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Economic Value Added: The Accurate Method of Company Valuation and Just Compensation for Management

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Abstract

Shareholders rely on accounting figures that do not indicate true performance and are known to be easily manipulated. Manager incentives, which are focused on these figures, must be changed in order to reward managers for honest corporate governance. The pursuit of corporate governance requires adjustments to internal reports and valuation methods. Economic Value Added (EVA) is a method that truly measures economic value and requires managers to return the cost of capital to lenders and shareholders. Some companies that have not required a minimum return from investment projects have gotten themselves into financial ruin and even turned to corrupt behavior. Cases of corruption involving Enron and Tyco will be analyzed with a focus on the reasons of corruption. Incentive plans utilizing EVA valuation standards will be discussed as solutions. EVA implementation will be proven to serve as a more accurate method of valuing a company's worth and manager performance. This will serve to deter dishonest practices and encourage managers for making decisions in the best interest of shareholders.

Economic Value Added: The Accurate Method of Company Valuation and Just Compensation for Management.

Turmoil in corporate accounting in recent years has been rampant. Scandals and corruption have led President Bush to create an oversight board in 2002 in order to regulate accounting and reporting procedures. These new procedures seek to stop dishonest practices such as exaggerating returns and other measures that mislead investors. However, many respectable managers have been implementing "creative accounting" methods which distort their company's true performance. To most, there seems to be nothing wrong, as long as company executives remain within the confines of the law. Bending accounting rules may not be strictly illegal, but it distorts profits and returns at the very least.

Greed and dishonesty cannot be blamed in themselves for these actions since they have always been present in business. The underlying problem is that bookkeeping has become disconnected from value. In addition, there is a great separation between the ownership and control of publicly held companies. The authors of the book, *The EVA Challenge* write, "although numerous shareholders own a public corporation, control over its operations is in the hands of professional managers, who typically hold relatively few shares and whose interests often diverge from those of the silent majority of shareholders" (Stern and Shiely 2).

Managers that act in the interests of shareholders are exercising what is known as "corporate governance" (Young and O'Byrne 35). However, they often have a greater concern for their own financial interests. Some managers of Enron and Tyco are just two recent

examples (Stewart, "Enron" 2). The result is a conflict of interest that reduces shareholder value.

Although shareholders lack the information held by management, shareholders attempt to examine performance by observing financial figures that accountants use. Net profit after taxes (NPAT) and earnings per share (EPS) are scrutinized most since they are thought to be the best indicators of company performance (Martin and Petty 136). Using these "bottom line" figures is a misleading method since accounting reports distort true economic performance. This is not to say accountants are usually dishonest, but rather they must abide by the conservative reporting measures outlined by Generally Accepted Accounting Principles (GAAP). The conservative nature of these guidelines often underestimates the value of a company. This is no surprise, as companies began (and continue) to report quarterly to lenders who are mainly focused on the down-side of risk. Accordingly, accountants report the value of assets in the case of default on debt payments (Stern and Shiely 8). However, shareholders are not concerned with the reported book value as lenders are, but rather are interested in a company's market value.

Adjustments to Financial Statements

The following two sections concern required changes necessary to income statements and balance sheets. These changes will allow for a more accurate valuation of a company. It is important to remember that these changes will only be made to *internal reports* used by management, not public filings that follow GAAP.

The Income Statement

Traditionally, accountants have expensed research and development (R&D). This means that outlays for R&D are deducted from revenue, even though the benefits are

often recognized in the following years (Stewart "Accounting" 5). Expensing R&D yields an understated profit for the year which lowers tax liability. Allocation requirements of R&D vary by company, but those that require massive amounts of R&D include high-tech firms and pharmaceutical companies. Expensing R&D for these companies severely underestimates their net profit and EPS.

Marketing and advertising outlays are also expensed. This practice may seem logical to those who view the effects of advertising to be brief. However, marketing and advertising efforts have lasting effects that build brand value (Stern and Shiely 4). It is true that estimating the duration of marketing and advertising effects is not exact. However, even a rough estimation of the duration is superior to expensing a large outlay at a single time. For example, soft drink and fast-food companies are just two of the many industries that aim at building recognition and acceptance in the years ahead of the outlays. The same method of expensing applies to quality improvement programs and training personnel, which are large expenditures for companies in the insurance and banking industries (Freeman 60).

