

## MANAGING WITH ECONOMIC VALUE ADDED (EVA)

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**ABSTRACT:** Structuring acceptable compensation package for manager seeks to achieve the highest possible degree of concordance between shareholders and managers. Linking compensations for managers with actual managers' performances should focus managers on actions that would result in increasing shareholder value and realization of organizational goals. But in reality, the structure and amounts of the compensation packages often were not correlated with the level of managerial performances. This study intended to identify why economic value added should be used as a performance management tool and incentive compensation system that can guide every decision a company makes, and that can transform a corporate culture which motivates all managers and employees to work cooperatively to achieve the very best performance possible.

**Keywords:** Economic Value Added (EVA), performance management, incentive compensation system, shareholders, managers.

**JEL Classification :** M40, M41.

### 1. INTRODUCTION:

The primary financial objective of any firm is to create value for its owners. As companies generate value and grow society also benefits. The quest for value directs scarce resources to their promising uses and most productive users. A problem faced by the shareholders of a firm is that it is difficult to determine the effect of management decisions on the future share returns of the firm. Furthermore, it may be necessary to implement certain monitoring costs to ensure that management is focused on achieving this objective. In most companies today the search for value is being challenged by a seriously out of date financial management system. Managers are often rewarded for the wrong achievements and in many cases they are not rewarded for the efforts that lead to real value. One of the focuses that have proved to be incorrect in the valuation of economic worth is earning per share (EPS) (Durant, 1999).

A firm would therefore, benefit from being able to identify those financial performance measures that are able to link the financial performance of the firm to its share returns. Implementing such a financial performance measure in the valuation and reward systems of a firm should ensure that management is aligned with the objective of shareholder value maximisation and reward for achieving it (Alexei, 2012).

Economic value added is a measure of corporate performance that differs from most others by including a charge against profit for the cost of all the capital a company

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employs. But EVA is much more than just a measure of performance. It is the framework for a complete financial management and incentive compensation system that can guide every decision a company makes, from the boardroom to the shop floor; that can transform a corporate culture; that can improve the working lives of everyone in an organization by making them more successful; and that can help them produce greater wealth for shareholders, customers, and themselves.

## **2. LITERATURE REVIEW:**

The choice of performance measures is one of the most critical challenges facing organisations. Poorly chosen performance measures routinely create the wrong signals for managers, leading to poor decisions and undesirable results. There are enormous hidden costs in misused performance measures. Shareholders pay the bill each day in the form of overinvestment and acquisitions that do not pay off etc. It is not that management is poor. Simply, it is the wrongly chosen performance measures, which in turn push management to take improper decisions (Ferguson and Leistikow, 1998).

There has been a growing concern about the performance measures based on traditional accounting information such as Return on Equity (ROE), Earning per Shares (EPS), Net operating profit after taxes (NOPAT) and Return on Investment (ROI) etc., these measures although widely used fail to capture the shareholders' value creation/destruction as a result of management actions. This fact has encouraged researchers to examine whether the value added method is superior to, and more reliable than, traditional methods.

Literature on EVA can broadly be classified into seven sub- themes. These are EVA and stock returns, EVA MVA relationship, managerial behavior and performance management, concept, criticism & implementations issues of EVA, value management & EVA, and their relationship with EVA and review studies on EVA. Several studies and research have been done on EVA but different researchers have focused on different areas.

Majority of the studies relate to EVA & stock returns and its comparison with traditional measure of corporate performance. In more recent study Behera (2019) conducted a study on 69 large-cap companies selected from the BSE 500 and compared the efficiency of EVA with accounting measures in explaining stock prices. The results showed that EVA maintained a strong association with the stock price and yielded incremental information content beyond that provided by other accounting measures. Khan et al. (2016) conducted a study that considered samples selected from 28 non-financial firms listed in the Karachi Stock Exchange and found that EVA availed incremental information content beyond the information content given by earnings. Similarly, Bhasin (2013) examined five Indian companies through data from 2006 to 2007 through 2010 to 2011 and found that the explanatory ability of EVA was better than that of traditional performance measures. Misra and Kanwal (2005) examined the relationship between share price between EVA and traditional measures using BSE-100 companies from 1998 to 2003 and concluded that EVA maintained a better association with share price compared to traditional measures.

