UNVEILING ECONOMIC VALUE ADDED (EVA): A HOLISTIC METRIC FOR TRUE VALUE CREATION IN MODERN BUSINESS

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ABSTRACT

In today's dynamic business landscape, traditional financial metrics often fall short of providing a complete understanding of a company's true economic performance. This research paper delves into the concept of Economic Value Added (EVA), a comprehensive performance metric that bridges the gap between economic and financial evaluation. EVA offers a comprehensive and holistic measure of a company's value creation potential by integrating both explicit and implicit costs. Through an in-depth exploration of EVA's components, implications, and real-world application, this paper highlights its significance in strategic decision-making, investment evaluation, and long-term sustainability. A case study of Tata Consultancy Services (TCS) illustrates how EVA surpasses conventional financial metrics, enabling a more accurate evaluation of a firm's economic performance.

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***Keywords:** EVA, Modern Business, True Value, Financial Metrics, TCS.*

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Introduction

In the dynamic landscape of business, assessing a company's performance is a crucial task. Traditional metrics, while informative, often fall short of capturing the full scope of a firm's economic performance. Financial performance, for instance, focuses on explicit costs, failing to account for the underlying opportunity costs and resources owned by the firm itself. This deficiency calls for a more comprehensive approach to evaluation, giving rise to the concept of Economic Value Added (EVA). EVA aims to bridge the gap between economic and financial performance, offering a comprehensive and holistic measure of a firm's true value creation potential.

The Limitations of Financial Performance Metrics

Financial performance metrics, while widely used, have inherent limitations. These metrics primarily focus on explicit costs - the tangible expenses incurred by a company or those for which liability exists. These costs are subtracted from the firm's income to determine financial performance. However, this approach disregards the implicit costs associated with resources owned by the company. These implicit costs are essentially opportunity costs - the potential value that could have been generated had those resources been used differently.

The Hidden Opportunity Costs

Implicit costs represent a pivotal aspect of a company's operations, but they often remain unaccounted for in traditional financial statements. This omission leads to an incomplete understanding of a company's economic performance. By concentrating solely on explicit costs, traditional measures of performance overlook the broader spectrum of economic activity. A holistic evaluation demands the consideration of both explicit and implicit costs, as they collectively shape the true economic reality of the firm.

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The Essence of Economic Cost and Performance

The concept of Economic Cost incorporates both explicit and implicit costs. This comprehensive approach provides a holistic view through which to examine a firm's economic performance. Unlike the constrained approach of financial statements, economic performance considers the firm's income while also deducting economic costs. The result is a more comprehensive and accurate measurement of performance that captures the full array of resources at the company's disposal.

The Advocacy for Economic Value Added (EVA)

Acknowledging the limitations of traditional financial performance metrics, the idea of Economic Value Added (EVA) emerges. EVA seeks to harmonize economic and financial performance evaluations by embracing both explicit and implicit costs. This approach creates a more reliable benchmark of a company's actual value generation capacity. By incorporating implicit costs into the equation, EVA furnishes a comprehensive and trustworthy representation of a firm's economic worth.

Net Operating Profit after Taxes (NOPAT): Unveiling the Core

Before delving into the realm of economic value added and cost of capital, it is essential to acquaint ourselves with the premise of financial performancei.e. Net Operating Profit after Taxes (NOPAT). NOPAT is a comprehensive measure that reflects the profit generated by a company's core operations, net of interest and tax expenses. The formula for calculating NOPAT is a step-by-step revelation of a company's operational efficiency:

The computation of NOPAT can be explained with the following illustration:

Illustration 1

Particulars	₹ In Crores
Net Profit as given in the Profit & Loss Statement	300
Add: Tax (i.e. $\frac{25}{75}$ x 300)	100
Profit before Tax	400
Add: Interest on Debts & Non–Current Liabilities	100
Operating Profit before Interest & Tax (EBIT)	500
Less: Tax @ 25%	125
Net Operating Profit after Tax (NOPAT)	375

Weighted Average Cost of Capital

Crossing the realm of operational profit, the Weighted Average Cost of Capital (WACC) emerges as a vital concept in the realm of finance. WACC is a measure that captures the proportional cost of the various capital components employed by a company, namely equity, preference shares, and debts & other non-current liabilities. To comprehend the intricacies of WACC, let us navigate through the computation process of WACC.

