CHAPTER 1 EVA 101

M any people think EVA (for economic value added) is just a performance measure. It is that, but it is a lot more. EVA has an application to every facet of corporate performance management. It is a technique for improving the planning process, and a framework for valuing decisions, gauging investments, and shaping strategies. It's the basis for bonus plans that turn managers and employees into charged-up, informed, enlightened owner/operators. It's a great way for a management team to credibly communicate its commitment to creating value to its investors. Using EVA pervasively—for all those applications and in substitution for other measures and methods—is what ultimately makes it so simple, so accountable, and so powerful. But true enough, EVA does begin as a performance measure, as simply a better way to gauge the true economic profit a business is earning. So let's begin there, with EVA 101—the money measure of EVA.

At its barest essence, FVA is a simple three-line computation of profit that anyone can understand:

Sales – Operating costs – Capital costs

What remains is EVA. It is sales less operating costs less the full cost of financing business assets, as if the assets had been rented. It consolidates income efficiency and asset management into one net profit score. Increasing EVA is the name of the game. It's that simple. End of the story.

Well, not quite. To aerate a bit, observe that EVA starts with sales. Some critics have said EVA will motivate managers to shortcut customers. But how can that be? EVA cannot exist at the bottom line without generating sales at the top line, and there can be no sustained increase in EVA without sustained sales growth. Customer satisfaction, repeat business, innovation, and growth are essential to putting points on the EVA scorecard. But even that is not enough. EVA demands more. It is a higher calling. It is the most challenging measure of profit performance.

Operating costs must be covered, of course. Operating costs include all the materials and production costs, overhead and administration costs, and people and programming costs, but they also include depreciation and amortization and taxes. Physical assets wear out or become obsolete, and intangible assets are competed away and must be replaced, so true costs have to include an allowance for the consumption of both tangible and intangible assets. Corporate income taxes must also be paid before profits can really be counted. Note, however, that interest expense and any other financing charges are not included in this category; they are contained in the overall cost of capital, discussed next.

Most companies stop here or about here when they measure profit. They forget, or act as if they forget, that there is another critical cost to cover—the cost of using capital.

Capital is the total money that has been raised from lenders or shareholders or retained from the company's earnings and is used to finance the company's business assets. In other words, capital is the amount of money tied up in working capital such as inventories; in financing property, plant, and equipment; and in sundry business assets, including the goodwill premiums paid to acquire companies. And because balance sheets must balance, every time line teams go out and acquire more assets or increase inventories or purchase equipment or invest in writing software code, the treasury department must raise additional capital from lenders or shareholders, or retain more earnings instead of paying them out. The asset buys must be financed with capital sources. And to induce investors to put or leave their money in the business, a company must offer them a competitive return on their investment that stacks up favorably against other available opportunities on the market.

The cost of capital, in other words, is not a cash cost you can see and touch. It is not a cost that accountants actually deduct or ever will. It is an opportunity cost— the cost to the lenders and shareholders of giving up the returns they could otherwise *expect* to earn from investing their money in a stock and bond portfolio that has a risk profile the same as the company in question. Or put another way, capital has a cost because it is scarce; it is limited in the aggregate to the amount of money people and companies worldwide choose to save (less savings siphoned off to fund government deficits). For a company to create value, it must outperform the marginal project that is also competing for funding in the global capital markets.

Fortunately, the cost of capital can be determined without surveying investors or rank ordering investment projects. The market has already done the work for us, and the cost of capital is reflected in measurable market prices. Without going into the details, the cost of capital always starts with the prevailing yield on relatively safe long-range government bonds (to approximate the indefinite life of a business)—which today is about 2.5 percent in the United States, well below historic norms as it happens—plus a premium, an extra bump up in the rate of return to compensate investors for bearing the added risk of the business. The risk premiums generally range from 2 percent to 8 percent, depending on how exposed a company is to business cycles. Regulated electric and gas utilities, staples retailers like Wal-Mart and Costco, and established everyday food giants like Kellogg and General Mills that are comparatively isolated from business cycles (we all want to be warm and fed) come in at the low end, while home builders and semiconductor fabricators and theme park operators—companies that get whipsawed in a downturn—come in with very high costs of capital.