Popa et al (2009) argued that EVA can be an important tool that bankers can use to measure and improve the financial performance of their bank. They emphasize the advantages of EVA by comparing to other performance indicators. Since EVA takes the

interest of the bank's shareholders into consideration, the use of EVA by bank management may lead to different decisions than if management relied solely on other measures. They investigate the Romanian Banking systems to compare the advantages of EVA to other measures of bank performance such as return on assets (ROA), return on equity (ROE), net banking income and the efficiency ratio, which do not consider the cost of equity capital employed. Thenmozhi, M. (2000) carried out a study in order to have an understanding of how the traditional performance measures are comparable to EVA, data of three financial years between 1996 and 1999 were chosen from 28 companies. Only 6 out of the 28 companies have positive EVA while the others have negative. The EVA as a percentage of Capital Employed (EVA/CE) has been found to indicate the true return on capital employed. Comparing EVA with other traditional performance measures the study indicates that all the companies depict a rosy picture in terms of EPS, RONA and ROCE for all the three years. The study shows that the traditional measures do not reflect the real value of shareholders and EVA has to be measured to have an idea about the shareholders' value.

A major study that addresses the changes made by EVA adopters is by Wallace (1997). It examines the resultant performance of firms using EVA and other residual income techniques. He finds that EVA adopters dispose of more assets and fewer new investments. Shareholders get what they pay for; i.e. performance is greater in the areas that are reinforced by the EVA bonus plan.

Although various studies dealing with the theory and applications of EVA have been published however the concept is still under development and debate.

### **3. ECONOMIC VALUE ADDED (EVA) - THE CONCEPT**

Although, the Economic Value Added (EVA) model was thoroughly applied by Stern Stewart & Co., for the first time, in the nineties, a similar concept had been contemplated by economists for many years before that. It was the famous economist Alfred Marshall in 1890, who first spoke about the notion of economic profit, in terms of the real profit that a company makes when it covers, besides the various operating costs, the cost of its invested capital (Kyriazis & Anastassis, 2007). Based upon the above meaning of economic profit, Stern Stewart & Co developed the concept of the Economic Value Added Model. The basic difference between the notions of economic value and residual income concerns the method for calculating profits and invested capital. Stern Stewart suggested various adjustments in the financial statements of the firms, in order to move away from the concept of accounting profits and approach the notion of real economic value. Considering this, it follows that, if the EVA model with the adjustments that Stern Stewart proposes is closer to the real economic value of the firm then its application will enable management to monitor and control more efficiently the use of invested capital (Reddy & M. Rajesh 2011). The definition given by Stern Value Management to EVA shows, that EVA is the difference between the net operating profit after tax of the business organization, and the cost of the opportunity capital invested in the business organization (BERBER ,2012).

$$EVA = NOPAT - (D + EBV) \cdot (WACC)$$

Where:

**NOPAT:** Net Operating Profits after Taxes.

**D:** Debt

**EBV:** Equity Book Value.

**WACC:** Weighted Average Cost of Capital

The results obtained by means of the economic value added method answer the question regarding the capital use efficiency and company value increase. Three variants of the relationship between the value of the EVA indicator and investors' behaviour can be analysed.

- 1) If  $EVA > 0$ , the relevant company or its departments gain more than the weighted average value of the capital, therefore value creation occurs. The positive value of the EVA value shows an efficient use of the capital and represents an index of company value increase.
- 2) If  $EVA = 0$ , the analysed company or its departments gain exactly as the capital cost level, meaning that the relevant company has the same value as in the moment investments were made in it. This is a notable feat, because the company capital owners recovered their investment and compensated the assumed risk.
- 3) If  $EVA < 0$ , the analysed company or some of its departments do not recover the capital cost. Investors could have obtained a higher profit elsewhere, with the same risk. The negative value of the EVA indicator shows an inefficient use of the capital and a decrease of the company value.

#### **4. ECONOMIC ADDED VALUE AND AGENCY COST THEORY:**

The agency cost theory assumes that there is a contract-based relationship between shareholder and agent (the manager delegated to run the company) by which the latter is bound to achieve some specific targets. Nevertheless, if both parties wish to maximize utility, there is strong evidence to believe that the agent (manager) will not act in the investors' interest but in his own. In this respect, taking into account the informational asymmetry (the manager holds more information and takes current decisions on behalf of the investor), a moral hazard situation may occur if the manager's interests are not similar to those of the investors (Dinu & Ciora, 2012)

As a result, managers may divert firm resources away from investments that create the most firm value towards those that bring the most value to the individual. In other words, managers will act in self-interest, which might be at variance with interests of residual claimants most importantly those of shareholders. This variance can be reduced only through the added costs of monitoring or designing appropriate incentive structures (Drucker, 1995).