A logical solution to the expensing of the budgets mentioned would include counting them as investments instead. This requires capitalizing the outlays on the balance sheet as an asset and writing it off over its useful life. This can be done in all three categories mentioned: R&D, marketing and advertising, and employee training programs.

The Balance Sheet

GAAP also underestimates value stated on the balance sheet. For instance, an asset such as a building is valued at either its original cost less depreciation, or its market

value. The lower value of the two is listed. Also, the market usually rises with time which will therefore understate the value of an asset. For example, a $25 million manufacturing plant bought in the past may now be valued at $35 million but would be carried on the balance sheet as $15 million because of the $10 million written off for depreciation. This methodology understates value and tax liability once again.

"Pooling" two companies together versus purchasing is another problem with the balance sheet. A company may purchase another by means of buying it outright with cash or by purchasing the shares of the desired company. Pooling the two companies simply involves putting the assets of both companies onto one balance sheet. This action does not record a purchase premium so that neither company's earnings are affected. On the contrary, purchasing a company with cash may adversely affect earnings if the purchase price is higher than the "fair" asset value (Stewart, "Accounting" 8). This excess amount is listed on the balance sheet as "goodwill" and is amortized for up to 40 years. For each of these years, the amortized expense depresses net income. Although pooling and purchasing have the same intent and end result, purchases are inappropriately penalized.

It is important to note that GAAP procedures must be followed for legal reporting purposes. However, these adjustments are to be made on internal management reports, which are used to make useful decisions in light of *economic reality*.

Manipulations in Accounting

The distortions of accounting procedures are not the only problem created for shareholders. Calculations are easily manipulated. Profits can be boosted by cutting back expenses like marketing and advertising even when this decision is determined to be

disadvantageous for the company. Another method involves managers persuading their customers (often retailers) to purchase additional inventory. Often, retailers agree because of the lengthened or more lenient credit terms offered as incentives. Sales are conveniently recorded on the shipping date just before the end of the period (Young and O'Byrne 98). Despite improving the results of managers and customers, there is no real value added to the company or its shareholders. Only the bonus of the manager is increased since it is tied to a rise in EPS.

SEC chairman, Arthur Levett Jr. addresses other earning schemes that artificially boost EPS. Management may overstate restructuring expenses, which often includes such costs as shutting down a factory and paying severance pay to laid-off employees. This is often overlooked since it is a one-time cost that is not carefully estimated by others (qtd. in Stern 25). Mergers and acquisitions may also be manipulated as a corporation may call the majority of the price "in process research and development" (Stern 26). This amount can be written off instantly, which serves to understate earnings.

Chairman of Berkshire Hathaway, Warren Buffet, has also expressed his opinion of corporate executives that mislead their shareholders. In his company's 1999 annual report he states:

> Many major companies still play things straight, but a significant and growing number of otherwise high grade managers- CEOs you would be happy to have as spouses for your children or trustees under your will- have come to the view that it's okay to manipulate earnings to satisfy what they believe are Wall Street's desires. Indeed, many CEOs think this kind of manipulation is not only okay, but actually their duty. (Buffet 12)

Manipulating games initiated by executives will be difficult to stop so long as bonuses are paid in direct proportion to EPS increases. Recognizing this problem, participants in favor of corporate governance have sought to promote using other earnings measurements. The most common measurements are Return on Equity (ROE), Return on Investment (ROI), and Return on Net Assets (RONA). These indicators include figures from the balance sheet which make them better than EPS, but they can also be manipulated. ROE, if not improved by performance can be increased by management opting to buy back shares in order to reduce the number of shares outstanding (Stern and Shiely 13). ROI is simple, but can be used in a manipulative manner. The amount gained from an investment (in the numerator of the equation) may be revenue or another figure such as net income. Dividing these figures by the initial outlay of the project or investment will yield completely different answers.