To calculate the Weighted Average Cost of Capital (WACC), a comprehensive process involves assessing the costs associated with equity, preference shares, and debts & other non-current liabilities. These costs are then weighted based on their relative proportions in the company's capital structure. This dynamic approach ensures that each component's impact is accurately reflected in the overall calculation.

A salient aspect in the computation of WACC is the robust treatment of debts & other non-current liabilities. Recognizing their tax-deductible nature, these liabilities undergo an adjustment. This adjustment acknowledges the tax benefits associated with such liabilities, leading to a recalibration that reflects their actual cost. This careful consideration safeguards the accuracy of the final WACC figure, facilitating a more precise understanding of the capital's true cost.

By properly integrating the diverse facets of capital - equity, preference shares, and debt - alongside their respective costs, WACC emerges as a robust and holistic metric. Its strength lies in its capacity to present a comprehensive and holistic picture of the capital's average cost, accounting for the interplay of various financing mechanisms. This multifaceted approach ensures that WACC captures the intricate dynamics of equity, preference shares, and debt financing, thereby illuminating the complex terrain of capital utilization and cost determination. The formula in respect of WACC is explained as under:

Capital Employed = Equity + Preference Shares + Debt & other Non–Current Liabilities

Proportionate Cost of Equity =	Cost of Equity (in %) x $\frac{Equity}{Capital\ Employed}$
Proportionate Cost of Preference Shares =	Cost of Preference Shares (in %) x $\frac{Preference\ Shares}{Capital\ Employed}$
Proportionate Cost of Debt &Other Non–Current Liabilities =	Cost of Debt & other Non–Current liabilities (in %) x (1 – Tax Rate) x $\frac{Debt\ \&\ other\ non-current\ liabilities}{Capital\ Employed}$

The culmination of this intricate process results in the derivation of the Weighted Average Cost of Capital (WACC) by aggregating the proportionate expenses associated with equity, preference shares, and debts & other non-current liabilities.

This methodical computation emphasizes the proportional significance of each capital element within the company's financial structure. The interplay between relative weights and respective costs for each capital component is carefully considered. This careful approach culminates in a holistic assessment, offering a more precise and comprehensive measure of the company's aggregate capital cost.

The summation of relative weights and costs is pivotal. This intricate fusion ensures that the calculated WACC accurately reflects the interwoven dynamics of equity, preference shares, and debt. As a result, it provides a conceptual and detailed understanding of the holistic capital composition, its associated costs, and its broader implications for the company's financial outlook.

The computation of WACC can be explained with the following illustration:

Illustration 2

Particulars	₹ in Crores
Equity Share Capital (fully paid shares of ₹ 10 each)	200
Retained Earnings	300
16% Preference Share Capital (fully paid shares of ₹ 100 each)	250
8% Debentures (fully paid of ₹ 100 each)	1250
Tax Rate	25%
Cost of Equity	20%

Equity = Equity Share Capital + Retained Earnings = ₹ 200 crores + ₹ 300 crores = ₹ 500 crores

Capital Employed = Equity + Preference Shares + Debts = ₹ 500 crores + ₹ 250 crores + ₹ 1,250 crores = ₹ 2,000 crores

WACC = $[20\% \times \frac{₹\ 500\ crores}{₹\ 2,000\ crores}] + [16\% \times \frac{₹\ 250\ crores}{₹\ 2,000\ crores}] + [8\% \times (1 - 0.25) \times \frac{₹\ 1,250\ crores}{₹\ 2,000\ crores}]$

WACC = 5% + 2% + 3.75% = 10.75%

In-depth Implications: Shaping Strategic Decisions

The conceptualisation of NOPAT and WACC extends beyond calculations; it influences real-world strategic decisions. NOPAT, as a measure of operational efficiency, guides managerial actions towards optimizing core operations. A higher NOPAT signifies robust operational efficacy, prompting managers to continue enhancing production processes, cost control, and resource allocation.

On the other hand, WACC transcends numbers to impact the very essence of a company's financial structure. The accurate calculation of WACC enables businesses to evaluate potential investment projects, determine their risk profiles, and assess their potential returns. A lower WACC often serves as a green light for undertaking projects, as it signifies a more cost-effective use of capital.