Though invisible to the naked eye, and out of the counting zone of the accountants, the cost of capital is a real cost that can be estimated with reasonable accuracy using modern financial techniques. Certainly we can do better than assuming that the cost of capital is zero, as profit measures like earnings before interest and taxes (EBT) and earnings before interest, taxes, depreciation, and amortization (EBTDA) effectively do. Those measures assign no charge for using assets. Those measures provide no protection for the owners' interests. Those measures motivate managers to squander capital, when managers should be motivated to use scarce capital sparingly, imaginatively, and intelligently to achieve business goals. The truth is that until a company is covering the full cost of its debt and equity capital, it is really losing money no matter what the accountants may say. Investors, and that's all of us, expect a return on their investments, and that return requirement becomes an unavoidable cost faced by any company that uses capital in its business.

Sales	\$1,250	Customer satisfaction, innovation, growth
- Operating costs	<u>\$1,100</u>	Pricing power, purchasing power, efficiency
NOPAT	\$ 150	Net Operating Profit After Taxes
- Capital costs (Cost of capital [%] × [\$] Net business assets)	<u>10% × \$1,000</u>	Working capital turns, plant productivity
= EVA	\$ 50	

With this as background, let's now run a basic EVA calculation:

The simple sample company shown above—let's call it SSCo—generates \$1,250 in sales with \$1,100 of operating costs, leaving a \$150 remainder called net operating profit after taxes (NOPAT). NOPAT is a resting point partway down the EVA schedule. It is the firm's operating profit, net of depreciation and amortization to make it sustainable, and after taxes on the operating profit are deducted. With NOPAT now defined, we can say that EVA is equal to NOPAT less a charge for capital.

The capital charge is computed by multiplying the cost of capital rate times the capital—that is, times the amount of money invested in the firm's *net* business assets, which is all the assets used in the business, net of, or less, the money advanced by trade suppliers. That being the case, the more a company is able to finance its working capital with interest-free credit from its suppliers, the less capital it will need to obtain from lenders and shareholders, and the higher its EVA will be.

Some may say it is not worthwhile to go into details like that and it would be better just to keep it simple. I disagree. I've seen real value in teaching team members about what goes into EVA and providing company-specific examples of how they can win. It's the simplest way to spread financial literacy company-wide and stimulate a lot of good thinking around how to improve performance in ways that may not have occurred to anyone before they were thinking in terms of EVA. Once they understand that trade credit reduces the capital charge, for instance, employees will naturally lean on suppliers for better terms without the need for constant prodding from the CFO. Granted, it takes some effort to instill EVA literacy, but it typically pays off in many ways, including saving the CFO for really strategic stuff. The bottom line is that EVA training is not an obstacle. It is a tremendous opportunity to improve performance.

To go back to the example, let's assume that SSCo's overall weighted average cost of apital is 10 percent, given its risk and capital structure. That is high by current standards but it is an easy figure to use. With \$1,000 tied up in net business assets and a 10 percent cost, the firm must earn \$100 in NOPAT to just break even. It's simple math. You just multiply the amount of capital times the cost of capital to determine the charge for the capital.

Now EVA can be computed. SSCo is earning \$150 in NOPAT. The capital charge is \$100. Therefore, its EVA is \$50, the difference. That alone is telling us something very important. The company is earning a positive economic profit after covering all resource costs, something that is true of only about half of the public companies in the economy at any time. The other half generates negative or negligible EVA, yet many of those companies don't even know it. And even in profitable firms there are almost always EVA-sapping divisions that look great on other measures, like sales growth, operating margins, EBITDA, cash flow, and so on, but are actually destroying value. The

bottom line is that EVA is a decidedly different and more accurate measure of performance that leads to profoundly different and more reliable impressions about where to invest and grow and where to restructure and retrench.

Before moving on, let's take a moment to appreciate how important and helpful the capital charge is. For one thing, there would be no point in working to reduce working capital or to improve plant turns if not for the charge. Why would management even bother and why would investors care, if capital had no cost? But with the charge, a whole new world of opportunities is opened for line teams to create value by better managing balance sheet assets. What at first appears daunting is very soon exhilarating and liberating. There are more levers to pull, more trade-offs to consider, and more ways to win.

A second point is that the capital charge is where accountability enters the EVA system. In many companies, getting a capital project approved is viewed as a win. With EVA, the approval of capital spending creates a visible ongoing obligation to cover the cost of the added capital.

