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The Value of Economic Reality: Applying Economic Value Added

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Abstract

The concept of Economic Value Added (EVA) is a revolutionary way to measure the value of a business. In its simplest form, EVA is a system that determines companies' worth and performance based on their economic reality, not numbers produced according to traditional accounting rules. EVA sets high standards for measuring performance and is essential for all companies wishing to create value for their shareholders.

The Value of Economic Reality: Applying Economic Value Added

Introduction

For years, public companies have been measuring their performance according to the method of Generally Accepted Accounting Principles (GAAP) and indicators such as Earnings per Share (EPS). From their long continued use, GAAP indicators have become the trademark measurements in today's marketplace. On the surface, EPS looks like an accurate measure of performance; however, in reality the method used to calculate EPS ignores numerous important expenses that change performance results significantly. In light of this problem, two University of Chicago graduates pioneered a new method of measuring and creating value in a business. In 1982, Joel Stern and G. Bennett Stewart III founded Stern Stewart & Co. and formally launched their revolutionary concept of Economic Value Added (EVA). Since then the concept and application of EVA has grown rapidly, with hundreds of companies worldwide adopting all or parts of it. EVA has greatly impacted the financial world and changed the way many people perceive value. Investors now have a better way to measure the true performance of a company and managers have a better grasp on how to create value for their shareholders. Although no theory is without skeptics, evidence continues to mount that EVA is correct in its methodology and assumptions, and can live up to its claims of being an alternative to traditional accounting (Kudla, 2000; Stewart, 1999).

Although certain aspects of this economic theory are very complex, the beauty of EVA is its overall simplicity. This report seeks to provide a simple, but in-depth understanding of EVA concepts and their applications and assumes that the reader may have a limited knowledge of accounting and finance. As such, the following discussion

focuses on the major principles of EVA without the extreme detail on the metrics of EVA. It is also presented with limited equations for even more simplicity. Topics to be discussed include the necessity of EVA, the four major applications of EVA—Measurement, Management System, Motivation, and Mindset—as identified by the Stern Stewart & Company (n.d.), and Market Value Added (MVA). Also included is a comparison study of companies that have adopted the EVA method. No matter how good EVA sounds in theory, it has no case for continued use without quantitative results. As will be shown, EVA companies average much better performance than their non-EVA competitors, and the foundational concepts in this report allow investors of all levels to better measure other companies' performance.

The Importance of EVA

While many businesses and organizations operate successfully without using EVA, none will likely reach their full potential until they apply the concepts set forth in EVA. Although companies do not have to follow the EVA format specifically, the underlying value concepts do need to be followed. They are not new concepts; however, it will benefit the reader to begin with a better understanding of what comprises EVA and the reasons to study it.

What is EVA?

EVA is the idea that companies do not earn a true profit until all costs, including items such as opportunity costs and cost of capital, have been covered. In other words, showing a profit on the income statement is not enough. The amount of earnings must also cover opportunity costs—the benefit foregone by using resources in a particular manner. But more importantly earnings must cover cost of capital—the return demanded

by shareholders and cost of debt. Only the earnings left, if any, after subtracting the firm's physical costs and intangible costs, can be considered profits. When a company earns more than its total costs, then it has made a true profit or "economic profit." The term "economic profit" was first developed by British Economist Alfred Marshall and includes the cost of capital as well as other adjustments. However, its basic theme is that firms must account for all costs, tangible or intangible, to earn a real profit. If an economic profit is not earned, then it does not matter what the income statement shows. In reality, the company is merely breaking-even or operating at a loss. Only economic profits measure true performance and create real value for a company and its shareholders (Rutledge, 1993).

Why Understand EVA?

Because of EVA's practical and performance driving concepts, one would think EVA should be the dominant measurement system in corporate America. However, one only need to read a newspaper to see that most of the business world still revolves around the traditional accounting rules of Generally Accepted Accounting Principles (GAAP) and conventional measurements such as Earnings per Share (EPS). GAAP accounting, though, is inconsistent at best and described by G. B. Stewart as "a jumble of ad hoc rules established by the tugging and pulling of competing factions and diverse perspectives… [in which] the measurement of earnings that accounts for and guides the creation of shareholder value has been lost in the shuffle" (*WSJ,* June 2, 2003, p. 4). Because GAAP ignores many important factors that determine the value of a company, shareholders are often left in the dark on their company's actual performance. To correct this situation, shareholders need a basic understanding of EVA principles to better evaluate their

investments. Likewise, executives and managers need to understand EVA in order to make better decisions for their shareholders. Furthermore, it is not always necessary to have an intimate knowledge of EVA or use all of its methods. Even a basic understanding can be applied effectively (Stewart, *WSJ,* 2003).

