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Impact of Merger Deal on Shareholders' Value Creation: An Instance of State Bank of India Group

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Abstract:- Like other comparable business concerns, shareholders are also pivotal stakeholders of the banking sector and any variation in organic and inorganic growth strategies of banking concerns directly impacts shareholders' wealth of that particular concern. Mergers are mostly used by the banking sector as an inorganic growth strategy to boost their earnings and increase market share. Shareholders' interest is also affected to a large extent by this tie up deal as this type of capital restructuring strategy can increase or decrease their wealth. Thus, to ascertain the impact of bank tie up on wealth of shareholders this interpretation considers State Bank of India's latest consolidation event which took place on 1st April 2017 with Bharatiya Mahila Bank & its five subordinate banks. Three years prior merger phase attainment (April 2014 to March 2017) and three years after merger phase attainment (April 2017 to March 2020) of state bank of India is investigated here. All the required data are gathered from secondary sources namely; CAPITALINE -2000 database and the ultimate conclusion is drawn by using EVA, MVA & SVA approach. The findings of the study clearly reveal the adverse effects of the merger in the immediate term as shareholders' wealth are immediately declined after the merger. But with regard to the sustainable impact of consolidation, the findings suggest that this merger failed to add any significant value to SBI's shareholders' wealth.

Keywords: *Merger, EVA, MVA, SVA, Banking Sector.*

I. INTRODUCTION

For any business concern, shareholders are the backbone of such organization among all its stakeholders and it is almost impossible to reach the goal of organization successfully without their active support. They not only help the business bodies by providing financial assistance, but sometimes shareholders are part of the management team with maximum risk of that related concern. So, shareholders in turn have certain expectations from the organization that their invested money should be utilized by organizations in such a way that their wealth is maximized. Each and every operation of business bodies has a direct and indirect effect on shareholders' wealth, such that even the smallest decision can proliferate or deteriorate its value. Hence in the contemporary situation, business organizations not only have the goal of long-term survival through profit maximization of related concern, but they also conduct their business activities to enrich shareholders' wealth. When a business suffers losses, the main impact of such losses is on the shareholders and sometimes in order to correct these losses and position them better in the competitive market, the organization employs corporate financial restructuring strategies. Among corporate financial restructuring techniques, the merger is one of the well-known strategies. When two or more concerns are unified with each other then it denotes merger event. These types of consolidation deals definitely have direct impact on shareholders wealth with its overall value. In today's emerging situation many banks are now opting for this merger path for various reasons such as restructuring of feeble banks; obtaining economies of scale; growth of market share; synergy, financial planning, diversification etc. and in return the shareholders of such banks are also being affected by this type of integration deal. All mergers could not be stamped as successful. Only those merger be regarded as successful that really add value to the wealth of their shareholders. For that reason the assessment of the impact of merger deal seems important from the point of view of its shareholders. Economic value-added (EVA), market value-added (MVA) and shareholder value-added (SVA) techniques are one of the major methodologies for assessing the impact of bank tie on shareholders' funds.

II. REVIEW OF EXISTING LITERATURE

Omah et. al. (2013) conducted a study titled "Mergers and Acquisitions: Effects on Shareholders Value Evidence from Nigeria" to measure the post-unification operating attainment and impacts of such unification on shareholders wealth of selected Nigerian banks. This article undergone eight merged banking companies from Nigeria during the period from 2001 to 2010 and all reliable data are drawn from various secondary sources, such as; respective banks websites, Nigerian Capital Market database, Centers of Monitoring Nigerian Economy, Nigerian Corporate database etc. To interpret the congregated data researchers have used Economic Value Added (EVA) and Market Value Added (MVA) approach and later they applied regression analysis to drawn final conclusion. The findings of the study revealed a significant but negative relationship between expense ratio and shareholder wealth, indicating that whenever expenses increased, shareholder value declined. However, in post tie up phase, EVA and Operating expenses have significant positive interconnection. An increase in debt equity ratio, current ratio and return on net worth leads to a decline in EVA indicating a negative relationship between them, but ROCE has a

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positively significant relationship with EVA. After merger phase, within one year, there is positive impact of tie up observed on Market Value of 70% consolidated banks but later on after four years, only 10% merged banks had this positive correlation with market value of such banks. Based on this study, it can be concluded that only marginal positive effects noticed on shareholders wealth creation due to tie up event. Further, researchers pointed that this investigation only considered shareholders value in financial terms, human aspects are totally ignored. Hence, in further research, these factors can also draw attention of the researchers.