A third insight is that the capital charge represents the amount of NOPAT profit that a company needs to earn in order to pay the interest due on its borrowed capital, after tax, while leaving a profit remainder that gives its shareholders a competitive return on the equity money they've invested in the firm. In other words, the firm's financing costs are not separate considerations outside the purview of EVA, they are baked right into the capital charge. As a result, operating people need not be concerned with interest payments, debt amortization, dividends, share buybacks, and the like. If they simply focus on covering the capital charge in the decisions they make, they are doing their job, and the financing costs will take care of themselves.

Moreover, if a firm raises capital and invests it in ways that increase its EVA, it is guaranteed to generate enough operating profit to pay interest on the money it borrowed and to provide share owners the minimum return they seek, and then some, on the additional capital they've funneled into the firm. EVA growth is always self-financing—it always attracts the capital needed to finance it.

A fourth point about the capital charge is that it establishes what is effectively a target for NOPAT that automatically rises or falls as more or less capital is invested in the business. The operating profit target contained in EVA, in other words, is not set by the board or the budget or by negotiation. Rather, it is an objective standard that is obtained by benchmarking the business against all other opportunities on the market, and asking: How much NOPAT profit must the firm earn, given the amount of capital it uses and the risk it takes, to just stand on a par with its capital market competitors? And the operating profit target represented by the capital charge is applicable even for private companies. They too should be asking: How do our operations stand up in the global marketplace for capital? Board directors devote a lot of time to benchmarking with peer companies, assessing their firm's performance, and establishing financial goals to grade the management team. But in so doing, most neglect to investigate the most essential benchmarking of all, which is: Are we meeting the marketset standard of excellence? In other words: Are we earning an EVA profit and are we increasing it over time at an acceptable pace, relative to our competitors and relative to expectations factored into our stock price? No other indicator establishes so bright a line between acceptable and unacceptable performance, because EVA is the only one that is benchmarked against the global market standard for investing and using capital, and the market price for bearing risk. This notion will become even more practical after EVA has been turned into a set of performance ratios that abstract the performance from the size of the company.

A key feature of the NOPAT profit target is that it *automatically* changes as capital changes. The NOPAT performance bar is set ingher as more capital is invested in a business, and the capital charge is automatically set lower as capital is withdrawn. With all other measures, an appropriate target has to be established or reestablished as circumstances or capital change, and that is not easy. How much should sales increase as additional capital is invested, or how much margin expansion should be sought to compensate for an increase in capital intensity, for example? Absent EVA, there really is no objective standard or simple way for revising targets on the fly for measures like sales growth and operating margins, because measures like those and all others are incomplete; they have blind spots and tell only part of the story.

EVA is different. Since EVA is operating profit net of a market-set target, a sustained increase is real progress, a persisting decrease is real deterioration, and sideways movement is truly just spinning wheels. In light of this, every management team in every business can have one simple mission: *to increase its EVA as much as possible*. No other measure enables management to espouse so simple and meaningful a goal. Making a negative EVA business less EVA negative is just as valid a way to improve performance and create value as making a positive EVA more positive. Like venerable Total Quality Management (TQM) programs that emphasize the continuous improvement in products and processes, the goal of an EVA program is the greatest sustainable *improvement* in EVA over time. Improving a tough turnaround business is given the same recognition in EVA as making a star performer shine brighter. The improvement goal is applicable across the board, regardless of the legacy assets or inherited baggage that is there at the start. It provides all the right incentives.

What are the incentives, though, and do they make sense? How are managers guided into making better decisions? The short answer is: in all the ways that matter and none that don't. While there are countless ways that performance can be improved and wealth created, depending on the business and the times, all the possible ways at all times conveniently fall into one of three key categories that are readily recognized by EVA, which are:

