THE CHOICE OF FINANCIAL PERFORMANCE MEASURES AS ONE OF THE MOST CRITICAL CHALLENGES FACING CORPORATION

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Abstract

The value-based measures are discussedby focusing on their measurement logic: The most important value-based measures are: economic value added (EVA), the cash flow return on investment (CFROI), the shareholder value added (SVA), the economic margin (EM) and the cash flow value added (CVA).The aim of this work is the collection and compilation materials about the Value Based Management (VBM) approach. Although an integral part of VBM-approach measures the value of the company, it fundamentally differs from traditional methods of the business evaluation, most of which give a "point" result and are isolated from management context and are snatched out of the ultimate goal and donot assume its monitoring.

Keywords: Value Based Management (VBM), Economic value added (EVA) Cash flow return on investment (CFROI), Shareholder value added (SVA), Economic margin (EM), Cash flow value added (CVA)

Introduction

The theory and practice of business valuation are widely used in the works of foreign scientists. Best knownscientists were awarded the Nobel Prize (James Tobin (1981), Franco Modigliani (1985) and Robert Merton (1997)) for developing the performance measurement systems.

Fisher (1930) and Hirschleifer (1958) introduced the discounted cash flow techniques, such as Net Present Value (NPV) and the Internal Rate of Return (IRR). Miller and Modigliani (1958; 1961) suggested a more consistent determination of valuation. Gordon (1962) incorporated growth and the cost of capital in valuation models. In order to determine the cost of capital, Sharpe (1964), Lintner (1965), Mossin (1966), and Black (1972) developed the Capital Asset Pricing Model (CAPM). Solomons (1965) introduced the divisional performance and the adaptation of Residual Income (RI), while Tobin (1969) suggested the Tobin's Q as the proper valuation method. Stern (1974), motivated by Miller and Modigliani conclusions, worked on Free Cash Flows (FCF), and lastly Rappaport (1986) and Stewart (1991; 1999) developed a new concept known as the Shareholder Value (SHV) approach. Modern value-based performance measures gained their popularity since the late 1980s, and thereby, the Value Based Management (VBM) approach became increasingly popular both as a decision making tool and as an incentive compensation system (Knight, 1998).

Firms focused on the maximization of shareholder value need to ensure that all activities yield positive net present values. A number of value-based financial performance measures have been developed in an attempt to guide management actions towards achieving this objective.

The value-based measures are discussed by focusing on their measurement logic: The most important value-based measures are: economic value added (EVA), the cash flow return on investment (CFROI), theshareholder value added (SVA), the economic margin (EM) and the cash flow value added (CVA)[77]. This article will focus on calculation, examining the data, the advantages and disadvantages of these methods.

Total shareholderreturn(TSR)

This is the change in a company's stock price for a given period plus its free cash flow over the same period, as a percentage of the beginning stock price. TSR can be measured only for publicly traded companies because it requires observable stock prices.

Total shareholder return = (Stock price$_{\text{End of period}}$ − Stock price$_{\text{Start of period}}$ + Dividends paid) ÷ Stock price$_{\text{Start of period}}$

The Boston Consulting Group (BCG) mentions the total shareholder return (TSR) as the central metric of the entire corporate strategy process and underlines the following advantages of using this approach: 1) it incorporates the value of dividends and other cash pay-outs which can represent anywhere from 20 to 40% (or even more) of a company's TSR; 2) it integrates all the dimensions of the value creation system better than other accounting-based or cash-based metrics; 3) the minimum appropriate TSR goal is easy to establish: it will be set by either the company's cost of equity or the expected average TSR of its peer group (assuming that this average is higher than the cost of equity). Therefore, the firm can easily state how much higher it should reach depending on the aspirations of the senior team and on its competitive advantages and management capabilities.[78]

Market Value Added (MVA)

Market Value Added (MVA) is the difference between the capital that has been invested and the market value of the capital. MVA is the assessment within the marketplace on what the net present value is for all investments made by the company.

MVA = Shareholder Value Added + Residual Value

1. MVA is also used as a way of benchmarking market performance between companies. In order to have a comparable MVA, a standardized MVA is calculated by dividing the change in MVA by the adjusted equity value at the beginning of the year.

Economic Value Added (EVA).

EVA is an estimate of the economic profit generated by a firm[79] and is after tax (NOPAT) to the total cost of all its forms of capital (debt, as well as equity).[80]Maximization a firm's EVA should result an increase inshareholder value created.[81] Proponents of the measure report high levels ofcorrelation with share returns.[82]

The EVA measure is expressed by the following formula:

[77]Lehn, K.L., &Makhija, A.K. (1996). EVA and MVA as performance measures and signals for strategic change. Strategy and Leadership, 24(3), 34-40.; Grant, 2003Foundations of EVA TM for investment managers. Journal of Portfolio Management, 23(1), 41-48.; Stewart, G.B. (1991). The Quest for value: The EVA TM management guide. New York: HarperBusiness.)

[78]Boston Consulting Group (2008) Missing link–Focusing corporate strategy on value creation. The 2008 Value Creators Report.