Likewise, RONA can be boosted at the end of the period by quickly selling off assets. With fewer assets, management will be able to state a higher return on net assets. Managers with bonuses tied to increasing RONA also have the incentive to deny a wise acquisition since adding a large asset to the total would reduce the overall return (Stewart, "Accounting" 12).

Traditionally, the level of compensation paid to executives increases with the size of the company. Few question this reasoning since larger companies carry larger responsibilities. However, growing larger does not ensure greater wealth for shareholders; better management does (Stern and Stewart 27). Therefore, a method is needed that can stop the manipulation of financial reports. A measuring stick is necessary to accurately assess the value of an enterprise as well as management's true

performance. This method must be difficult for management to manipulate, and meaningful to shareholders. Once a company is accurately valued and performance is gauged correctly, proper incentives can be put into place which will reward managers who serve the interests of the shareholders.

The desire for such a method is not new. Adolf Berle Jr. and Gardiner Means, to Columbia University professors in the 1930s, addressed the need to align the goals of managers with shareholder goals in their book, *The Modern Corporation and Private Property* (ref. in Stern 2). The basic concept of measuring true profit for shareholders has been referred to as *economic profit* (Martin and Petty 80). Finding a reliable way to determine economic profit has been a problem facing managers ever since it was identified. Economic Value Added, known as EVA, was introduced by Stern Stewart & Co. in 1989. The goal of EVA is simple: Align the interests of management with the interests of shareholders. Today, there are over one hundred companies that focus on raising a single EVA figure in order to benefit themselves, the enterprise, and most importantly the shareholders (Grant·9).

The Missing Link: Cost of Capital

When investors decide to place their funds in a company, they expect a given rate of return that is above the nearly risk-free rate offered by government securities. However, traditionally both managers and accountants have treated this equity capital as free, which fails to place any value on the funds that shareholders have invested into a business. This is not only inaccurate, but an example of poor stewardship of the resources given to an enterprise (Mt. 25.14-30).

Failure to consider a cost of capital often leads to reporting a profit despite actually cutting shareholder value (Yoong 2). By accounting for economic profit, corporate performance is measured by subtracting the total cost of resources associated with generating revenue, which includes equity capital (Stern 18). The basic formula follows:

Economic Profit = Accounting Profit - The Cost of Equity

The cost of capital is an opportunity cost which is the return that shareholders expect given a level of risk. The firm must deliver this return at the very least in order to return an *economic* profit to the investor. The expected rate of return depends on the level of risk and usually varies 2 to7 percent above the risk-free returns of government securities (Ka-Neng Au 2). Economic profit is often significantly lower than the accounting profit. A company may have an accounting profit of $10 million, but if it ties up $100 million on its balance sheet, it will actually report an economic loss of $2 million if its cost of capital is 12% as shown below:

Economic Profit = Accounting Profit - (Cost of Equity% x $Equity Capital)

- $2 Million = $ 10 Million - (12% x $100 Million)

As shown, economic profit is a superior indicator than accounting profit because it measures how efficient a company is at using the resources of shareholders. Neglecting the cost of capital has greatly misinformed investors for years. In 2001, combined net income of 1,000 of the largest companies in the U.S. totaled $96 billion while the cost of the capital (figured at 10% of book equity) was over three times that amount (Stewart "Accounting" 5).

Solving this problem requires a simple change: earnings should be charged with a debit (for the cost of equity) and this charge can be added back by crediting book equity.

Measuring the cost of equity is not exact nor is it easy because the true cost of funds cannot be known precisely; it is a forward-looking expectation that cannot be known (Gray 9). Research conducted by Fama and French, two leading experts on the quantification of uncertainty suggests that the cost of the equity portion of funds stems from the risk premium (R_m-R_f) and the risk loading beta, which are both estimated with error (Fama 155). Therefore, estimating the cost of equity will have a margin of error. In a study that followed, Fama and French reported that there is at least a 3% error interval around the mean given a 95% confidence level (Fama and French 180).

Three percent is a substantial range of error. However, even if the cost is not perfectly assigned (i.e., 10% when actual cost is 7% or 13%), it is superior to the complete neglect of this cost used by traditional accounting practices.