Jensen and Meckling proposed that the solution to this problem is to make the managers into owners but an upstanding remuneration given to the manager is not, according to Jensen and Meckling, an optimal solution. This type of remuneration would make the manager draw away from the formerly established targets as his reward would be independent of his work quality by giving them equity (Jensen & Meckling, 1976).

Agency theorists hold that managerial short-term result oriented attitude increases the agency costs borne by firms, and this is one of the principal arguments against traditional accounting measures of performance. The short term attitude of managers can inflict agency costs on the firm if there is excessive managerial emphasis on improving financial ratios by masking balance sheet realities. Some corporate managers may invest in certain projects,

which are more propelled by their specialized skills and experience but not by the economic realities of the firm. Such behavior is called *managerial entrenchment*, which focuses on incremental sales (income statement side) regardless of the quality of investments (balance sheet side) (Shleifer & Vishny, 1997).

The concept of EVA discourages managerial entrenchment, and reduces managers' incentive for overinvestment. The EVA encourages managers to accept projects that they truly believe will cover the full cost of capital and adds to the shareholder value.

Stewardship theory argues that managers' interests lie in the well-being of the organisation and they are at variance with other stakeholders only when the managers' position is threatened due to environmental threats like mergers, acquisition and takeovers.

EVA can be considered as a mechanism that aligns interests of managers with those of shareholders; and as a result, firms are less likely to be susceptible to agency costs (Hundal, 2015). The EVA system enables managers to make better decisions by providing them with superior information and insights. But information alone won't cause managers to choose the actions that maximize economic profits and shareholder wealth, especially when those actions are difficult or unpleasant. The real magic in EVA comes from changing behavior throughout an organization, and that depends crucially on using it as the basis for incentive compensation.

In short, use of EVA improves 'internal corporate governance' in the sense that it motivates manager to get rid of value destructive activities and to invest only in those projects that are expected to enhance shareholder value.

## **5. EVA AS AN INCENTIVE COMPENSATION SYSTEM:**

Compensations are direct financial costs for the organization, and if it is taken the fact that labor costs may represent a great amount of total operating costs, there is the need of viewing the compensation system in terms of investments that will result in value added for the company. An incentive program is a planned activity designed to motivate people to achieve predetermined organizational objectives. In fact, incentive compensations are the most commonly used motivation factor for motivating managers to maximize their skills in the accomplishment of these goals (Stewarts, 1998) Incentives are often excessively dependent on short-term performance. Bonuses depend so heavily on the results generated within one year that managers do not pay sufficient attention to long-term issues, and do not invest enough in projects that will increase their capabilities to succeed over a longer horizon. In other words, the problem with any incentive compensation system (and an illustration of agency costs) is that it can be manipulated by managers to maximize their compensation without necessarily increasing the profits of the firm. For example, if the incentive compensation system considers only the manager's performance this period, then it is often possible for a manager to take actions that raise reported performance this period but depress it in succeeding periods. Managers are also tempted to manipulate accounting to produce results they cannot sustain over the longer term. Incentives tied to accounting numbers may motivate executives to manipulate the timing of revenues and expenses to maximize pay out to them (Stewarts, 1998).

Another serious problem is concentrating incentives among top managers instead of involving all employees, and offering incentives insufficiently large to encourage people to

make unpleasant decisions. In most companies the board wants to limit the cost of making incentive payments. But that need not be the case.

EVA provides an incentive compensation system that differs radically from the conventional modal. The most important difference is that EVA bonus plans give managers the same visceral identification that an owner has with the success or failure of a firm. EVA bonus plans make managers think and act like owners by paying them like owners. This can be done by calculating cash bonuses as a fixed percentage of increases in EVA—in other words, by giving managers a piece of the EVA action.

