

ECONOMIC VALUE ADDED AS TECHNIQUE OF PERFORMANCE EVALUATION

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Abstract

EVA can be used for the purposes of setting organizational goals, performance measurement, determining bonus, communication with shareholders and investors, motivation of managers, capital budgeting, corporate budgeting, corporate valuation, Economic performance Evaluation of Furniture Company through indicator many Slovak managers have recognized that to evaluate the performance of the company only on the basis of profit or revenues are not enough. Financial results provide more or less view into the past and say a little about the perspectives of the company. Therefore, many companies stopped taking accounting as the sole basis for measuring of performance. Modern approaches consider finance as only one of many indicators. The performers and treating under performers are today's norm to establish equity to work place. Aptly, lots of techniques have been developed so far to address this issue. Each technique has its own parameters and conceptual underpinning. Conceptualization of techniques with their limitations and challenges are very much important before their application. This paper gives an overview of different performance measures emphasizing Economic Value Added (EVA). An attempt is made to compare EVA with other performance measures to give the readers a more focused orientation with the EVA. Literature review is used as a methodology with qualitative orientation of research.

Keywords: *economic profit, performance measurement, value management, Performance measures.*

1.0 Introduction:

The Economic Value Added is not really a new concept. It is essentially the same as residual income-a concept that has been there in management text book for few years. EVA is a registered trade mark of Stern, Stewart & Co., and is a wonderful example of “how it is always possible to sell old wine, as long as you can get hold of anew bottle and buzzy brand name. a contemporary management intellectual, claimed that he discussed EVA at a considerable length . As examined by EVA is based on something we have known for a long time: what we call profits, the money left to service equity, is usually not profit at all. Until a business returns a profit that is greater than its cost of capital, it operates at a loss. Never mind it pays taxes as if it has a genuine profit. The organization returns less to the economy that is devours resources until less it does not create wealth it destroys it.”An accounting performance measures called residual income is defined as operating profit subtracted with capital charge. EVA is thus, one variation of residual income with adjustments to how one works out income and capital. EVA , simply is the gain that remains after levying a charge against operating profits for the opportunity cost of all capital-equity as well as debt used to produce these profits. Coined for its particular variety of economic profit, a concept that has been the part of main stream economic thinking for more than a century mentioned the residual income concept in 1980.According to Dodd and Chen, the idea of residual income appeared first in accounting theory literature in the early part of the last Century. This idea was propounded in Later this concept appeared in management accounting literature in the Also, Finish academics and financial Press discussed the concept in the the EVA concept is often called “Economic Profit” (EP) in order to avoid problems caused by the trade marking.

Economic value added:

The purpose of EVA is to assess company and management performance. EVA champions the idea a business is only profitable when it creates wealth and returns for shareholders, and requires performance above a company's cost of capital. EVA as a performance indicator is very useful. The calculation shows how and where a company created wealth, through the inclusion of balance sheet items. This forces managers to be aware of assets and expenses when making managerial decisions. However, the EVA calculation relies heavily on the amount of invested capital, and is best used for asset-rich companies that are stable or mature. Companies with intangible assets, such as technology businesses, may not be good candidates for an EVA evaluation.

Accounting Profit and Earnings Management EVA:

Many authors state that huge valuations are on a yearly basis designed inside organizations due to the fact sales can be used pertaining to decision making, it is argued that huge valuations are demolished applying accounting data. Established financial concept advises the corporation's final purpose would be to make best use of the wealth maximization of its stockholders. That will mustn't be shocking given that frequent stockholders (principals) which personal the organization are generally traders along with expect good long-term produce on their investment. Considering that the comfort connected with corporate governance has zero in numerous organizations, maximization connected with stockholders' wealth can be doubtful. A profit managing is just not a fresh trend. It takes in magnified press and investor attention within an environment where the current market punishes brokers that do certainly not meet their earnings quotes. It can't be denied that data processing techniques are chosen by means of brokers to meet anticipation involving shareholders along with experts. The cursory analyze with the Securities And Exchange Commission's a lawsuit funds implies that adjustment involving income constituted almost 20 % with the cases added by the section involving enforcement.

Scope of Study:

Scope of the study in general term means the extent to which it is possible to cover the subject, this study attempts to cover almost all the tools and techniques for the purpose of evaluating the financial dialectics. EVA can be used for the purposes of setting organizational goals, performance measurement, determining bonus, communication with shareholders and investors, motivation of managers, capital budgeting, corporate budgeting, corporate valuation,

Literature review:

[1] **Burkette and Hedley (1997)** explained that the EVA concept can be used to assess organizational performance known as economic profit; it can be applied for profit companies, public sector organizations and non-profit organizations. EVA is being used by these entities in a variety of ways, including as a management communication base, as a measure of corporate and divisional performance, to tighten management, shareholder interests and to emphasize the long-term benefits of industrial research and employee training.