Capital Misallocation

Investment decisions are also poorly affected by traditional accounting methods. Management is more inclined to finance an investment project through debt rather than equity financing in order to report higher EPS and ROE (Stern and Shiely 4). This is because traditional accounting only requires the interest portion of the loan to be covered and both earnings and returns will be reported. The investment would have to yield a much greater return if it is financed with the issue of stock. Therefore, managers are rewarded for increasing the level of debt financing, which may be a misallocation of capital, instead of increasing actual returns. Enron became an example of this when it announced, "We are laser-focused on earnings-per-share" (Enron Annual Report 2). Their actions were followed by rapidly increasing debt financing to dangerously high

levels in order to boost EPS. The underlying problem is that managers are motivated to trade wise allocation of capital for a *seemingly* better financial report.

Description of EVA

As a solution, financing costs should be subtracted after operating results are figured. Dividing Net Operating Profit After Tax (NOPAT) by the firms total debt and equity yields the true operating results without regard to how the debt is financed. This method is therefore a better indicator than ROE. Once financing costs are removed from NOPAT, the weighted average cost of capital can be subtracted from NOPAT. The following formula yields the EVA:

EVA = NOPAT - (% Capital x $ Total Cost of Capital)

For example, if a firm has a total capital of $1 billion (from lenders and investors) and their cost of capital is figured at 9%, their capital charge of $90 million ($1 billion x 9%) represents the minimum NOPAT required to break even in economic profit. This means that interest has been paid on debt after taxes and meets the 9% return that shareholders demand. From this point, actual NOPAT should be compared to the NOPAT break even point or "threshold" (Grant 17). If it is greater than the threshold, wealth has been created for shareholders. If it is lower, then wealth has been destroyed.

Once a company determines the NOPAT figure to be accurate, it must look to the other parts of the formula. As mentioned earlier, figuring the cost of capital (required rate of return) demanded by shareholders is not precise. This percentage must compensate investors for the perceived amount of risk they are undertaking. This rate, made of two parts, varies by industry and type of business. The first part called cost of debt capital is equal to the after-tax interest rate of the company's borrowings (Roztocki

16). The other part called cost of equity capital begins with the risk-free rate of long-term government securities which is typically 6% (Ka-Neng 3). The equity risk premium, which varies on the type of project is added. This portion usually varies from as low as 1% (i.e. grocery chain) to 7% (i.e. a film production company) (Stern and Shiely 19). Combining the debt and equity portions of the cost of capital brings the majority of businesses to a 7% to 13% cost of capital.

Before calculating EVA, it is important to ensure that NOPAT is figured correctly. If the traditional net profit bottom line were used, the economic profit would be understated. This is because from the shareholder's point of view there are a number of current expenses that should be placed as assets on the balance sheet (Stern and Stewart 32). EVA experts have identified over 150 accounting "anomalies", which are placements that can distort true results. However, most companies only require 5 to 10 adjustments to make their NOPAT accurate (Stewart, "Accounting" 18). The handful of changes made must be identified and explained to management so that they can be understood and their decisions can now better serve the interests of the shareholders.

Pitfalls of Poor Incentive Plans

Whether or not employers and employees like to admit it, one of the best ways to motivate workers is through monetary bonuses. An effectively designed incentive plan will encourage workers to use assets carefully, invest in the right projects, to seize new opportunities, and most of all to deliver performance that adds value (Martin 161). Ultimately, incentives should aim to make employees better stewards of the resources given to them, something all companies desire from their workers.

Managers must be warned of the potential harm incentive plans can have. Poor incentive plans can have a negative result in an enterprise if they are not first carefully designed. Jack Welch, former CEO of General Electric, stresses the absolute importance of properly designed incentive plans (qtd. in Stewart, "Enron Signals the End" 14).

A common mistake made in incentive design is to base bonuses on a measure that gives the wrong signal. An example, outlined by Bennett Stewart III., of Stern Stewart & Co. is rewarding solely on such measurements as sales, earnings, or market share (Stewart, "How to Structure" 3). These may be strong indicators, but managing from an indicator that is easily manipulated may narrow the focus of management to the extent of ignoring other important measures. Being unable to associate daily decisions to achieving bonuses is another pitfall faced by many companies (Young and O'Byrne 350). Another mistake, according to Joel Stern, is rewarding managers for meeting budget goals. It is not that meeting budget goals is negative in itself, but rather mangers will be motivated to set minimal goals in order to be rewarded a bonus every time (14).