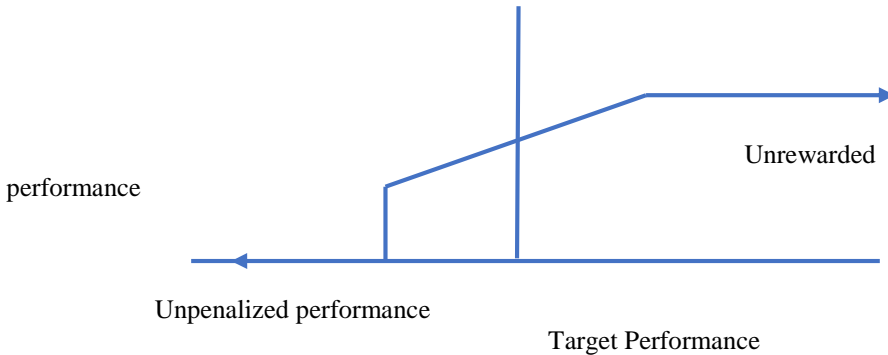
If bonuses are structured as a share of performance *improvements*—as a set percent of the additional wealth that is created by the ingenuity and energy of the employees, then the potential bonus awards can legitimately be quite large, indeed, uncapped, for all employees. With such a bonus structure bigger bonuses are better for all concerned. There is no question that such bonuses – even quite large ones – can be financed, because they are automatically self-funding. They are paid for out of the extra efficiency and growth that stems from giving the people a piece of the action. Bonus payments of this type are certainly not a cost to be minimized but are rather a share of the value to be maximized. After adopting such an “ownership-oriented” incentive philosophy, a board of directors should no longer feel obliged to limit potential bonus payments, and no longer should they be reluctant to extend a bonus program to even the lowliest worker (Evans, J., & Evans, R., 2002).

Therefore, EVA has to be incorporated into the incentive compensation system within a long term period. Otherwise, current EVA could be improved at expenses of future EVA and shareholder value.

Empirical evidence supports the above observations. Empirical studies concluded that EVA, when used as an incentive compensation measure, tends to improve the value of the firm by inducing managers towards value creating activities. An examination of the compensation structure and economic value added of 209 companies in 1995 –1998 provided evidence supporting incentive compensation where EVA is found to be positively and significantly related to incentive based compensation (Mihir & Fabrizio, 2005).

With conventional, that is the non-EVA, bonus plan. A bonus is paid out upon achievement of a given performance target with a limit on the upside (cap) and the downside (floor). The floor is meant to avoid “negative” bonuses and thus limit retention risk, while the cap is meant to limit shareholder cost, or the risk of paying too much when the stock price is not doing well.

### **Figure 1: Conventional Bonus Plan**



Source: S. David Young and Stephen F. O'Byrne, *EVA and Value-Based Management* (McGraw-Hill, 2001), p 132, reproduced with permission of the McGraw-Hill companies.

This bonus scheme has limitations: First, caps limit incentives for exceptional performance and floors limit penalties for mediocre performance, thereby reducing the intensity of the pay-to-performance relation. Second, these thresholds, combined with negotiated targets, encourage short-term gaming. When performance is already above the cap, managers will have an incentive to defer any additional profit opportunity to the next period, since they will not be rewarded for it and they may be penalized through a higher target the next period. Conversely, when it is clear that performance will be below the floor, managers will have an incentive to report even lower performance, since they will not be penalized further for it and may actually be rewarded through a lower target the subsequent period.

Under conventional incentive plan, managers have every reason to go into leisure mode once their bonuses have “capped out” and to engage in wealth-destroying behavior such as pushing additional sales into the next bonus year (Stewart & Bennett, 2002).

## 6. EVA BASED BONUS PLAN

EVA proponents recommend removing caps and floors, using objective targets delinked from the budget negotiation process and avoiding yearly resetting of the targets. In essence, the objective of the EVA bonus plan is to replicate the features of equity-based compensation (unlimited upside and downside incentives, objective external targets, high correlation with shareholder value, no accounting distortions) while preserving the line-of-sight feature of an operating performance bonus plan, less affected by factors outside management's control.

### 6.1 EARLY VERSIONS OF EVA BONUS PLANS

Bonus plans based on economic profit have existed for many years. The original EVA-based bonus plans were designed to be as straight-forward as the metric they were based upon. Quite simply, under these early plans management received a fixed percentage of EVA earned (O'Byrne, 2000).

$$\text{Bonus} = X\% * \text{EVA}$$

General Motors adopted such a plan in 1922 by giving managers a bonus pool equal to 10% of profit in excess of a 7% return on capital. In 1984, the Walt Disney Company gave Michael Eisner an annual bonus equal to 2% of net income in excess of a 9% return on equity. In both of these cases, a fixed percentage interest in economic profit worked quite well and the plan survived for a very long time. The General Motors bonus formula was used for 25 years without any change in the sharing percentage or cost of capital and the Eisner formula was used for almost 15 years with only one change in the cost of capital. Despite its success at General Motors and Walt Disney, this simple bonus formula is rarely used today.