Analyzing EVA: The Four Ms

EVA has four primary applications and goals it seeks to accomplish. Though each is important individually, all four work together to bring maximum value to a firm. Developed by Stern Stewart & Company (SS&C), the applications are "Measurement", "Management System", "Motivation", and "Mindset", and are the foundation of the EVA concept (Stern Stewart & Company, n.d.).

Measurement

The first step in applying the EVA concept is measuring a firm's performance by EVA standards instead of traditional accounting methods. The reason is quite simple: GAAP accounting provides a distorted view of a company's performance and creates numerous "anomalies" that must be corrected in order to see the firm's true economic results (Stern Stewart & Company, n.d.). In all, over 160 different adjustments could be made to GAAP accounting procedures to measure earnings and value better. They cover all aspects of business to include inventory, restructuring, and depreciation. Though not all the adjustments can be implemented at once or in every company, the underlying principle is that managers should abandon traditional accounting techniques when measuring value (Stern Stewart & Company). Three of the most important changes are highlighted below.

Cost of Capital

The biggest adjustment EVA makes is the cost of equity capital. In simple terms, cost of equity is the required rate of return demanded by investors, or a return equal to the amount they could have received had they invested their money elsewhere. It is the opportunity cost of the investor that a firm must match or beat. If the return generated is less than the cost of equity, then the company's stock will sell below its true value and destroy its shareholder wealth: "Only by earning more than the cost of equity can a company create wealth. The cost of equity is a critical cutoff rate, an invisible but profound dividing line between superior and inferior corporate performance" (Stewart, *WSJ,*2003, June 2, p. 2).

In equation form, this concept is stated as:

$$EVA = NOPAT - [WACC \times C]$$

NOPAT = *Net Operating Profit After Tax,* WACC = *Weighted Average Cost of Capital,* and C = *Capital Invested* (Abate, Grant, & Stewart, 2004) (p. 2).

The calculation of WACC includes both equity and debt. A friendlier form of the equation, also known as "residual income", is

$$\text{Economic Profit} = \text{Accounting Profit} - \text{The Cost of Equity}$$

In both equations, equity capital is clearly not free. In reality, it is more expensive than financing through a bank, because shareholders almost always have a higher expected return than lenders (Stewart, *Applied Corporate Finance,* June 2, 2003; Tully, 1994).

For example, investors can usually earn a 10% return on their investment, either in the stock market or elsewhere. Historically, the average return for the stock market since 1926 has been about 12.2% (Gitman & Joehnk, 2003), but for simplicity 10% will

be used in this example. Therefore, the required rate of return for these investors is 10%. In 2002, the companies comprising the S&P 500 had approximately $3 trillion in equity capital outstanding, or $3 trillion of other people's wealth invested in the 500 companies. At 10%, the required rate of return for investors, the total net earnings for these companies should have been a minimum of $300 billion to return 10% in value. However, the total net income of all 500 companies for the same period was only $118 billion. Subtracting net income from the cost of capital, we see that the actual performance of the S&P 500 during 2002 was an economic value loss of $182 billion. In effect, investors in these companies lost $182 billion in value they could have received had they invested their money elsewhere in the market. However, under traditional accounting rules, the $300 billion charge is completely ignored and equity capital is presumed to be free. The $118 billion of net income appears to have created value for the investors (Stewart, *WSJ,* June 2, 2003).