- 1. Operate efficiently. Intelligently cut wasteful costs. Increase NOPAT without increasing capital. Almost all measures get this one right, but EVA gets it right, too. It's important, and it's there. Go for it.
- 2. Grow profitably. Invest capital, and build the business, but be sure to cover the full cost of the invested capital. In truth, the *only* way a company can increase its EVA over the long term is by investing, by growing, and by innovating, but the return on the new capital must exceed the full cost of raising the capital. The incentive, in short, is to take on as many positive net present value (NPV) projects as possible, but *only* positive NPV projects. Investments and strategies that don't cover the cost of capital and that diminish the firm's NPV are absolutely discouraged and penalized, as they should be. There is a real deterrent to misallocating or misusing capital, but there is also a real reward for *all* growth over the cost of capital.
- **3. Purge ruthlessly.** The last big improvement category is to stop pouring money into, or to liquidate assets from, the uneconomic activities that can't cover the cost of capital. Find ways to turn working capital faster; to increase production yields and uptimes; to sell assets worth more to others; to bring technology and products to market faster; to prune marginal or unprofitable lines of business, plants, product lines, and customers; and outsource or restructure where it is economic to do so. By putting a charge on assets, EVA puts a visible premium on superior asset management and lean business models.

No other metric so succinctly, accurately, and completely captures all of the ways that performance can be improved and wealth created in any business. And that is why EVA, and EVA alone, can be used in an incredibly simple but extraordinarily powerful profit sharing bonus plan. Let's take a short but scenic detour to explore the contours.

In the classic plan, the bonus consists of a base bonus award—a certain percentage of base pay that is needed to bring the participant's total pay package up to a competitive market standard—plus a bonus kicker that is some set percentage of the EVA earned in the year less a target for EVA that is set by a formula. The simplest formula sets the EVA target to the prior year's EVA, so that the bonus kicker just is a percentage of year-overyear change in EVA. Other variations include incorporating a growth goal into the EVA target or adjusting the target to reflect for the performance of peers—I will cover those variations in more detail in Chapter 7, where setting targets is formally discussed. For now, though, just think of the bonus as a competitive base bonus award plus a percentage of delta (change in) EVA. That actually works fine for most companies.

No matter what form it takes, though, the bonus plan message is the same—more EVA is good, and less EVA is bad, so make EVA go up. It's extremely simple, it provides all the right incentives, it clearly links pay to performance, and it reinforces the message that managers should really use EVA in reporting, planning, and decision making. It is the one bonus plan where a bigger bonus is better all around, because when EVA gets bigger, the stock price get bigger, as I will establish very clearly later on. The underlying theme is: Let's create wealth by sharing the wealth with the people who create the wealth.

The plan also has a number of unique and interesting properties that are worth playing out. For example, if a company just cause the cost of capital on incremental growth and its EVA goes sideways, its managers will earn the base bonus from the plan. Said another way, when the owners break even and just obtain the minimum return they expect on incremental investments in the business, then the firm's managers break even, too, and just earn the normal bonus they expect. That's fair and sensible, but missing from most bonus plans.

Suppose now that management does succeed at increasing EVA compared to the prior year. Then, great the team is rewarded with a premium bonus, as it should be. The team added value by increasing EVA in some way. But there's a catch.

In the next year, the prior year's elevated EVA automatically becomes the new standard of excellence. The EVA performance target is reset higher by operation of the formula. Management is unable to rack up another large bonus unless it manages to increase EVA once again, piling even more EVA on top of the prior year's improvement. Even the simplest EVA bonus plan builds in a double protection for the shareholders. EVA requires more profit be earned as more capital is invested, and the bonus plan requires more EVA as management proves it can produce it. And if the management team was able to increase EVA year after year and earn supersized bonuses according to the bonus formula, nothing would please shareholders more, because that would undoubtedly send the share price higher (be patient—I will definitely show this). In exuberant moments I have said that I am prepared to make the managers rich-so long as they make the shareholders filthy rich. The important point here is that EVA bonuses are always self-financing. They are paid out of and are a fraction of the added value, which is true of any real payfor-performance incentive plan, but most incentive plans fail that basic test.

What happens if EVA takes a tumble? The bonus kicker turns negative and is deducted from the base bonus. The bonus could fall all the way to zero, depending on how far EVA fell. There is a definite penalty for a downturn in EVA, and that hurts, as it should. The incentive is: be prepared to react fast, increase fixed costs reluctantly, establish contingency plans to hold the EVA line in case bad things happen, and never think that good times last forever. Those are all terrific incentives for managers that shareholders would applaud and that boards should be prepared to provide. The downside is that managers are exposed to business risk, but should it be otherwise? Isolate managers from risk, and there will be no real risk management. Expose them to risk, and they will anticipate and manage risks. Take risk out of the picture, and it is impossible to link pay to performance. It sounds draconian, but there are good reasons why even corporate managers should prefer it above and beyond the fact that it does provide them with all the right incentives.