Relative to conventional bonus schemes, this plan provides stronger leverage (through the uncapped fixed percentage interest) and removes the negative incentives associated with the presence of a cap. However, it presents the following problems (Hověžáková, 2010).

- ❖ **Mismeasurement of EVA:** If EVA is not measured properly, this type of plan may become too costly to shareholders. For example, if capital reflects historical book values rather than the market value of assets in place, EVA will be positive even if investors are not receiving a fair return on the value of the assets in place.
- ❖ **Accounting for Future Growth:** Even when EVA on assets in place is measured perfectly, this plan does not take into account the fact that the market value of a firm reflects not only the value of the assets in place but also the value of future growth opportunities. Since shareholders pay for both components of firm value, they expect a return of the full market value of their investment-assets in place and future growth opportunities. A positive EVA only ensures that the firm is delivering on the first component and, thus, it may be accompanied by a stock price decline. As a result, this bonus plan could impose excessive costs on shareholders and would not be as “self-financing” as its formula would suggest. Conversely, negative EVA may be accompanied by a stock price increase due to the creation of future growth opportunities, but this plan would not provide for any bonus opportunities at negative-EVA firms.
- ❖ **The Incentive to “Shift” EVA:** The presence of a floor (implicitly set at zero EVA) effectively makes the plan an option on “good” years (i.e., years with positive EVA), thereby encouraging the shifting of EVA across periods and resulting in higher effective cost to shareholders.

In the next generation of EVA bonus plans, the bonus was based on a percentage of the level of EVA and a (typically higher) percentage of the change in EVA (Young et al, 2001)

$$\text{Bonus} = (x\% * \text{EVA}) + (y\% * \Delta \text{EVA})$$

The  $y\%$  can be used to provide stronger incentives, while the  $x\%$  can be used to provide a competitive bonus. By focusing on changes in EVA, this plan is applicable to negative-EVA firms and can mitigate the mismeasurement problem. However, stronger incentives to increase EVA may alleviate but not eliminate the future growth problem. A positive change in EVA does not guarantee that investors receive a full return on their investment, since the increase in EVA may fall short of investors’ expectations. To address



this problem, it becomes necessary to incorporate such expectations directly in the bonus formula.

## **6.2 RECENT VERSION OF EVA BONUS PLANS**

The modern EVA bonus plan, Stern Stewart EVA bonus plan, eliminates the weaknesses of the two previous plans and provides a complex system for management remuneration. The core centre of the modern bonus plan is to determine three key parameters that are necessary for bonus computing. This procedure is called bonus plan calibration (Stephen et al, 2015).

**First:** It is necessary to identify the expected EVA improvements; expected EVA improvements must achieve at least the level of the cost of capital return on the market value of shareholders' investments. In other words, the expected investor return on the company's market value has to be calculated. If the managers achieve this amount the target bonus is earned. If they outperform the expected improvement the target bonus is exceeded, if they underperform they do not obtain any bonus.

**Second:** The Target Bonus which is the bonus earned by a manager for delivering the expected EVA improvement by investors (to be determined by the compensation committee prior to the performance period), in other words, is the bonus earned for zero excess EVA improvement, while managers should get rewarded (penalized) for superior (inferior) performance, with no limits on the upside or downside. Target bonus is based on the competitive compensation analysis which ensures that the firm's managers are rewarded at the same level at the managers of the other comparable companies. It also ensures that the management compensation costs are not as high as it could be without the analysis

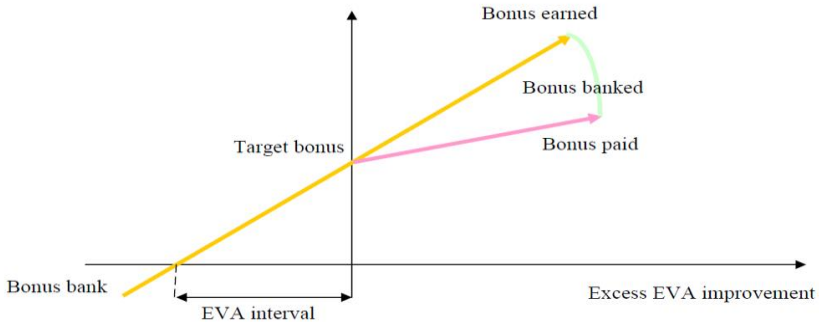
**Third:** As the last step EVA interval has to be computed, in other words we calculate EVA shortfall that causes zero return to shareholders. There is a simple logic, if shareholders do not receive any return, managers earn a zero bonus.