Rangan (2013) studied the impact of unification between HDFC Bank with Centurion Bank of Punjab through his research article titled "Evaluation of Merger of HDFC Bank and Centurion Bank of Punjab-EVA Analysis". The required data for this investigation are collected from secondary sources with BSE index and data are interpreted by adopting Economic Value Added approach. To draw the final conclusion based on EVA methodology, researcher also evaluated its components, namely; NOPAT, Cost of Debt, Cost of Equity etc. for the period from 2004-05 to 2012-13 with four years prior tie up & four years after tie up evaluation. The findings of the research demonstrated an improvement in NOPAT which signified improvement in terms of profit parameters of merged banks. Cost of debt value reported an increasing trend whereas reported value of Beta & Cost of Equity is exhibiting the declining trend. Overall, a cyclical trend in value addition in form of EVA in post tie up period is observed and on the basis of this trend it can be concluded that this merger event had generated an average satisfactory report towards EVA aspect.

Ashima (2014) carried out a study investigated a study to assessed the impact on shareholders' value due to consolidation event of selected banks through her article "Financial Synergic Impact on ICICI and HDFC Bank after Merger (with EVA & MVA Approach)". The relevant data are taken from various secondary sources, such as respective banks' websites, money control.com etc. for three years prior & three years after merger period. Mainly two merger event i.e. Merger between ICICI Bank with Bank of Rajasthan & HDFC Bank with Centurion Bank of Punjab are selected as sample for this study. Sample data are interpreted by using EVA (Economic Value Added) & MVA (Market Value Added) approach for drawing the final conclusion. In case of ICICI tie up event, it noticed that a persuaded trend observed in post-merger period on financial attainment of such bank with increased EVA which signifies positive impact of consolidation on shareholders fund. Whereas 1 year before the tie up, ICICI has a negative value of MVA but in the year of merger the MVA has been seen upwards, but after that again the value of the MVA has seen a decline. On the other side, HDFC merger deal revealed an overall satisfactory performance with higher EVA and MVA which identified increased value of the bank that would bring higher return for the shareholders. As a whole, it can be concluded that both merger deals reflect positive outperformance due to the merger incident and succeeded in achieving higher returns for its shareholders.

Patel et. al. (2016) studied the comparative performance of consolidated banks in both prior tie up & post tie up phase as per financial context through their research article "Mergers and Acquisitions – The Game of Profit and Loss : A Study of Indian Banking Sector". Researchers mainly considered six ties up bank, namely; Oriental Bank of Commerce, Federal Bank, IDBI bank, Indian Overseas Bank, HDFC Bank & ICICI bank as a sample of their study which are unified during the period from 2004 to 2010. The necessitate data are extracted from various secondary sources, like; money control, RBI's report, Yahoo finance, Indian banker's association etc. with 5 years prior & 5 years post tie up period. For measuring financial attainment of the consolidated banks researchers applied EVA methodology along with some financial variables, such as, Interest earned, total assets, Net profit, Net profit margin, Return on long term fund , Return on net worth, Return on assets and Earning per Share. The findings in case of merger between OBC with Global Trust Bank revealed that there is no such type of remarkable satisfactory attainment noticed though in post tie up phase the performance of the unified bank was improved but these consolidated bank failed to utilize its fund properly for raising profit which leads to less improvement in EVA. Federal bank tie up event showed insignificant changes in post-merger performance whereas IDBI bank reflected highest enhanced EVA with efficient utilization of funds which automatically enriched its performance in post-merger phase. The merger event of Indian overseas bank depicted improved financial attainment with positive EVA during after tie up period. By proper utilization of long term funds HDFC with Centurion Bank of Punjab tie up event expressed enhanced significant positive EVA with better financial attainment in after unification event. ICICI bank consolidation event demonstrated adverse EVA which is mainly due to reason of improper application of funds & assets. As conclusive remark, this article represented that IDBI bank had greatest EVA with highest post tie up performance whereas ICICI bank had negative EVA with declined performance in terms of financial aspect due to merger event.