Stock options

Another major correction EVA makes is in the area of stock options: "Every independent academic expert in America knows that stock option grants are an economic expense, and the market has already factored the cost of outstanding and future grants into current stock prices. Yet option cost are not now deducted" (Stewart, *WSJ*, June 2, 2003, p. 3). Stock option grants are not recognized as a legitimate expense by GAAP; therefore, they make great incentives and rewards that do not show up on the income statement. It is no surprise then that option grants are used extensively today and consequently, often abused. The downside to option grants, however, is that most companies eventually spend significant cash to buy back the stock from exercised

options. While sometimes there are good reasons to buy back company stock, by doing so the company diverts cash that could be used for better purposes. Most of the time, the company could create more value by paying off debt or expanding the business. Therefore the extensive use of option grants decreases value but is ignored by GAAP rules (Stewart, *WSJ*, June 2, 2003).

Pension plans

A third adjustment to GAAP methods is accounting for pension plan expense. Current pension plan rules have loopholes that allow companies to increase earnings falsely. The process is not illegal, but it does present a distorted picture. Companies can deduct from their pension expense the *projected* spread between long-term asset returns and interest rate liabilities in their pension plans. If the company were to transfer the pension assets into stocks instead of keeping them in bonds, then the fund's return would appear to increase and consequently increase earnings as well. However, since equity is more risky than debt, all that has really occurred is the fund's assets have been exposed to greater risk. The risk-adjusted rate of return is the same and actual earnings have not changed. Still, the average shareholder is fooled into thinking the company has improved its performance, when in reality it might have decreased. EVA accounts for the increased risk, whereas GAAP accounting does not (Stewart, *WSJ,* June 2, 2003).

Management System

The second of the Four M's is the EVA Management System (Stern Stewart & Company, n.d., ¶4): "While simply measuring EVA can give companies a better focus on how they are performing, its true value comes in using it as the foundation for a comprehensive financial management system that encompasses all the policies,

procedures, methods and measures that guide operations and strategy" (Stern Stewart & Company, n.d., ¶4). However, redirecting a manager's focus away from the bottom line is not an easy task. Wall Street rewards and punishes companies severely when they meet or do not meet their earnings as predicted. Likewise, upper managers punish lower managers and departments when they miss targets. Stern Stewart & Company (SS&C) describes the condition of traditional management systems as follows:

> In a very important sense, the process of becoming an EVA company is one of subtraction as well as addition. It involves the paring away of all other financial metrics, each of which can frequently mislead managers to the wrong decision. If the stated corporate goal is to maximize the rate of return on net assets, for example, highly profitable divisions will be reluctant to invest even in attractive projects for fear of eroding their returns. Underperformers, meanwhile, will be eager to invest in almost anything, even if the expected return is below the firm's cost of capital, in order to lift their average return and buy their way out of trouble. The uniform focus on continuously improving EVA, in contrast, provides the best insurance that all managers are making the right decisions for shareholders. (Stern Stewart & Company, n.d., ¶ 5)

The pressure of meeting earnings often encourages managers to make faulty business decisions for short-term profit at the expense of long-term results. Society is filled with examples of what happens when this occurs on a large scale (Stewart, June 2006). The most notable and still very recent example is Enron.

Enron

Despite the general opinion that "creative accounting" and executive greed were the sources of Enron's collapse, in reality it was neither of them. This is not to say bad leadership, intentional or unintentional, did not contribute and make the situation worse, but it was not the primary cause. Enron's collapse was due to long-running financial strategies at all levels that were detrimental to the company. "Creative bookkeeping" as it is, was a consequence rather than a cause. As G. Bennett Stewart notes, "Enron did not fail because of creative bookkeeping, for instance, but was creative in bookkeeping because it was failing" (June 2006, p. 2). Enron's managers made three critical mistakes. None of them would have been as bad individually, but combined they created an atmosphere that eventually destroyed the company (Stewart, June 2006).

Mark-to-market accounting (M2M). Enron recorded profits with a technique called mark-to-market (M2M) accounting. Essentially, M2M allows a company to record all profits from a contract up front, which would normally be spread out over the life of that contract. Enron used this method to record its earnings on interest spread over the life of contracts in the year the contract was signed. Obviously, this method will tremendously boosts earnings for the particular year a contract is signed. It should be said that M2M was and still is a legitimate form of accounting used successfully in other industries. Enron was not doing anything illegal by using M2M, but when combined with another Enron policy, it became a system that was easily abused and used in ways never intended (Stewart, June 2006).