First off all, the expected return on the company's market must be determined. The expected return is computed as following (Balsley, 2012):

$$\textit{Expected return} = \textit{WACC} \times \textit{Market Value}$$

Secondly, the expected market value return is converted to an equivalent annual economic profit. The economic profit equivalent is computed as following (Rice & Cahan, 2000).

$$\textit{EVA interval} = \textit{Expected return} / ((1+\textit{WACC})/\textit{WACC})$$

**Figure 2: The Stern Stewart EVA Bonus Plan Design**

**Source:** Steve O'Byrne, Does VBM Discourage Investment in Intangibles? available at: [www.valuebasedmanagement.net/books\\_young\\_eva.html](http://www.valuebasedmanagement.net/books_young_eva.html)

Under characteristic modern EVA bonus plans, the bonus earned by a manager is equal to the sum of a target bonus plus a fixed share of excess EVA improvement, that is, the difference between the actual change in EVA and an expected improvement in EVA.

$$\text{Bonus} = \text{Target bonus} + y \% (\Delta \text{EVA} - \text{expected EVA improvement})$$

**Where:**  $\Delta$  EVA is the real EVA change in comparison to previous year ( $\text{EVA}_1 - \text{EVA}_0$ ).

The change in EVA less Expected EVA improvement (Excess EVA Improvement) is meant to capture the incremental EVA that a manager has delivered above and beyond the EVA growth that investors expect and have already paid for. Under these modern plans, the actual bonus will be higher (lower) than the target bonus when the performance is above (below) expectations. The percentage of the incremental performance ( $y\%$ ) that is returned to management is also established by the compensation committee.

The fixed percentage component results in an uncapped bonus level, on the upside or the downside. Removal of the upside cap creates an unlimited incentive for improvement. The removal of the downside cap could theoretically result in a negative bonus, but the bonus bank eliminates that possibility (SAVARESE, 2000).

## 7 . THE BONUS BANK MECHANISM:

Excess EVA improvement can be positive or negative, and when it's sufficiently negative, can make the total bonus earned negative. The bonus earned, both positive and negative, is uncapped. To help ensure that negative bonuses are recovered from the manager, Stern Stewart & Co proposed the use of a "bonus bank" designed to base a manager's annual bonus pay out on multi-period EVA delivery.

The bank balance is credited with any positive bonus earned and debited with any negative bonus earned. At the end of year, the bonus paid is determined by the bank balance: if the bank balance is negative, the bonus paid is zero; if the bank balance is less than the target bonus, bonus paid is the bank balance; and if the bank balance is greater than the target

bonus, the bonus paid is the target bonus plus 1/3 of the bank balance in excess of the target bonus (SHIL, 2009).

The mechanics of the bonus bank is presented as following:

- In every year, the “current year bonus” is calculated using the formula described above and based on the manager’s performance during that year.
- The “current year bonus” is then placed in a “bonus bank” that also holds the deferred (or unpaid portion of) bonuses from prior years.
- The bonus bank balance (after the current year bonus has been included), rather than the current year bonus, then determines the amount of bonus actually earned by a manager each year.

The amount earned is determined in two steps: 100% of the bonus bank (if possible) is paid up to the amount of the target bonus, plus 1/3 of the remaining bonus bank (after the target bonus).

To illustrate this point, let’s consider the following example:

**Table (1): EVA Bonus Bank**

	Target Bonus	Change in EVA	Expected EVA Improvement	Bonus Earned	Bank Beg. Balance	Bonus Paid	Bank Ending Balance
Year 1	100,000	15,000,000	5,000,000	300,000	300,000	166,667	133,333
Year 2	100,000	(5,000,000)	5,000,000	(100,000)	33,333	33,333	-
Year 3	100,000	15,000,000	5,000,000	300,000	300,000	166,667	133,333

Assume that  $y = 2\%$

Bonus Earned = Target Bonus +  $y\% * (\text{Change in EVA} - \text{Expected EVA Improvement})$

Bank Beginning Balance (BBB) = Previous Year Ending Balance + Bonus Earned

Bonus Paid: if BBB is negative, bonus paid is zero

Bonus Paid: if BBB positive, bonus paid is equal to BBB up to the amount of the target bonus, plus one-third of the excess.