Overcoming Challenges and Envisioning the Future

While NOPAT and WACC are undeniably potent tools, they are not without challenges. Calculations might become intricate due to variations in tax laws, differing debt structures, and dynamic equity markets. However, with advancements in financial technology and data analytics, these challenges can be mitigated.

Looking ahead, the relevance of NOPAT and WACC is poised to escalate. In an era where data-driven decision-making dominates corporate strategies, these metrics assume a greater role in evaluating performance and predicting future trends. As companies prioritize value maximization and sustainable growth, the ability to accurately assess their financial standing becomes an invaluable asset.

Understanding the Cost of Operating Capital Employed

In the realm of modern business evaluation, traditional financial performance metrics sometimes fall short in providing a complete understanding of a company's true financial costs. These metrics predominantly focus on explicit costs, disregarding the intricate interplay between explicit and implicit costs. Implicit costs, such as the opportunity costs associated with equity and preference shares, are often overlooked in the pursuit of assessing a firm's financial performance. This oversight has given rise to a more comprehensive measure known as the Cost of Operating Capital Employed. In this paper, we have delved into the significance of this metric and its role in offering a more accurate assessment of a company's overall capital utilization. The Cost of Operating Capital Employed is a robust metric that goes beyond the conventional financial evaluation framework. It is calculated by multiplying the capital employed by the Weighted Average Cost of Capital (WACC). Unlike traditional metrics, this approach incorporates both explicit and implicit costs, offering a more holistic perspective on a company's financial operations.

Explicit and Implicit Costs: The Distinction

Before delving into the concept of the Cost of Operating Capital Employed, it's important to understand the distinction between explicit and implicit costs. Explicit costs encompass the expenses that are directly associated with a company's operations. These costs are either already settled or represent liabilities that the company is under obligation to pay in future. On the other hand, implicit costs encompass the opportunity costs that arise from utilizing resources owned by the company itself. These implicit costs are often overlooked when measuring financial performance through traditional metrics.

Enhanced Insight with Implicit Costs

One of the key differentiators of the Cost of Operating Capital Employed is its inclusion of both explicit and implicit costs. Unlike traditional financial performance metrics that primarily focus on explicit costs, this metric takes a more comprehensive approach. By considering both explicit and implicit costs, it provides a deeper insight into the true cost of capital employed by the company.

Holistic Assessment of Capital Utilization

Implicit costs related to equity and preference shares are particularly significant in understanding a company's financial operations. These costs are inherently tied to the company's capital structure and represent the alternative uses of resources. By integrating implicit costs into the calculation, the Cost of Operating Capital Employed offers a more accurate assessment of the overall capital employed by the firm.

Significance in Financial Evaluation

The significance of the Cost of Operating Capital Employed lies in its ability to offer a more conceptual understanding of a company's financial performance. Traditional financial metrics often overlook the opportunity costs associated with equity and preference shares. As a result, they provide an incomplete view of a company's financial health.

By incorporating implicit costs, the Cost of Operating Capital Employed bridges this gap and provides a more reliable measure of capital utilization. This comprehensive perspective is crucial for strategic decision-making, investment evaluation, and overall financial planning.

Understanding Economic Value Added (EVA)

EVA is a performance metric that goes beyond the basic evaluation of net profit, offering a more holistic assessment of a company's economic performance. It is calculated by subtracting the Cost of Operating Capital Employed from the Net Operating Profit after Tax (NOPAT). This seemingly simple equation has profound implications, as it encapsulates the intricate relationship between a company's earnings and the cost of the capital required to generate those earnings.

The Integration of Implicit Costs

What sets EVA apart is its integration of implicit costs into the evaluation of economic performance. By considering both explicit and implicit costs, EVA provides a comprehensive picture of the true cost of capital employed by the firm. This holistic approach paints a more accurate portrayal of a company's financial health, as it recognizes the full spectrum of resources required to generate earnings.

A Deeper Dive into EVA Components

Breaking down the EVA equation sheds light on its components. The Net Operating Profit after Tax (NOPAT) reflects the income generated by a company after accounting for taxes. This figure represents the earnings available to both debt and equity holders.

The Cost of Operating Capital Employed, on the other hand, is the summation of explicit and implicit costs. It incorporates explicit costs associated with debts and non-current liabilities, while also factoring in implicit costs related to equity and preference shares. This comprehensive cost assessment aligns with the principle that all sources of capital employed in a business carry a cost, whether explicit or implicit.