Incentives and compensation policy. Enron's performance measures and compensation plans were directly linked to earnings. Managers maintained and increased their compensation by the profits they recorded. Therefore, M2M accounting was the ideal system for managers to increase earnings. The more deals signed, regardless of quality, the better earnings were. The net effect, however, was that M2M was radically abused and profits were recorded on obviously bad investments, projections, and even unproven business ventures that eventually failed. It did not matter whether the investment or project actually earned the money it was supposed to after it started. What mattered were future expected earnings, all of which were recorded at the beginning. As early as 1992, Enron's earnings began to explode while its capital position and return to shareholders were being destroyed. This culture eventually brought Enron to the point where it lost money on investments because these investments did not even return the cost of capital (Stewart, June 2006).

Finance profit center. Enron's third critical mistake was allowing the finance department to be turned into a profit center. The CFO, Andrew Fastow, wanted a place in the incentives program that deal-makers in the rest of the company received. As a result, the financial control center diverted its attention from managing and controlling the company's finances to "doing deals, financing growth, bullying naysayers, and papering over problems that stood in the way of earning massive incentive awards" (Stewart, June 2006, p. 4). Now Enron had no restraints to hold back its investment and earnings free-for-all. Eventually, accountants had to become creative to hide the problems this strategy was causing, but Enron's situation could only stay afloat for so long. Eventually there was no money left to invest and nothing was being returned

because the investments were so bad. Investors learned what was happening and devalued the stock as Enron declared the largest bankruptcy in U.S. history (Stewart, June 2006).

Enron Conclusions

Unquestionably, the character of Enron's leadership played a role in its collapse. However, it was the entire management system, which focused the company so intently on earnings that provided the temptation and incentive to make bad decisions. Managers knowingly pushed bad investments for their own benefit because of the existing culture. To protect against a misguided system like Enron's, EVA teaches managers there are only three ways to create value. The first is to increase the return of the company's current assets by operating more efficiently without spending more capital. The use of more capital on existing ventures often negates any efficiency gained. The second way is investing new capital and growing the business, as long as returns are greater than the cost of capital. As Enron demonstrates, making low-return investments destroys a firm's capital position and future earnings. Finally, companies can increase value by freeing up capital by selling assets that are worth more to others than to themselves. There is no need for a company to hold assets that can be better utilized by someone else. By not doing so, assets are not used efficiently and companies often miss other opportunities to obtain better assets that bring higher returns. Management systems focused on areas other than these three will not create value for the firm and will hinder a company's long-term success (Stern Stewart & Company, n.d.).

Motivation

The third part of the EVA approach is Motivation (Stern Stewart & Company, n.d., ¶ 7). As shown in the Enron study, linking bonuses and reward systems to earnings is not a wise strategy. Most managers will never act illegally or intentionally do things to harm their company; nonetheless, such reward systems provide incentives to make decisions counter to the company's best interest. Even if approached with good intentions, managers still might sacrifice long-term results for short-term gains. Instead, compensation and incentive plans should be based on the value managers create for shareholders, and there should be no limit on how much can be earned. The more value managers create for the company, the bigger their reward should be. Shareholders will also be content, because they will know any increase in compensation has been more than offset by the value created: "In fact, under EVA, the greater the bonus for managers, the happier shareholders will be" (Stern Stewart & Company, n.d. ¶ 7). The Stern Stewart model for incentive plans makes two major changes to today's average corporate incentive plan.

No Negotiation

First, EVA changes the focus of reward systems from a negotiation act to a truly motivating system. Traditionally, managers receive a bonus for meeting a sales target or beating a budget. In either case, those targets are usually pre-defined at the beginning of the year, and a manager's biggest incentive is to negotiate targets he can easily meet. The goal is then met and the manager gets his bonus. In addition, if the bonus is the same each year or limited to a certain amount, then the manager has even more of an incentive to just barely beat his targets. If the manager beats the targets by a lot, then he or she

risks having his expectations raised the following year, making the same bonus harder to achieve. EVA bonus systems, however, take negotiation out of the system and replace it with a strong incentive to perform better (Stern Stewart & Company, n.d.).