Short-term (a year or less) focused incentives without long-term incentives leaves little motivation to invest in long-term projects. Short-sighted goals also tempt management to manipulate accounting measures like EPS (Stewart, "Accounting" 16). A prime example of short-sighted goals that led to corruption can be found in the Enron case. Their annual report admitted their obsession with short-term results (Enron annual report 2001 3).

Using EVA to Create the Optimal Incentive Plan

A tailored approach must be taken for EVA implementation. Such factors as organizational structure, business strategy, risk tolerance, and company culture are major

factors to consider when designing the plan (Young and O'Byrne 85). The most important consideration is to make every employee think and act like an owner. This consideration of course is simple in theory, but difficult in implementing. To demonstrate, the following principles to be discussed are taught by EVA experts such as Bennett Stewart III and Joel Stern who have successfully trained fortune 500 companies such as The Coca-Cola Company and Eli Lilly and Company.

Improvement. Unlike traditional bonuses, EVA incentives are not only paid to top management, but to every employee who is improving EVA from the previous period. Improvement in EVA therefore "levels the playing field" whereby, "Talented managers and employees can be just as motivated to join tough businesses that need to be turned around and restructured as to join the best business" (Stewart, "How to Structure" 10). Improvement bonuses are always in reach, which can even be attained by managers who feel as though their stock price has reached its high. This solves the problem of managers who leave small companies once they have matured to search for gains at another firm.

Common concentration. A single measure that is not easy to manipulate allows for a central and simple focus for all employees. Traditionally, companies reward production teams differently than sales teams. Vying for different goals can lead to cross-functional disagreement, which fosters poor cooperation. Multiple goals can cause confusion, as juggling 10 measures is difficult. For instance, an analogy of determining the best basketball team is made by Bennett Stewart III: Adding blocks, rebounds, field goal percentage, free throws, and penalties together will not objectively tell which team is

the best. The best team is determined by the highest score. Likewise, EVA is the single measure of score for an enterprise (Stewart "How to Structure" 18).

Substantial incentive. The bonus opportunity must be large enough to motivate managers to make the most value-creating decisions, even the difficult ones. Bonuses tied to creating value must be more attractive than pleasing the sources of both internal and external pressure. Misallocating capital in order to reach budget goals is a typical example of internal pressure, while external pressure may be felt by investor expectations. As mentioned earlier, a substantial incentive is best tied to increasing EVA. The following is a simplified example that highlights the effectiveness of an EVA incentive plan:

Sales	$100,000,000
Costs (including taxes)	(80,000,000)
NOPAT	20,000,000
Capital	150,000,000
X cost of capital	10%
Capital Charge	(15,000,000)
EVA	5,000,000
EVA (previous year)	4,000,000
Increase in EVA	$1,000,000 +25%

In the example above, management subtracted a $15,000,000 capital charge from the $20,000,000 of net operating profit after taxes (NOPAT) to get a positive EVA number of 5,000,000. Management has determined an EVA expected growth rate of

25%. A "bonus pool" has also been determined for every employee that meets the targeted EVA growth rate. In this case, EVA is increased by 25% (reached an EVA of $5 million which is increased from $4 million the previous year) which meets the targeted growth rate. This incentive plan can prove to be generous as each deserving employee will receive a 100% of their specified cash bonus for achieving the goal. Higher level managers will have a greater bonus pool than lower level employees (i.e. $20,000 vs. $2,000).

Unlimited bonus. Most companies limit the bonus amount to a ceiling of 1.5 times the target bonus (Stewart "How to Structure" 13). Bonuses must be uncapped as *Fortune Magazine* executive editor Geoffrey Colvin states, "When a company caps bonuses, something is wrong. Somehow, leadership, organization, measurement, decision-making, and incentives are not aligned with shareholder value. If they were, limiting bonuses would be foolish" (16). EVA can promise unlimited bonus potential since there is no limit on how much value that can be added. Bonuses will continually rise as long as economic profit continues to increase. In the previous example, if a functional unit of a company achieved twice the bonus (in this case, raising EVA by 50% in a period) they would receive twice the specified cash bonus.

