97, 0.21 in 1999-2000 with EVA. However, the correlation of overall cost of capital appears to be stronger in table –4 with EVA as against cost of equity.

Table – 4
EVA and other variables

	2000-01	1999-2000	1998-99	1997-98	1996-97
EVA and EV/IC	0.62	0.56	0.47	0.22	0.18
EVA and ROIC	0.99	0.99	0.99	0.99	0.99
EVA and Cost of Capital	0.49	0.41	0.46	0.23	0.43
EVA and Cost of Equity	0.16	0.12	0.15	0.16	0.07
EVA and EPS	0.09	0.09	0.19	0.07	0.03
EVA and PE	0.34	0.21	0.33	0.19	0.09

Table – 5
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	1.000	0.397	0.839	0.127	0.364	-0.039	0.076	0.371	0.008	-0.064	0.055	0.389	0.425	0.204	0.291	0.203
PAT (crs)	0.397	1.000	0.560	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	0.839	0.560	1.000	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	1.000	0.179	0.405	0.042	0.497	0.949	0.590	0.325	-0.220	-0.115	-0.401	-0.420	0.178
Cost of deposits	0.364	0.274	0.156	0.179	1.000	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	1.000	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	1.000	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	0.613	0.276	0.195	1.000	0.261	0.247	0.060	-0.336	-0.369	-0.346	-0.510	0.115
EVA	0.008	0.484	0.345	0.949	0.068	0.296	0.003	0.261	1.000	0.577	0.319	-0.153	-0.031	-0.343	-0.317	0.153
ROCE	-0.064	0.326	0.090	0.590	0.026	0.296	0.246	0.247	0.577	1.000	0.165	-0.234	-0.210	-0.044	-0.125	-0.069
RONW	0.055	0.238	-0.037	0.325	0.176	0.283	-0.099	0.060	0.319	0.165	1.000	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	1.000	0.537	0.328	0.575	0.145
MVA	0.425	0.208	0.322	-0.115	-0.062	-0.182	-0.106	0.369	-0.031	-0.210	-0.090	0.537	1.000	-0.004	0.498	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	1.000	0.586	-0.649
MPS	0.291	0.203	0.088	-0.420	-0.082	-0.151	0.067	0.510	-0.317	-0.125	0.171	0.575	0.498	0.586	1.000	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	0.492	-0.649	0.073	1.000

Conclusion

Banking industry in India is undergoing a rapid metamorphosis. Their role of a traditional banker has been replaced 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 merger of Timesbank with the HDFC Bank and that of ICICI Bank with Bank of Madras points at the possibility of further consolidation in the industry for adding values. While in both these cases market immediately reacted sharply by increasing their capitalization and shareholders of both these banks saw appreciable increase in their wealth. 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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