With EVA, bonus targets automatically reset according to the EVA formula:

$$\text{Bonus} = K_1 [EVA_t - EVA_{t-1}] + K_2 [EVA_t]$$

$$K_1, K_2 = \text{constant percentages and } K_1 >> K_2$$

According to the equation, managers receive a constant percentage (K) of the change in EVA ($EVA_t - EVA_{t-1}$) and also a percentage of total EVA (K_2 [EVA_t]). The second part is only earned once EVA becomes positive, and in effect measures the sustainability of value created. Therefore, managers can still be rewarded for creating value, even if a company's overall EVA is not yet positive. However, once the total EVA does become positive, managers have even more incentive to perform. This part of the equation encourages managers to make decisions that are beneficial for the entire company, not just his or her department. The more positive overall EVA is and the bigger the change from year to year, the larger the bonus will be. Bonuses are determined entirely by how hard they work, and there is no limit as to how high the rewards can go. Thus, EVA managers are strongly motivated to create more and more value for the shareholder year after year. If accomplished, then the manager gets rewarded very well for his or her efforts but can still do better the next year (Kudla, 2000).

Negative Bonuses

Secondly, EVA changes the way bonuses are distributed. Instead of issuing the full amount at the end of the year, EVA encourages storing portions earned for several years to make sure that EVA improvements are sustainable. Therefore managers are not rewarded for short-term value created. Due to this feature, managers could potentially

have negative bonus earnings in a year where EVA dropped significantly. Managers should have incentives to go for big projects, ones that will add long-term, sustainable value to the company. If rewards are given for short-term successes as in traditional systems, most managers will lose focus on creating lasting value: "The EVA result is annual budgets that are driven by aggressive strategy instead of strategy that is constrained by modest budgets" (Stern Stewart & Company, n.d. ¶ 8).

Mindset

The final component of the EVA framework is recreating the corporate mindset. However, truly changing the way managers think and operate is not an easy task. A lot of time and effort must be spent to ingrain the EVA systems into a company culture. While measurements, management systems, and motivation techniques are the tools EVA uses, the real goal is accomplished when people change their perspective and discover the need for what they are doing.

Implementing EVA

To fully ingrain EVA into a company's culture and maximize effectiveness, it must be the central focus of the business. To do that, a number of steps must be taken. First, upper managers must stand strongly behind the change. A solid commitment from senior management is vital for successful integration and implementation of EVA programs: "Without management buy-in, employees may view the program as just another temporary corporate trend" (Kudla, 2000, p. 2). Secondly, EVA must be the dominant measurement system and not just added to others: "Because EVA is a measure of total factor productivity, it can and should supersede other financial and operating measures, resulting in a hierarchical as opposed to a 'balanced' scorecard" (Stern Stewart

& Company, n.d. ¶ 11). Thirdly, EVA must influence decision making. The mindset of increasing shareholder wealth with every decision will not take hold unless routinely practiced. Lastly, the implementation process must be given time. Depending on the size of the company, the full integration period may take several years, and the actual start of wealth creation may take even longer. The timing also depends on how wide the implementation process is. Some companies do not have the money or resources to implement EVA across the entire company. A company-wide plan also requires a significant amount of training throughout the organization:

> Even when finances are not at issue, educating and training employees on the concepts of EVA is a formidable task. Employees must understand how they influence EVA through their actions. Key value drivers need to be identified at all organizational levels…After the program is implemented, the company must commit to continuous training to ensure that employees stay up to speed. (Kudla, 2000, p. 3)

Implementing the EVA system is not an easy task; however, the results of doing so make it a worthwhile process.

Results

Once the EVA system has been successfully integrated, the culture of a company may be expected to change dramatically. All sections of the business will be united under a common goal, and departments that normally compete become much more cooperative because the system of competition is no longer in place. Strategic planning and budgeting become friendlier to the operating side of the business because EVA replaces the standard budget controlling environment. Decision making becomes

decentralized, giving managers at all levels the responsibility for creating value: "The EVA framework is, in effect, a system of internal corporate governance that automatically guides all managers and employees and propels them to work for the best interest of the owners" (Stern Stewart & Company, n.d. ¶ 10). Employees are then poised to produce incredible results that bring great rewards to both them and the shareholders.