Bank Ending Balance is the difference between BBB and Bonus paid.

**Note:** this approach ensures that the cumulative bonus earned is always equal to the cumulative sum of the target bonus plus management’s share of the cumulative excess EVA improvement. In fact:  $\$300,000 + 2\% * (\$25,000,000 - \$15,000,000) = \$500,000$ .

$\$500,000$  corresponds to the ending bank balance ( $\$133,333$ ) plus the cumulative bonus paid out ( $\$366,667$ ).

Source: S. David Young and Stephen F. O’Byrne, *EVA and Value-Based Management* (McGraw-Hill, 2001), p. 140, reproduced with permission of the McGraw-Hill Companies.

The bonus bank is a mechanism which extends the manager’s time horizon, managers are forced to take a longer view on the company performance. Bonus bank presents a deferred compensation.

## 8. EVALUATION OF EVA

**a. Virtues EVA:** Among the advantages of economic value added can be mentioned:

- ✓ EVA 's flexibility, it can be used as a measurement system for a company as a whole, but it can be easily applied to the individual divisions, factories, stores or product lines
- ✓ EVA is a perfect mean that improves business literacy because of its easy understandability and conceptual clarity. Even for non-financial specialists it is easy to understand the EVA concept and it offers the direct link with shareholder value
- ✓ EVA presents a complex performance measure that is linked with shareholder value creation; it removes the influence of accrual accounting.
- ✓ EVA, when used as an incentive measure, improves value of the firm and makes managers and employees feel as a contributor of company performance. The managers on the EVA based incentive bonus plan outperform those on the traditional bonus plan.
- ✓ EVA provides to the firm's managers the clear instructions how to improve EVA and the company performance. There are three main options, they can improve returns with existing capital, employ capital productively or reduce the capital costs.
- ✓ EVA may be appropriate to unite the interests of owner, managers and other employees. The optimal capital structure might be provided by EVA by making the firm properly levered. Motivating bonus system may motivate managers to exceed the performance level

### **b. Limitations of EVA**

With its advantages, the concept of Economic Value Added does have some inherent inconsistencies that are limiting the use of the method. Some of the limitations include (Saboll & Sverer, 2016):

- ✓ EVA, by itself, completely ignores the importance of different organizational structures; it presumes that the managers are all capable and have all important information necessary for their decision making. Further, EVA does not provide any framework for the strategic issues.
- ✓ Some companies have concluded that EVA does not suit them because of their focus on long-term investments;
- ✓ The true return or true EVA of long-term investments cannot be measured objectively because future returns cannot be measured, they can only be subjectively estimated;
- ✓ EVA is probably not a suitable primary performance measure for companies that have invested heavily today and expect positive cash flow only in a distant future;

Finally, some critics of EVA claim that it should not completely replace accounting earnings as a performance measure. For example, Dodd and Chen found that

accounting profit measures are still of significant information value even if EVA is already in use. Their study shows that along with EVA, companies should continue monitoring the traditional measures of accounting profit such as earnings per share, return of assets and return on equity.

## 9. CONCLUSION

Performance measurement systems that were successful in the past are becoming obsolete and in some cases are dysfunctional and obstructive to improvements. A dynamic and more competitive environment requires dynamic benchmarks to get a clear picture of whether the firm is a value generator or a value destroyer.

The EVA based performance measurement system is the basis on which the company should take appropriate decisions related to the choice of strategy, capital allocation, merger & acquisitions, divesting business and goal setting. The essence of the EVA is that true profit does not arise merely by paying cost to firms' debt holders but only when shareholders are also rewarded with a fair return on their investment. The EVA raises the bar of corporate performance, which adds value to the firm, and determines performance based executive pay; consequently, mitigating agency costs.

When it comes to the managerial compensations, EVA encourages managers to make decisions that are aligned with the creation of value for the shareholders. As it was described in the study, EVA incentive compensations are based not only on the year increase in EVA, but on the increase that is above expected EVA improvement. EVA is an appropriate tool for motivation system and in this way it motivates managers to think like owners; and provides a common language within the corporate culture.

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