Sharma et. al. (2019) try to evaluate the accomplishment of HDFC Bank with Centurion Bank of Punjab tie up event for five years post consolidation period on operating performance in their research article titled " Beginning of Consolidation in Indian Banking Sector :Measuring Operating Feasibility against Standard Benchmark : a Case Study of HDFC Bank Acquisition of Centurion Bank of Punjab". All necessary data for this investigation are taken from various secondary sources, such as SEBI reports, Companies official websites, published financial statements of respective bank, and magazines etc. and final conclusion have been drawn based on such collected data by using EVA approach. The findings of the study depicted that in this investigated tie up deal, macro-economic variables had significant impact on operational attainment of such consolidated bank in after merger period. Overall findings of this article illustrated an adverse attainment benchmark during post-unification period and also revealed that this consolidation event failed to accomplish positive EVA. Researches also pointed out that achievement in tie up event not only depend on scope availability but also on scale of operation of management, synergy realization and achievement of competitive cost advantages. As per investigators view, liberalization is one of the prime reason for failure of tie up deal as it forcing companies for consolidation.

From above discussion, it can be supposed that EVA, MVA and SVA approaches have been least used by researchers to measure changes in shareholder value as a result of consolidation event. So, by opting EVA, MVA & SVA methodologies we are trying to give our view on shareholders' value addition of concern in after tie up phase. Assessment of the Effects of merger event on shareholders' value is prime area of this article.

III. OBJECTIVE OF THE STUDY

The defined purpose behind this study is to weigh the impact of the merger deal on shareholders' value creation.

IV. HYPOTHESIS OF THE STUDY

To accomplish and to validate the above stated objective of the study, the following null hypothesis has been developed for testing:

The merger event does not add any considerable value to the shareholders' wealth in the post tie-up phase as compared to the pre-tie-up phase during the study period.

Rejection of the null hypothesis indicates that the merger event adds a considerable value to the shareholders' wealth in the post tie-up phase as compared to the pre-tie-up phase during the study period.

V. DATABASE AND METHODOLOGY OF THE STUDY

This study has been constructed with the help of secondary data and all the necessitate facts are extracted from 'CAPITALINE – 2000' database. The latest State Bank of India (SBI)'s consolidation event which took place on 1st April 2017 is glanced here as sample of study, i.e., unification of State Bank of India with its five associates and with Bharatiya Mahila Bank are analyzed here. Three years prior merger phase attainment (April 2014 to March 2017) and three years after merger phase attainment (April 2017 to March 2020) of state bank of India is investigated here. The five subordinate banks of State Bank of India that are tie up with it are State Bank of Travancore, State Bank of Patiala, State Bank of Mysore, State Bank of Hyderabad and State Bank of Bikanir & Jaipur.

In order to achieve the defined objective and to gauge the efficacy of this alliance on the Shareholders' value creation, EVA, MVA & SVA methodologies have been opted here. EVA indicates shareholders wealth creation on economic point of view. On the other hand MVA demonstrates wealth creation for shareholders based on current market position, whereas SVA pointed out wealth creation for shareholders based on current market position as well as based on a particular managerial decision viz., dividend decision.