Market EVA

A thorough discussion has been presented on the structure and goals of EVA, but how does EVA translate into the real marketplace? How does the increased value that EVA produces for shareholders actually get to the shareholders? One method is by natural stock appreciation. If a company performs well by EVA standards, it will almost always translate into higher performance on the income statement. However, another method is through EVA's close relative, Market Value Added (MVA). EVA and MVA are inseparably linked, but they are two separate measurements.

EVA vs. MVA

In a basic sense, MVA shows how the marketplace thinks about EVA. Shawn Tully (1994) of *Fortune* magazine describes MVA as follows:

> Related to MVA, EVA measures the wealth a company creates each year. It is defined as net income from operations, less the cost of capital needed to produce that income. Think of MVA as the value the market places on the future stream of annual EVAs. Generating big, positive EVA year after year is the key to enriching investors. (¶ 10)

In another article, Tully (1998) says MVA is "the market's reward for strong growth…the premium the market awards a company over and above the money investors have put into it, based on the market's expectations of future EVAs" (¶ 12). Although EVA in effect determines MVA, the two do not always seem in sync. A study conducted in 2000 of the 50 top wealth creators showed that most of the time there is a positive relationship between EVA and MVA. When the EVA-to-capital ratio is up, then the MVA-to-capital ratio is also up. If EVA is down, then MVA usually follows (Abate, Grant, & Stewart, 2004).

Nevertheless, this is not always the case. Sometimes one can be negative while the other is positive. One can be going up while the other is going down. The key phrase in Tully's definition above is *future EVAs,* and it also depends on the industry. In 1993, Exxon and Mobile had incredibly strong MVAs and yet severely negative EVAs. The reason was that both of them had huge gas reserves that took up massive amounts of capital. However, the markets fully expected the capital to appreciate and produce massive earnings in the future. Likewise, GE had an EVA of only 1% of its MVA, clearly indicating that the markets expected huge returns in the years to come. On the other hand, pharmaceutical companies showed the opposite in 1993. They posted huge EVA gains and yet their MVA fell. Although conditions were good currently, the market expected competition to increase and cut future EVAs (Tully, 1994).

Power of MVA

MVA is a powerful tool for comparing company performance and predicting what future performance will be. Coca-Cola and PepsiCo serve as good examples. In 1993 Pepsi looked very successful. The company had increased sales by 102% since 1988 and

had annual revenues of $25 billion. Pepsi's earnings per share had jumped 73% in five years, which was more than Coke's. In contrast, Coke had increased its sales by only 73% and had annual revenues of $14 billion. The difference between the two was that Coke's MVA was $53 billion, more than double Pepsi's $22 billion. It took Pepsi $20 billion in capital to produce its gains; however, it took Coke only $7.9 billion to produce its gains. MVA shows that Coke used its assets much more efficiently than Pepsi and produced more wealth for shareholders. Therefore the market had faith in Coke to continue its outstanding performance, whereas the market did not expect much from Pepsi (Tully, 1994).

Measuring MVA

MVA is calculated by adding a company's debt and market value of stock, and then subtracting the amount of capital that was invested. The result shows how much wealth has been created or destroyed (Tully, 1994). Companies that consistently create wealth are usually rewarded by the market, even if their current EVA happens to be negative. However, companies that often destroy wealth will not be rewarded, even if they have a good EVA at times. Investors then have a good idea of where the stock price will go and make good investments (Abate, Grant, & Stewart, 2004).

EVA Results

No study of EVA would be complete without looking at the results of companies that have put EVA into practice. Without strong results, EVA is just another business theory. However, the power of EVA is not in its theory but in the results it produces. In addition to better market performance, almost all EVA companies receive some

intangible benefits such as improved decision making, better communication from managers and improved strategic planning (Tejpavan, & Kulkarni, 2005).

EVA vs. Market

EVA's goal of maximizing shareholder wealth is directly shown by the stock returns that most EVA companies receive compared to competitors in their respective markets and the market in general. In an unpublished Stern Stewart study, 67 of their clients were compared to the general market. The companies selected had to have been in the EVA program at least 5 years, and were selected to include a wide range of industries. Each company was then compared to the top ten competitors in its respective industry that had the closest market capital. In the first 5 years of using EVA, Stern Stewart clients returned average annual gains of 21.8%, whereas the competitor group averaged annual returns of only 13% (Tully, March 1999). From March 24, 2000 to the mid point of 2002, Stern Stewart's EVA companies earned a total return of 36.5% while beating the S&P 500 by 69.8%. In firms that adopted the EVA system totally for decisions and performance measures the returns were even greater. These companies' stocks returned a total of 64.5% and beat the S&P 500 by 91.3% (Stewart, Ellis, & Budington, 2002). Though not all EVA companies experience such high returns, the above statistics show that on average they perform much better than the market.