[2] **Thenmozhi, MWest and Worthington (1999)** have examined whether the economic value-added is more highly associated with stock returns than conventional accounting-based measures by using a pooled time-series, cross-sectional data on 110 Australian companies over the period 1992-1998. The accounting-based measures of internal and external

performance include earnings, net cash flow and residual income. According to relative information content tests they reveal earnings to be more closely associated with returns than net cash flow, residual income and EVA. Their analysis of the components of EVA confirms that the capital charges and GAAP-related adjustments most closely associated with EVA are significant at the margin in explaining market returns.

[3] Roztocki (2000) examines the implementation of an integrated Activity-Based Costing and Economic Value Added system, using a database approach. The proposed database approach allows the creation of a costing and performance measure system which provides decision-makers with up-to-date, complete, and reliable cost information. He illustrates the steps for designing and implementing this integrated information system with data from a real company. He also investigates the advantages for calculating product cost information when a database is used to collect, store, retrieve, and analyze data. Improvements in quality of product cost information, resulting from this proposed methodology, are presented. Finally, he discusses the impact of this integrated information system on a company's decision-making and long-term business performance.

Hasani&Fathi, 2012) traditional as well as value-based are the two main classes of performance appraisal indexes of companies inside capital market. Under traditional appraisal indexes like revenues, dividend per share (DPS), return on equity (ROI), return on assets (ROA), cash flow (CFs) etc. of the investment in capital market were common over a long time period until value-based indexes were proposed which leads to companies performance appraisal. In traditional approach performance value is determined by only accounting profit which seems not a favorable method on account as it ignores the charges of securing investment capital which are main resources of organizations. Economic value-added index is just about the newest value-based indexes. According to this index value, the company depends on return as well as the applied capital charges. Therefore, the difference among economic value-added and traditional indexes is its attempt of this method to consider all financing costs.

Shil, (2009).For capturing the true economic profit, Economic Value Added (EVA) of an enterprise is best measure of financial performance. EVA takes an important position in modern financial and economic area that has been less debated among researchers and practitioners. As EVA is a performance measure and it is closely linked to shareholder wealth over time. Shareholders critically examine the business for their selective interest and expect that management have to work for their interest. Thus, EVA is important in sense that how much economic value is added by the management to the shareholders wealth while other traditional tools depended on accounted generated information. But accounting just brings historic data or distorted data which have no relation with real performance of company, while on other hand EVA makes viable performance measure of enterprises

3.0 Methodology:

Economic Value Added vs. Market Value Added: EVA is the surplus of net operating profit after taxes (NOPAT) after adjusting the cost of capital. The theory of EVA states that earning a return greater than the cost of capital increases the shareholders' value. For listed companies, Stewart defined another method that assess whether the company has created shareholders value that is Market Value added (MVA) method. As per the MVA approach, the company has managed to create shareholders value if the total market value of a company

is more than the amount of capital invested in it. When the case is opposite, then the company has destroyed shareholders value.

$MVA = \text{Company's total market value} - \text{Capital invested}$

Market Value Added is the difference between Market Value of the firm and its invested capital (including equity and debt) contributed to the firm. Mathematically, MVA can be expressed as under:

$\text{Market Value Added} = (\text{Market Value of Equity} + \text{Market Value of Debt}) - (\text{Book Value of Equity} + \text{Book Value of Debt})$ Symbolically, $MVA = (MVE + MVD) - (BVE + BVD)$

It can also be expressed as:

$\text{Market Value Added} = (\text{Market Value of Equity} + \text{Book Value of Equity})$ Symbolically, $MVA = (MVE - BVE)$

Characteristics and Advantages:

Economic Value Added focuses on five key factors to analyze how shareholders' value is Created:

- Net operating profit after tax and before
- financing cost ;
- The weighted average cost of capital ;
- Investment in the business ;
- The rate of return on investment ; and
- The competitive advantage period.

Residual Income vs. Economic Value Added:

It is strange but a fact that EVA has gained so much popularity in recent years when the concept of residual income has been inexistence even before EVA. EVA is a just refinement of residual income; Residual Income is the difference between profit and the cost of capital. It differs from EVA in the fact that profits and capital employed are book figures, i.e., the same as appearing in the financial statement. No adjustment to profit and capital employed figures as reported in the Profit and Loss Account and Balance Sheet are made unlike EVA.

Economic Value Added: Limitations:

The EVA measures suffer from a number of accounting flaws on account of the treatment Depreciation. For example, EVA is biased against new projects because when any investment is made, higher depreciation in the initial periods tend to lower EVA, exception those cases where the investment has a low pay-back period. EVA does not really measure value creation in terms of effectiveness with which the resource deployed are utilized. This makes EVA a poor measure of attractiveness of a business relative to the quantum of capital employed. EVA is dependent upon market valuation of equity.

Economic value added (EVA) versus Stock Returns:

The literature in organizing operations determines about three issues with deciding a selected business performance: industry, corporate and firm factors has to examine at which usually issues between these kinds of about three possess the most important impact in the business profitability and the industry's profits. He / she studies in which about 75% deviation associated with sector returns could be spelled out through sector components. Compared, only 20% with the deviation inside business profitability could be spelled out through sector side effects. Having a detailed dataset, take a look at your impact associated with influence of

industry, firm-specific and corporate-parent components within the profitability associated with both broad economic areas and the economy people community organizations with SIC categories.