Economic Value Added (EVA): EVA is a value-based financial performance measure that is used to assess the real economic benefit that a firm has made with its capital investment. Value for shareholders will be created when the company's Net Operating Profit before interest after tax of the company exceeds its weighted average cost of capital. If EVA's calculated value is positive, it indicates that the firm is creating value for shareholders with its capital investment. Conversely, if the calculated value of EVA shows negative, it indicates that the firm is destroying value with its capital investment.

The following equation shows the calculation of EVA.

$$EVA_t = NOPAT_t - (WACC_t \times CE_{t-1})$$

Where,

EVA_t = Economic Value Added at period 't'

$NOPAT_t$ = Net operating profit before interest after tax in year 't'

$WACC_t$ = Weighted average cost of capital in year 't'

CE_{t-1} = Total capital employed in year ' t-1'

Since EVA is an absolute value it is to be transformed into relative figure i.e., Economic Value Added as a percentage of Capital Employed (EVA/CE) so that all the figures can be brought into a common platform.

Market Value Added (MVA): MVA is a value-based financial performance measure that is used to assess the level of market value a firm has added over years in the form of unrealized capital gain. If the calculated value of MVA is positive, it indicates that the firm has added some extra value than what has been invested to it by shareholders, while a negative value of MVA specifies that the company has destroyed its market value.

$$MVA_t = (MP_t - MP_{t-1}) \times O_n \pm (MP_t - MP_{t-1}) \times n \times \frac{D}{365}$$

Where,

MVA_t= Market Value Added at period t

MP_t= Market Price per share at the end of the year t.

MP_{t-1}= Market Price per share at the beginning of the year t.

O_n= Number of outstanding shares at the beginning of the year t.

n = Number of shares adjusted for increase or decrease.

D = Number of days the adjusted number of shares remains invested.

Since MVA is an absolute value, MVA as a percentage of Equity Shareholders' Value (MVA/ESV) has been considered so that all the figures can be put on the same footing.

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Shareholders' Value Added (SVA): SVA is also a value-based financial performance measure that gives insight in the total value that is accumulated by a firm for its shareholders both in realized and unrealized form of capital gain. In fact it is the sum total of unrealized capital gain (MVA) and realized current gain (equity dividend).

$$SVA = MVA + EDIV \times \frac{D}{365} \times D_t \times n$$

Where, MVA = Market value added on opening number of outstanding shares
EDIV = Total Equity dividend paid on opening number of outstanding shares
D = Number of days the adjusted number of shares remains invested.
D_t = Dividend per share at the year end t
n = Number of shares adjusted for increase or decrease

Since SVA is an absolute value it is converted into relative figure so that all the figures may be put on a common footing. Shareholders' Value Added as a percentage of Equity Shareholders' Value (MVA/ESV) is thus calculated.

Lastly, to reach a particular conclusion that whether, the merger event adds any considerable value to the shareholders' wealth in the post tie-up phase as compared to the pre-tie-up phase during the study period, paired t test has been applied here.

VI. MAJOR FINDINGS OF THE STUDY

Table-1: EVA, MVA and SVA of SBI during 2014-15 to 2016-17 (Pre-merger phase) and 2017-18 to 2019-20 (Post-merger phase)

STATE BANK OF INDIA						
	Pre-Merger			Post-Merger		
Financial Year	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
EVA (Rs. in Crore)	32185.145	38007.505	20125.981	11881.326	24509.348	54588.715
MVA (Rs. in Crore)	56119.670	-48503.430	82473.980	-10100.810	63097.610	-110531.320
SVA (Rs. in Crore)	58732.665	-46485.102	84547.090	-10100.810	63097.610	-110531.320

Table 1 depicts the absolute value of EVA, MVA and SVA for a period of six-years i.e., the values of three years preceding the tie up and the values of three years after the tie up. In case of EVA, just after merger, deterioration in value of EVA from Rs. 20125.981 crore (in March 2017) to Rs. -11881.326 crore (in March 2018) is observed. But thereafter in March 2019 EVA has been increased and becomes Rs. 24509.348 crore and again increase in value of EVA to Rs. 54588.715 crore can also be seen in March 2020. Thus, immediate change in the shareholders wealth is negative but in sustainable period an increasing trends in value of EVA is reflected that indicates that SBI creates favorable shareholders value from the perspective of wealth generation.