No Boundaries

EVA is not limited to certain industries or areas of business. Companies of all models have adopted EVA and experienced exceptional performance. A major retailer, Best Buy adopted EVA in January of 1998. From 1998 through 2002 the company averaged an annualized return of 39.1%, whereas its competitors only returned an

average of 10.4% to shareholders. In the pharmaceuticals industry, Bradley Pharmaceuticals returned annualized returns of 62.2% since adopting EVA in 1998. Its peers, however, on average lost value with a return of -0.2%. In the banking industry, Centura Banks started EVA in 1994 and through 2002 returned an average of 32.3% each year, whereas its peers averaged only 2.0%. In manufacturing, SPX Corporation adopted EVA in 1995. From then its stock returned an average of 14.2% each year through 2002 while its closest competitors only increased 2.1%. Finally, in the brewing industry, Molson returned an average of 39.3% each year from 1999 to 2002 (Stewart, Ellis, & Budington, 2002). EVA has also worked well in other countries and cultures. In Southeast Asia and India, EVA clients created approximately $11.6 billion more than their respective markets from 2001-2004. In the same period, Indian clients averaged around 72% each year while their market, the BSE 100 index, averaged 22%. The South East Asia clients also performed 12% better than their respective market (Tejpavan & Kulkarni, 2005).

Culture Change

EVA also claims to change a company's culture and business style when implemented completely. While it might not work for all businesses and certainly depends on the managers leading the company, the following example shows how EVA can shape company culture. In the late 1990s Rackspace was just one of many small internet hosting companies. After experiencing great success the first couple of years, the technology market crashed in 2000 and the company barely had enough money to survive. After dramatically cutting cost and developing a plan to expand the business very slowly, the managers kept the company alive and in 2002 implemented the EVA

formula in all parts of the business. From then on the company as a whole was focused on making a true economic profit, not just expanding like many of the competitors were doing. In 2003 the company started a new program that soon began growing rapidly. It eventually earned $600,000 a month in new revenue and $150,000 in cash flow. However, in reality the program was returning only a minimal amount on its capital and the CEO decided to sell it. In 2005 Morgan Stanley approached Rackspace about a deal to host all of its data. The deal would have generated a guaranteed $20 million in revenues over two years and also established Rackspace as a major hosting service. However, Rackspace had set its cost of capital at 15% and decided not to invest in projects that returned less than that amount. Although the deal with Morgan Stanley looked very promising, after all costs were considered it was discovered that the deal would only return around 10% or less on its capital and thus Rackspace did not make the deal. For any company to make decisions such as these, great discipline is required. The message of EVA has penetrated the entire company, and everyone from the CEO to the front line focuses on earning a true profit. While not a public company, the discipline has paid off and Rackspace is returning tremendous value to its private investors. The company had revenues of $140 million in 2005 and is expected to break $200 million in 2006. It has major clients such as Motorola, Isuzu, and Hershey and is positioned to become the second largest U.S. hosting company in the next several years. Without the discipline and focus that EVA brought to the company culture, it is doubtful that Rackspace would be in its current position. When used correctly, EVA can be a powerful tool for changing a company's focus and producing tremendous financial results (Gray, 2006).

Conclusion

While first and foremost a measure of performance, EVA is much more. As Al Ehrbar (1998) states in his detailed book *EVA: The Real Key to Creating Wealth*:

> 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. (pp. 1-2)

Anyone can benefit from applying EVA. It helps business leaders focus on and prioritize what really needs to be done to create wealth and helps investors and stakeholders determine whether or not a company is following through with its mandate of creating shareholder value. Though the principles of EVA are not new nor are they always easy to follow, they are critical for any business that wants to achieve long-term success and maximize the amount of wealth created. EVA is a powerful business tool which, if used correctly, promises to improve company performance and produce greater returns to shareholders.

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