EVA as a Reliable Performance Indicator

EVA stands as a superior indicator of economic performance compared to the traditional net profit metric. By incorporating implicit costs, EVA provides a more accurate measure of a firm's ability to generate value. This accuracy is crucial for investors, analysts, and stakeholders alike, as it reflects the company's ability to allocate resources efficiently and generate returns that exceed the total cost of capital employed. Furthermore, EVA aligns with the overarching goal of wealth maximization—a fundamental objective for every business entity. While net profit may provide an initial overview of financial performance, EVA delves deeper to capture the essence of value creation. It showcases a company's ability to not only cover its costs but also generate surplus value, ultimately contributing to long-term sustainability and growth.

The computation of NOPAT can be explained with the following illustration:

Illustration 3

Particulars	₹ in crores
Equity Share Capital (fully paid shares of ₹ 10 each)	200
Retained Earnings	300
16% Preference Share Capital (fully paid shares of ₹ 100 each)	250
8% Debentures (fully paid of ₹ 100 each)	1250
Tax Rate	25%
Cost of Equity	20%
Net Profit	300

Cost of Operating Capital Employed = Capital Employed x WACC

As both Capital Employed and WACC are computed in illustration 2, therefore

Cost of Operating Capital Employed = ₹ 2,000 crores x 10.75% = ₹ 215 crores

Economic Value Added (EVA) = NOPAT – Cost of Operating Capital Employed

Now NOPAT is computed in illustration 1 therefore:

EVA = ₹ 375 crores – ₹ 215 crores = ₹ 160 crores

Case Study: Tata Consultancy Services (TCS)

To demonstrate the practical application of EVA, we have taken the case of Tata Consultancy Services (TCS), a prominent firm in the information technology industry. The financial data for the financial year 2022-2023 provides valuable insights into EVA revealing a more precise representation of a company's performance compared to traditional financial metrics.

Particulars (Standalone) for the year 2022 – 2023	₹ in crores
Equity Share Capital	366
Retained Earnings	74,172
Preference Share Capital	0
Debts & Other Non–Current Liabilities	5,965
Tax Rate	34.94%
Finance Cost	695
Net Profit	33,630

Source: https://www.bseindia.com/xml-data/corpfiling/AttachHis//085896fa-2e3b-4ecc-b9f1-31a31b7204b5.pdf

Calculation of Net Operating Profit after Taxes (NOPAT)

The starting point for calculating EVA is to determine the Net Operating Profit after Taxes (NOPAT). This involves adding taxes to the net profit to arrive at the pre-tax profit. Further, by including the interest on debts and non-current liabilities, the operating profit before interest and tax (EBIT) is obtained. Finally, the tax is deducted from EBIT to derive the NOPAT. The calculation is shown as under:

Particulars	₹ in Crores
Net Profit as given in the Profit & Loss Statement	33,630
Add: Tax (i.e. $\frac{34.94}{65.06}$ x 33,630)	18,060
Profit before Tax	51,690
Add: Interest on Debts & Non–Current Liabilities	695
Operating Profit before Interest & Tax (EBIT)	52,385
Less: Tax @ 34.94%	18,303
Net Operating Profit after Tax (NOPAT)	34,082

Calculation of Cost of Equity

To calculate the Cost of Equity, the Capital Asset Pricing Model (CAPM) is employed. This model incorporates various factors such as the risk-free return, the return on the market portfolio, and the systematic risk of the company relative to the market portfolio.

$Re = Rf + (Rm – Rf)β$

In this equation:

Re represents the Return on Equity,

Rf stands for the Risk-Free Return,

Rm denotes the Return on the Market Portfolio, and

β represents the Systematic Risk of TCS relative to the Market Portfolio.

The risk-free return rate (Rf) is established at 6.680%, based on a one-year time frame, as documented in the source provided: https://www.niftyindices.com/Factsheet/Factsheet_NIFTY_G-SEC_Indices.pdf.

The CAPM model offers a structured approach to assessing the compensation for the level of risk associated with an investment. It factors in the risk-free rate, the expected return from the market, and the asset's sensitivity to market risk. By incorporating these elements, the model aids in determining an equitable rate of return on equity that appropriately reflects the potential risks and rewards for an investor.