A similar appearance regarding immediate impact of merger can also be perceived in case of Market Value Added (MVA) also. The Immediate change in MVA after the merger is negative. This means after entering into merger deal the bank has lost its market value. But picture of sustainable impact is different. If we look a sustainable period of three years during post tie up phase then a wavy picture of MVA is on display. In the pre-take-over period in March 2016, the MVA has a negative value of Rs. 48503.43 crore, but thereafter in March 2017 it shows a positive value of Rs. 82473.980 crore, which was at the time of merger. But after consolidation, MVA figure was reduced to Rs. -10100.810 crore, then it increased to positive favorable value of Rs. 63097.61 crore in March 2019, but again in March 2020 it shows unfavorable value i.e. Rs. -110500.300 crore. This interpretation suggests that seemingly SBI has failed to create value for its shareholders in post consolidation period of three years from a market standpoint as compared to the pre-consolidation phase of the merger.

A parallel conclusion, as MVA demonstrates, can also be seen in the case of Shareholders Value Added (SVA), that is, there is a decline in wealth growth immediately after consolidation. With an unfavorable value of Rs. 46485.1 crore in March 2016, SVA reached a favorable value of Rs.84547.09 crore just before the tie up event in March 2017. But after consolidation, in March 2018 it shows a negative value of Rs. 10100.81 crore. An immediate change in the SVA figure just after merger indicates value destruction from the shareholders' point of view. However, it again increased to Rs 63097.61 crore in March 2019 but it went down again in March 2020.This fluctuation in the value of SVA indicates that compared to prior tie ups, the merger fails to bring any significant value to its shareholders over a sustainable period of three years in post-consolidation phase.

Above interpretations can also be portrays through figure 1 below.