[79]Stern, J. M., G. B. Stewart III and D. H. Chew, Jr. (1995), 'The EVA® Financial System', Journal of Applied Corporate Finance, 8(2).

[80]Grant, J.L. 2003.Foundations of EVA TM for investment managers. Journal of Portfolio Management, 23(1), 41-48.).

[81]Stewart, G.B. (1991). The Quest for value: The EVA TM management guide. New York: Harper Business.

[82]Worthington, T West Australian 2004..Journal of Management 29 (2), 201-223, 72.

EVA = Net Operating Profit After Tax – Weighted Average Cost Of Capital* Invested capital at the end of t-1 ,

EVA measure is implemented in firmsmainly for two reasons: 1)its objective is to extend a firm's organizational knowledge and the understanding of its process'sfinancial implications, which should improve the decision making process and thereby eventuallyincrease a firm's value; 2)it can be easily understood.

Shareholder Value Added (SVA).

The Basic Idea of one of the best known value-based performance measures: Shareholder Value is driven by Long-term Free Cash Flows. Shareholder Value is created when Long-term Returns > Cost of Capital and vice versa.This is the measure of the enterprise's value for shareholders. Net Operating Profit after Taxes minus the cost of the capital is the basis of estimating SVA:

SVA = Net Operating Profit after Taxes – The Costof Capital,

The main advantage of this matric: SVA holds that management should first and foremost consider the interests of shareholders in its business decisions. SVA offers a common approach which is not subject to the particular accounting policies that are adopted. It is therefore globally applicable and can be used across most sectors.The main disadvantage of this matric: The concentration on shareholder value does not take into account societal needs. Therefore, a management decision can maximize shareholder value while adversely affecting third parties, including other companies.

Cash Flow Return on Investment (CFROI)

CFROI is a performance measurement ratio for managers who can influence and thus also take the responsibility for all financial aspects of their organizational unit, except investments and depreciation and except of the financing structure. It is a percentage rate of return valuation model that is essentially cash flow divided by market value of capital employed. The objective is to guide the manager so that he realizes high sales volume with low controllable costs and small investments in assets.

$$\mathbf{CFROI} = \frac{\text{Gros Cash flow} - \mathit{DepreciatiEconomic}}{\text{Gross investments}}$$

Bennet Stewart mentions two types of disadvantages of CFROI: the accounting and financial disadvantages. Accounting distortions deal mostly with the different costing methods (LIFO, FIFO etc) while the financial distortions deal mostly with proportion of debt and equity. If the management's task is the particular ROE, the manager can accept the bad project which is financed by the debt, and reject the good one if it is financed by the equity.[83]

Thus, a firm's value will depend on the CFROI it earns on assets in place and both the abruptness and the speed with which this CFROI fades toward the cost of capital. Thus, a firm can therefore potentially increase its value by doing either of the following: 1.Increasing the CFROI from assets in place for a given gross investment; 2.Reducing the speed at which the CFROI fades toward the real cost of capital.

Cash Value Added (CVA)

CVA as another value-based metric was developed by the Boston Consulting Group. In contrast to EVA it is derived from cashflow numbers. Cash Value Added (CVA) is the difference between the cash flows which should be generated by the company to cover the

[83]Stewart, G. B. (1991), The Quest for Value: A Guide for Senior Managers, First Ed., New York: Harper Business.

costs of capital and the cash flows which are generated at present. This is cash value added from the customers. One can introduce CVA the following example:

CVA = (CFROI – THE COST CAPITAL)* INVESTMENT CASH

Someone might think that EVA and CVA are similar. In theory they are, but not in reality. In theory, they are alike. As we know, in reality a few corrections and adjustments are carried out to calculate CVA or Residual Cash Flow (RCF),[84] they are therefore not similar in real life.The main disadvantage of this model is the complexity of the calculations and the difficulties associated with forecasting cash flows.

This traditional and apparently unchanged behavior in financial performance measurement seems to be confirmed by the empirical evidence that emerges from the most recent analysis about the most common financial metrics used in compensation plans, conducted in 2010 by the U.S. National Association of Corporate Directors (NACD) regarding about 1,300 individual from public company boardrooms across 24 industry sectors: profits and EPS (and similar ratios) weigh 97%, cash flow 36%, economic value measures like EVA and CFROI 16%, and stock price based measures 31% (multiple responses being allowed).[85]

Conclusion

The value-based financial performance measures are proposed by certain research studies asimprovements over the traditional financial measures.The value-based financial performance measures are proposed by certain research studies as improvements of the traditional financial measures. Each of the examined indicators has its limitations and disadvantages as well, because the area of value creation is a relatively new branch of knowledge. Some authors propose them combined in the assessment process of value creation. From our point of view, this approach is not optimal because VBM system efficiency can be achieved by submission of all significant common goals of management decisions. Therefore, in each case, the company's management must select the appropriate valuation figure for reasons of efficiency, the benefits and costs associated with obtaining the information needed to calculate it.

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