RESULTS AND DISCUSSIONS:

EVA constitutes nowadays one of the most important and widely spread management techniques. EVA assumes that the Economic Value Added (defined as the change in the Net Operating Profit after Taxes minus the change in the Cost of the Capital used to generate it), is the best shareholder wealth measure, and thus, must be the key variable used by managers in the decision making process. The way to achieve this goal is usually to link part of managerial compensation to firm's EVA. The previous results shows the market index achieved negative revenue greater than the negative yield made by the stocks portfolios with high EVA. This may indicate a benefit to increase the yield for the equity portfolio, the EVA return is significantly lower than the market return. It can be explained by these results, the systemic risk for shares with high EVA and market risk was lowered therefore, changes in the prices of these stocks and their returns are less than changes in the market index both in the case of a rise or a decline so the return (positive or negative) for the investigator of the shares with high EVA is always less than the market return. In general, the previous results did not support the first hypothesis of the study, which aimed to test the theory allegations which referred to the use of the EVA to design the investment policies conducive to extraordinary returns compared to market return. This will ultimately lead to contribution in stock returns. But in this study, it is tried to find out how much EVA is showing its worth in contribution to stock returns. Mostly investors are keen in the stock return an upward trend in stock return attract investors toward investment in stock that will further raise the demand in the stock market and will lead to increasing stock prices and performance of the stock market.

Economic value added as technique of performance evaluation:

A measure of the economic value addition by Indian companies, and To move the benchmark of performance of companies from accounting profits to economics profits and shareholder wealth creation.

Table: The conversions of the basic components of EVA are presented.

1	- non-operating fixed assets
2	+ goodwill
3	+ intangible assets related to capitalized costs
4	increase in the value of fixed assets from revaluation (hidden reserves)
5	+ value of the leased property (leasing)
6	+ cumulative unexpected losses
7	- cumulative unexpected profits
8	non-operating current assets
	+ hidden reserves from revaluation of current assets

Adjustment to Capital Employed:

For calculation of correct EVA, the following adjustments are required to be made for capital employed.

The capital employed can be calculated through the assets side of the balance sheet or the liability side. From the asset side, capital employed is the current assets less the non-interest bearing current liabilities i.e. the net working capital plus the net fixed assets.

Use the beginning of the year capital employed for calculating EVA as this was the capital available to the management to earn the returns and it helps in evaluating capital budgeting decisions. Adjustment to “Cost of Capital” The third elements in EVA calculations is the cost of capital, which is the weighted average of the cost of debt, cost of equity capital and cost of preference capital, If any. While the cost of debt is the average interest rate paid by the company on its debt, the cost of equity can be found out using the Capital Asset Pricing Model (CAPM) and the cost of preference shares can be taken as the fixed rate of dividend. The results of our statistical tests and model by following the analytical tools described in the table below We applied these statistical tools

Table: descriptive statistics of variables

	R	EVA
Mean	-0.055790 -	-4957497.
Median	-0.049282	-840178.7
Maximum	1.178588	2516979
Minimum	-1.120360	-93955311

CAPM model:

(Capital Assets Pricing Model) $RA = R_f + \text{Beta} (R_m - R_f)$

Where, RA = Return on Assets

R_f = Risk free rate

R_m = Return on market Beta = Beta is measurement of Risk.

- EVA is most directly linked to the creation of shareholder's wealth over time. The term “maximizing value” in the EVA context, means maximizing long term yield on shareholders' investment and not just the absolute amount of earnings/profits.
- The mechanism of EVA forces management to expressly recognize its cost of equity in all its decisions from the board room to the shop floor. The inclusion of this element in overall cost of capital results into the goal congruence of the managers and owners.
- EVA compensation system ties management's interest with those of shareholders. A regular monitoring of EVA emphasizes on problem areas of a company and helps managers to take corrective actions.
- It is used to assess the likely impact of competing strategies on shareholder's wealth and thus helps the management to select the one that will best serve shareholders.
- EVA also helps in brand valuation. The brand equity or value created by a particular business unit for its brand could be equated with the value of wealth that the brand has generated over a period of time.
- EVA framework provides a clear perception of underlying economics of a business and enables managers to make better decisions

Conclusion:

For performance evaluation of the analyzed furniture company the method of economic value added EVA was selected, because this method is the most appropriate modern method which can evaluate a company limited, that is not traded on the stock exchange and thus is not possible to obtain a market expression of its value. When we calculate the indicator EVA, we used gradual modifications that were presented in the methodology paper to company is successful in earnings rate of return that exceeds its cost of capital. Argues that EVA is a more useful all-purpose corporate tool than NPV or DCF, even though both methodologies properly give the same result over an extended period of time. Professor Israel Shacked, an ardent critique, also remarked that “EVA is the best proxy for value creation, but caution needs to be exercised instead of blindly applying this concept to any company and any industry. The most productive way to use Eva would be to understand its limitations.” In other words, EVA is the ideal measure for matured companies or matured industries. Both for cash sensitive companies or companies in growth stage of the business cycle, where liquidity is a major factor, the Cash Value Added (CVA) could better depict value creation.

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