Figure 1: EVA, MVA and SVA of SBI during 2014-15 to 2019-20

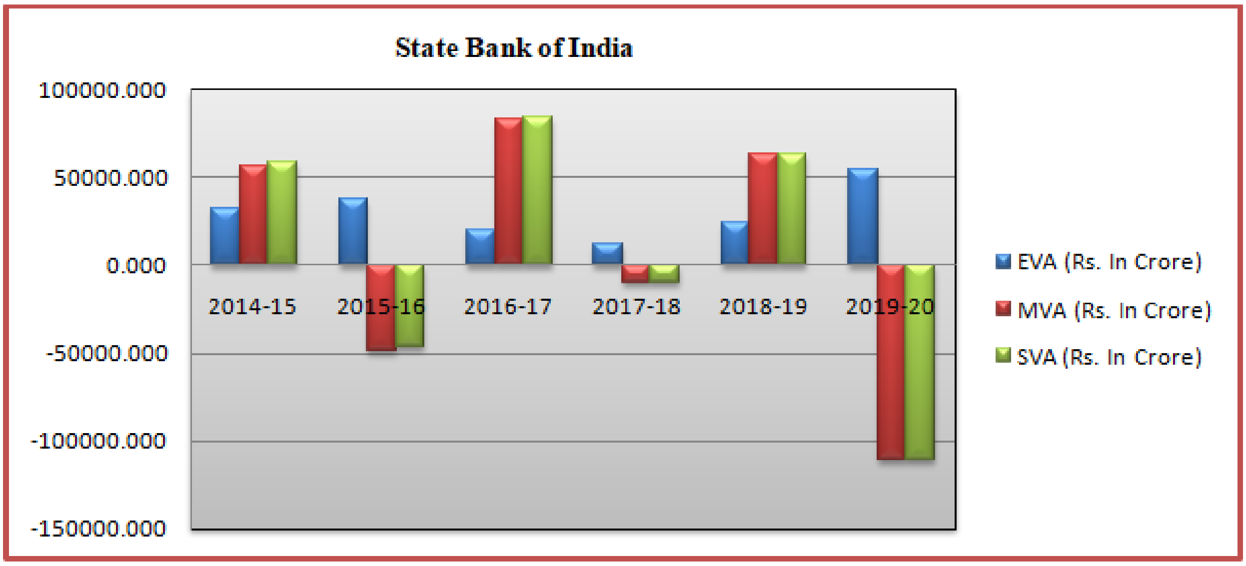

Table-2: EVA/CE, MVA/ESV and SVA/ESV of SBI during 2014-15 to 2016-17 (Pre-merger phase) and 2017-18 to 2019-20 (Post-merger phase)

STATE BANK OF INDIA						
	Pre-Merger			Post-Merger		
Financial Year	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
EVA/CE (in %)	1.78	1.85	0.85	0.41	0.72	1.49
MAV/ESV (in %)	45.49	-35.57	49.60	-4.96	28.68	-48.81
SVA/ESV (in %)	47.61	-34.09	50.85	-4.96	28.68	-48.81

Along with the absolute value of EVA, MVA and SVA of the SBI, the "Economic Value Added as a percentage of Capital Employed (EVA/CE)", "Market Value Added as a percentage of Equity Shareholders' Value (MVA/ESV)" and "Shareholders' Value Added as percentage of Equity Shareholders' Value (SVA/ESV)" have also been demonstrated here through Table 2. These relative values will simplify your understanding with respect to any value creation at SBI, irrespective of the difference in the year-wise value of capital employed and equity shareholders. If we look at the immediate impact of the merger deal, we find that EVA / CE, MVA / ESV and SVA / ESV are showing figures through which we can easily understand that shareholders' value has declined immediately after consolidation phenomenon. Despite this fact, if we monitor the impact of the consolidation event over a sustainable period of three years during the post tie up, a wavy trend can particularly be observed in the case of MVA / ESV and SVA / ESV. Whereas, in the case of EVA / CE, there seems to be an increasing trend after post tie up.

VII. HYPOTHESIS TESTING

To reach a particular conclusion that whether, the merger event adds any considerable value to the shareholders' wealth in the post tie-up phase as compared to the pre-tie-up phase during the study period, paired t test has applied here.Here entire study period have divided into pre- merger and post-merger. In before merger, three years data relating to EVA, MVA and SVA from 2014-15 to 2016-17 has been used and in after merger, three years data of EVA, MVA and SVA from 2017-18 to 2019-20 have been taken.

Table 3: Paired Samples Test of State Bank of India (Pre and Post-Merger)

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
EVA/CE	Before & After Merger	-.620	1.098	.634	-3.347	2.107	-.978	2	.431
MVA/ESV	Before & After Merger	-28.203	83.581	48.255	-235.830	179.422	-.584	2	.618
SVA/ESV	Before & After Merger	-29.820	83.571	48.250	-237.421	177.780	-.618	2	.600

Table 3 reveals the paired sample test for EVA/CE, MVA/ESV and SVA/ESV. While testing the paired t test, significance level of 0.05 is preferred and the two tailed test is opted in this case. The significance value in case of all parameters is more than the 0.05 that indicates non rejection of the hypothesis which states that this merger event does not add any considerable value to the shareholders' wealth of SBI in the post tie-up phase as compared to the pre-tie-up phase during the period of period.

VIII. CONCLUSION

The main purpose of this article was to assess the impact of the consolidation event on shareholders' funds. For which we have presented here the example of latest merger of SBI. The findings of the study clearly reveal the adverse effects of the merger in the immediate term as shareholders' wealth are immediately declined after the merger. But with regard to the sustainable impact of consolidation, the findings suggest that this merger failed to add any significant value to SBI's shareholders' wealth. Following the merger, SBI could join the world's top 50 banks with 22,500 branches and 58,000 ATMs with an asset base of over $ 555 billion. But this bank has ignored the value creation point of shareholders and the findings of this study advocate this fact.

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