Sustainability. The board of directors must take precautions so as to ensure that EVA figures can be maintained. As a solution, holding back or "banking" large bonuses can be done. Up to half the bonus is paid in the first year, and the remaining portion is paid annually over the following years. Banking bonuses maintains a high level of motivation as managers may lose them if performance levels decline. This approach

incorporates the benefits of using traditional stock options that can decrease in similar penalties.

Definitive. An accurate assessment of manager performance can only be done when expectations and goals are clearly communicated. Ambiguous goals and bonuses that are difficult to estimate will hinder a manager's motivation. Stern Stewart & Co. has discovered that a successful approach is to develop a formula that rewards improvement in EVA as a percentage. Such implementation has attributed managerial success for The Coca-Cola Co. and Oppenheimer Capital (Stern 33).

Community. Community is the final principle outlined by Stern & Stewart & Co.'s EVA incentive program. Every employee must have EVA incentive potential. Bonus plan structures must all have similarities as this promotes high morale and the common quest to create value for shareholders.

Incentive Implementation Cases: Diageo PLC and Guidant Corp.

EVA encourages accountability; it organizes a system whereby each individual knows what is expected of them, what job needs to be done by when, and how the results will be measured. Teams are made to work together to make decisions. For example, John McGrath, CEO of Diageo PLC, a leading consumer goods company, established a "global peer group" of 19 direct competitors, with top competitors like Gillette and Nestle in the mix. McGrath made it clear that bonus maximization was in reach for excellent performance. Using a Long Term Incentive Program (L-TIP) he outlined the benefits. Fifth place ensures 100% of the agreed upon bonus. Fourth place wins 125%, and the top three spots are rewarded with 150% of the bonus. Fifth to tenth place offered

a smaller, sliding scale bonus that fell from 100% gradually. If Diageo failed to make the top ten, the executives would receive no bonus. McGrath could confidently implement this type of incentive program since 90% of shareholders approved it at the annual general meeting ("EVA in Action" 1).

Critics of long-term incentive programs argue that bonuses may still be rewarded to companies that have performed poorly despite beating some competitors. Diageo and other L-TIP implementers have acknowledged this as a legitimate argument, but claim that fallout may be avoided with the proper safeguards: Under EVA valuation standards, bonuses will never be paid if wealth is not created for shareholders. Above this, the remuneration committee must agree that economic profit is growing at an acceptable rate before bonuses are awarded (Stewart, "How to Structure" 8).

In regard to the remuneration (or finance) committee, it must be acknowledged that corruption can still exist if these members have ulterior motives. Enron's committee was partly composed of "old friends" of the executives as well as members who were permissive in corrupt practices that served their own interests (Stewart, "Enron Signals the End" 4). Members that do not have a previous interest in the firm should be selected to safeguard against dishonest practice.

Guidant Corp., a medical device company, also implements an effective EVA-based incentive program. Chairman James Cornelius was seeking to motivate managers to be top-performers in 1995. He decided to contract with the Stern Stewart team to develop EVA performance targets. In addition, every manager was given stock options in efforts to align their own success to the success of the company. Managers set

performance bonuses with time frames that were responded to with an unprecedented level of product innovation (McGrath 1).

In four years time, Guidant Corp. multiplied their share price ten times and added $105 million in *EVA profits* (McGrath 1). When asked to comment on the effectiveness of EVA implementation, Cornelius responded:

> I'm convinced these results are largely because of EVA and because our people have stock ownership in the company. They keep looking for ways to improve our business because at the end of the day a significant share of their annual cash bonuses are tied to EVA improvement and to holdings of Guidant stock in their benefit and retirement plans. They can see and share in the results of their own efforts. (3)

Corruption Cases: Enron and Tyco

Case #1: Enron Corp.