The calculation of the Cost of Equity for TCS involves adjusting the systematic risk (beta) for the leverage of the firm. The beta for the unlevered firm is multiplied by a factor that considers the debt-to-equity ratio and the tax rate. The result is a refined beta for the levered firm, which is then used to calculate the Cost of Equity.

In the pursuit of calculating the Return on the Market Portfolio (Rm), the BSE Sensex has been designated as the benchmark indicator for the preceding 16 years. The rationale behind opting for the BSE Sensex as the market portfolio measure finds its foundation in TCS's distinguished status as a blue-chip enterprise. Its sustained inclusion as a constituent of the BSE Sensex for an extensive duration lends credence to this selection.

Period	Year	BSE SENSEX	TCS	LN (BSE SENSEX)	LN (TCS)	RT(BSE)	RT (TCS)
1	March 2008	15,644.44	810.90	9.657870861	6.69814474		
2	March 2009	9,708.50	540.00	9.180757069	6.29156914	-0.4771138	-0.40658
3	March 2010	17,527.77	780.80	9.771541759	6.66031904	0.59078469	0.36875
4	March 2011	19,445.22	1,182.50	9.87535656	7.07538612	0.1038148	0.415067
5	March 2012	17,404.20	1,167.85	9.764466835	7.06291973	-0.1108897	-0.01247
6	March 2013	18,835.77	1,571.80	9.843513001	7.35997674	0.07904617	0.297057
7	March 2014	22,386.27	2,128.25	10.0162031	7.66305532	0.1726901	0.303079
8	March 2015	27,957.49	2,547.05	10.23844042	7.84269111	0.22223732	0.179636
9	March 2016	25,341.86	2,516.05	10.14021285	7.83044549	-0.0982276	-0.01225
10	March 2017	29,620.50	2,431.10	10.29622197	7.79609911	0.15600912	-0.03435
11	March 2018	32,968.68	2,849.30	10.4033133	7.95482863	0.10709133	0.15873
12	March 2019	38,672.91	2,000.40	10.56289463	7.60110244	0.15958134	-0.35373
13	March 2020	29,468.49	1,823.05	10.29107684	7.5082662	-0.2718178	-0.09284
14	March 2021	49,509.15	3,177.60	10.80991278	8.06388147	0.51883594	0.555615
15	March 2022	58,568.51	3,738.80	10.97795246	8.22651998	0.16803968	0.162639
16	March 2023	58,991.52	3,205.80	10.98514898	8.07271695	0.00719652	-0.1538

The calculation of the Cost of Equity for TCS involves adjusting the systematic risk (beta) for the leverage of the firm. The beta for the unlevered firm is multiplied by a factor that considers the debt-to-equity ratio and the tax rate. The result is a refined beta for the levered firm, which is then used to calculate the Cost of Equity.

Covariance (BSE SENSEX & TCS) = 0.053325

Variance (BSE SENSEX) = 0.072146

$\beta = \dfrac{\text{Covariance (BSE SENSEX \& } TCS}{\text{Variance (BSE SENSEX)}} = \dfrac{0.053325}{0.072146} = 0.739124$

Adjusting β for levered Firm i.e. β for levered firm =

β for unlevered firm x $[\ 1 + (\ 1 - \text{Tax Rate})\dfrac{\text{Debt}}{\text{Equity}}]$

Considering TCS as a levered firm, we can calculate β for TCS = 0.739124 x [1 + (1 - 0.3494) x $\dfrac{5,965}{366 + 74,172}$] = 0.777607

Re = Return on Equity or Cost of Equity of TCS = Rf + (RM – Rf)β

Rm = Regression Coefficient of Natural Log of BSE Sensex with Period from 1 to 16 years (i.e. from 2008 – 2023) = 9.936%

Hence = Re = 6.680 + (9.936 – 6.680)0.777607 = 9.212%

Thus Cost of Equity of TCS = 9.212%

Calculation of Cost of Debt

The Cost of Debt is computed by dividing the interest expenses of debts and non-current liabilities by the total debts and non-current liabilities. This percentage represents the cost of debt financing for the company.

Cost of Debt = $\dfrac{\text{Interest on Debts \& } Non\ Current\ Liabilities}{\text{Debts \& } Non-Current\ Liabilities} = \dfrac{695}{5965} = 0.11651$ or 11.651%

Calculation of Weighted Average Cost of Capital (WACC)

The Weighted Average Cost of Capital (WACC) is the key element in the calculation of EVA. It takes into accountthe Cost of Equity, Preference and Debt, considering their proportions in the company's capital structure. By weighing these costs, the WACC provides a comprehensive measure of the average cost of capital employed by the firm.