As noted earlier, management bonuses at top companies are often tied to an earnings figure such as earnings-per-share. Managers of Enron are a prime example of being motivated to raise EPS in a manipulative way. The demise of Enron can very much be linked to their "laser focus on earnings-per-share" (Enron 2001 annual report 2). There were a number of ways in which the executives of Enron manipulated EPS. The "superficial attraction" to increasing EPS may be attributed to a commonly used formula to estimate stock prices:

Price = EPS x P/E

This methodology tells an investor that a company that delivers $5 in EPS and trades for 20 times its earnings (P/E) will be worth $100 per share. With so many investors watching EPS and management incentives linked to it, there is no wonder that there is pressure to raise it. Raising EPS to $6 will boost the stock price to $120 per share. The appeal of using a stock price formula is in its simplicity. However, it makes the incorrect assumption that the P/E ratio will remain the same. In reality, P/E ratios can and do change due to such factors as new strategy implementation and investment allocations (Young and O'Byrne 134).

Over-investing capital is one of the surest ways to boost EPS. Financing projects with debt capital usually only requires the 4 or 5% return to meet the cost of capital (Stewart, "Enron Signals the End" 2). However, equity capital (capital from shareholders), requires a much higher return, often 10 to 12% (Copeland, Koller, and Murrin 176). In an effort to maximize EPS, Enron poured billions of dollars into low-return investments that averaged a 7% return on capital (Stewart, "Enron Signals the End" 5). Since the return was much lower than the cost of capital, Enron was setting itself up for failure.

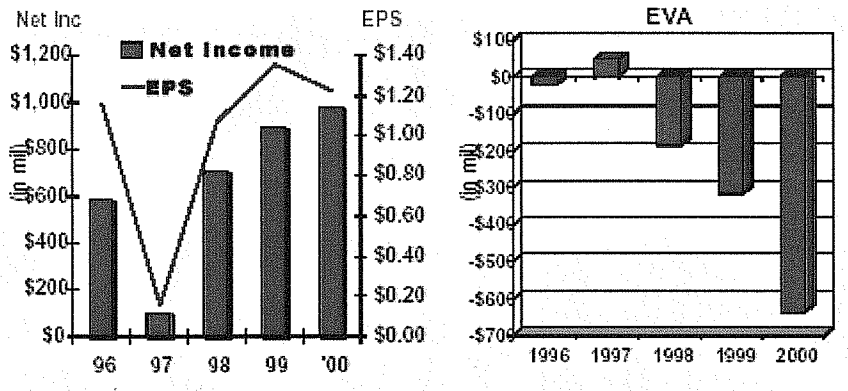
Over-leveraging the balance sheet was another method used by the executives of Enron. Heavy debt financing is the obvious course of action for managers who are frantically trying to boost EPS. In Enron's case, debt-financing was employed far beyond cautious levels. Lenders and investors caught on and were suddenly unwilling to provide the fast financing required for Enron to deliver their expected EPS figure (Stewart, "Enron Signals the End" 7).

The problem with management in many companies is executives being given a single focus to raise earnings. A single earnings figure will lead to disaster as it did with Enron. Boosting EPS, if not through genuine performance, will always tempt managers to borrow too much and offer too few new shares in order to raise reported earnings as high as possible. As Bennett Stewart noted, "EPS is the opium of the executive suite; it is the Don Juan of corporate value. As Enron discovered, worshipping at the EPS alter can lift a top team to a prominent pedestal in the short run but drag them down to a fiery grave in the longer term" ("How to Structure" 7).

EVA methodology raises expectations for management. An enterprise can misallocate or over-invest capital, increase sales, and even increase EPS and still reduce EVA. However, since EVA measures the wealth created for shareholders, a positive EVA will mean increased EPS (Grant 27). The beauty of EVA above its simplicity is that it places pressure on management to add real value. Managers may only receive a bonus once the determined cost of capital (debt and equity mix) has been returned to lenders and investors.

If the managers of Enron were utilizing an EVA incentive plan, they would not have been rewarded for their highest years of EPS gains (1998-2000). In fact, their dishonest efforts of over-investing and over-leveraging would never have been acceptable. The meager 7% rate of return would not have met the 10 or 12% required return needed to accept the increased leverage for the investment projects (Stewart "Enron Signals the End" 5). Enron CFO, Andrew Fastow, would not have been able to fuel his bonus since he was not returning the cost of the capital borrowed from shareholders.

As the chart below indicates (Stewart, "Enron Signals the End" 6) the three highest years of reported EPS returned the largest bonuses to Enron executives. However, EVA valuation would not have paid a single dollar in bonuses since it grew increasingly negative. Managers who destroy EVA are not rewarded since they have not met the demands of shareholders. EVA is indeed a tool that holds management accountable to creating wealth for shareholders first.



Had raising EVA been the focus for management in the beginning, the temptation to manipulate a single figure like EPS would not have existed. Misallocating investor capital and over-leveraging the balance sheet would be avoided as they would be judged as an unsatisfactory investment. EVA cannot be manipulated nearly as easily because it incorporates the expectations of overall economic performance.

Case #2: Tyco International

The American-based conglomerate, Tyco International, is another example of a company engaged in corruption that could have been deterred in part by EVA valuation and compensation methods. Although there were numerous instances of corruption, the largest practices will be discussed.

CEO Kazlowski was accused of purchasing multi-million dollar items for himself with company debt, which allowed him to avoid paying income tax. The conglomerate itself raised suspicion as it paid CFO Mark Swartz $170 million over a three year period (Colvin 16). Much of the earnings were in bonus dollars fueled by rapid acquisitions. These acquisitions were financed by stock that was used to over-leverage the growing conglomerate. Earnings increased annually by 20% during the early nineties, which fattened the pockets of executives whose bonuses were tied to earnings. While the executives increased their wealth, the funds of shareholders were being used against themselves. Earnings were pushed by the $27 billion of capital debt from lenders and investors (Stewart "Enron Signals the End" 7).

As with the Enron example, the pressure to run earnings up, this time through over-valued acquisitions, would not have existed with EVA valuation and compensation. The 20% annual returns would not have been deemed satisfactory given the level of capital required to do so.

As SEC Commissioner Harvey Pitt said, "There is no true number in accounting, and if there were, auditors would be the last to find it." (qtd. In Stewart, "Accounting is Broken" 8). Accounting manipulation and fraud would not hold to the scrutiny of EVA. Economic profit cannot be manipulated; it must be substantiated through the delivery of an actual return. Increased earnings are simply not enough.

Conclusion

The Goals of EVA: Accuracy, Accountability, Honesty

The introduction described the problem of corrupt practices and dishonest reporting. Dishonest motives still lead to corrupt practice and therefore EVA

implementation in itself cannot rid corporate America of such harm. Instead, it serves as a deterrent in the three ways that were discussed in the previous sections.

First, managers and the finance committee are held accountable to shareholders and lenders. EVA requires more than a net profit, but a relevant *economic profit* in which success begins once value is added to shareholders. The proper adjustments are made to internal financial statements which serve to accurately gauge performance.

Second, the temptation to manipulate figures is discouraged since compensation is no longer tied to earnings. Incentives are based on increasing EVA, which requires returning the cost of capital used. Actions to misallocate capital, avoid long-term investments, and over-leverage the balance sheet are discouraged simply because they will not increase management's bonus. Instead, incentives are linked directly to rewarding shareholders.

Third and most of all, EVA promotes honesty. True performance is measured instead of profit and earnings by traditional accounting standards. Therefore, the relevant economic results are gauged. Managers are not rewarded for manipulating particular figures, but rather have an incentive to raise a number that can only be done through honest results.

The End Results

A tailored EVA plan is one that incorporates every employee from top managers down to the manual laborers in a factory. Unity among all employees encourages every individual to think and act as if they owned the company. Since valuation is accurate and compensation is tied to increasing value, cross-functional teams are able to cooperate in efforts that are rewarded simultaneously. Resources are used efficiently with an expected

level of return in mind. Bonus earnings are unlimited and motivation is based on honest results. Shareholders benefit in equal measure from EVA implementation as the money that they have invested is put to use in a manner that meets their expectations.

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