Capital Employed = Equity + Debts & Non–Current Liabilities = (₹ 366 crores + ₹ 74,172 crores) + ₹ 5,965 crores = ₹ 74,538 + ₹ 5,965 = ₹ 80,503 crores

WACC = [Cost of Equity x $\dfrac{\text{Equity}}{\text{Capital Employed}}$] + [Cost of Debts & Non–Current Liabilities x (1 – Tax Rate) x $\dfrac{\text{Debts \& } Non-Current\ Liabilities}{\text{Capital Employed}}$]

WACC = [9.212% x $\dfrac{74,538}{80,503}$] + [11.651% x (1 – 0.3494) x$\dfrac{5,965}{80,503}$] = 8.529% + 0.562% = 9.091%

Calculation of Cost of Operating Capital Employed

The Cost of Operating Capital Employed captures both explicit and implicit costs associated with the company's capital utilization. It is calculated by multiplying the WACC by the capital employed, which is the sum of equity and debts & other non-current liabilities.

Cost of Operating Capital Employed = Capital Employed x WACC = ₹ 80,503 crores x 9.091% = ₹ 7,318.53 crores

Calculation of Economic Value Added (EVA)

EVA is the culmination of this comprehensive analysis. By subtracting the Cost of Operating Capital Employed from the NOPAT, EVA reveals the surplus value generated by the firm's operations. In the case of TCS, this surplus value demonstrates the company's ability to generate value beyond its capital costs.

Economic Value Added (EVA) = Net Operating Profit after Tax – Cost of Operating Capital Employed = ₹ 34,082 crores – ₹ 7,318.53 crores = ₹ 26,763.47 crores

Therefore, the Economic Value Added (EVA) for TCS is ₹26,763.47. It provides a better indicator of the economic performance compared to the Net Profit of ₹33,630 crores stated in the Profit & Loss Statement.

The case study of Tata Consultancy Services (TCS) emphasises the power and relevance of Economic Value Added (EVA) in evaluating economic performance. EVA goes beyond the limitations of conventional financial metrics by considering both explicit and implicit costs, providing a more accurate assessment of a firm's value generation capabilities.

Implicit costs, which often go unnoticed by traditional metrics, play a significant role in the determination of a company's true economic performance. EVA's incorporation of these implicit costs through the Cost of Operating Capital Employed enriches its ability to offer reliable insights to investors, analysts, and stakeholders.

As businesses navigate a complex and competitive landscape, EVA emerges as an invaluable tool—one that measures not only profitability but also the creation of sustainable value. Through its holistic evaluation of capital utilization, returns, and costs, EVA empowers companies to make informed decisions, drive growth, and ultimately achieve their objectives of wealth maximization. By adopting EVA as a key performance indicator, businesses can unlock deeper insights into their true economic potential.

Conclusion

Economic Value Added (EVA) emerges as a transformative metric that offers a comprehensive and accurate evaluation of a company's value creation potential. By integrating both explicit and implicit costs, EVA provides a nuanced perspective that traditional financial metrics lack. The case study of TCS showcases how EVA can illuminate a company's economic performance beyond surface-level profitability. As businesses prioritize value maximization and sustainable growth, EVA becomes an invaluable asset in accurately assessing their financial standing and guiding strategic decisions. EVA's ability to capture the essence of value creation positions it as a crucial tool for companies navigating the complex terrain of modern business.

References

1.   CHEN, SHIMIN AND JAMES L. DODD, 1997, Usefulness of Operating Income, Residual Income, and EVA: A Value-Relevance Perspective, Working Paper, Social Science Research Network.

2.   HAMILTON, R., 1777. An Introduction to Merchandize. Edinburgh. Referred by BIDDLE, BOWEN AND WALLACE, 1997.

3.   KEFGEN, KEITH Y MAHONEY, ROSEMARY, 1996, Economic Value Added: A New Performance Measure for Incentive Pay, www.hotel.online.com, October.

4.   MARSHALL, A., 1890. Principles of Economics. The MacMillan Press Ltd., London, New York. Cited by BIDDLE, BOWEN AND WALLACE, 1997.

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