The first argument is that the cost of capital can often be dramatically simplified by using a bonus plan like this one. Knowing that their bonuses are linked to producing EVA, managers in riskier divisions will naturally want to factor a more sizable return cushion into the capital projects they propose. As a result, CFOs aren't necessarily forced to gin up the cost of capital for riskier divisions. Many find they can get away with using just one company-wide cost of capital rate or use just a few as a simplification. The general rule is that a well-constructed EVA bonus plan is often a better way to encourage managers to think about and manage risk than to engage in what is often a politically charge 1 and ineffectual debate over ratcheting the cost of capital up or down.

Here's an example. For many years Coca-Cola used just one cost of capital worldwide in its EVA calculation. The rate was set at 12 percent and was used to review all results once they were converted into U.S. dollars, because that made it convenient to charge all operations 1 percent a month on their capital. And in its EVA program, Siemens, although it was made up of a diversified mix of 13 sectors (and 162 underlying business units) at the time, consolidated them all into just three distinct cost-of-capital categories ranging from low to average to elevated. Even that was highly effective. Once the firm's semiconductor business was measured against the higher cost of capital standard it was assigned, management realized it was not competitive, and sold it.

A second reason is that the bonus plan immediately forgives management for the sin of letting EVA go down (after whacking the current-year bonus, that is). After all, the objective is to expose managers to risk as a motivator and not to drive them away. It is imperative to retain the good people through the bad times and to motivate them to try hard. This is where EVA bonus plans are so clever, in my opinion, because the EVA performance bar is reset to accommodate the new normal. In the next year, the prior year's marked-down EVA automatically becomes the new starting point for earning an upside EVA bonus. The management team knows that it will be able to earn back what it lost by reversing the downturn, perhaps more if it has been investing for growth when other companies held back.

In effect, the total bonus award is not only what it pays in a year but also how it automatically translates the performance in the year into a higher or lower EVA performance target in the next year. EVA companies take advantage of that. They not only track the bonuses that are being earned as a year unfolds; they also project the bonus outlook for the next year or two based on how the EVA target will be reset as compared to rolling EVA forecasts. That's a great way to mitigate demoralization during downturns, to keep up the pressure to perform in the good times, and to encourage everyone to stay focused at all times on driving EVA with a two- to threeyear forward horizon.

Unfortunately, most companies do not use bonus plans anything like this. Most pay managers for beating budget goals. It sounds sensible—pay managers for doing what all agree they should aim to do. But it really isn't a good idea at all. It corrupts the planning process. When plan goals are used as bonus bogeys, managers are perversely motivated to understate and underperform the true performance potential that exists in their businesses rather than shooting for the stars. Their real incentive is to shoot low and keep their powder dry to make it easy to earn a steady if uninspiring bonus year after year. Well aware of this, senior and subordinate are pitted as adversaries rather than as planning partners. Trust and candor are forfeit, starting with the board compensation committee and the top management team. Planning becomes far less strategic and far more tactical as the field of vision narrows to arm wresting over budget goals for just the year ahead. Managers hem and haw, hedge, hide, and hate it, but they cannot do anything about it because they are captives of a counterproductive system that ties their bonuses to their budgets and plan goals.

None of those really bad things can happen when companies use the classic EVA bonus plan that I have described. EVA bonus plans absolutely reward breakaway thinking, achieving stretch goals, and openly collaborating. They truly lead to better, more energetic, more realistic, more imaginative, more strategic, and inherently more value-based budgets and plans. How?

Aside from rewarding EVA—which gives the managers all the right incentives and the fullest range of levers to pull—it comes from setting and resetting EVA performance targets by automatically adjusting formulas that can be modeled out not just for one year as I illustrated, but for years ahead. Managers are literally able to plot out a long-range business plan and compute the bonus they will be entitled to receive each year over even a three- to five-year horizon. They know that if they just achieve their plan, they will be entitled to receive a very large stream of EVA bonus awards over time. They are paid for delivering results and as a share of the value they add, and not for beating budgeted intentions. They are paid to think and act like owners—to put in the really hard hours, to take intelligent risks, to challenge the status quo, and to be prepared to transform the business model and innovate as necessary—because they are married to the corporate wellbeing over a long time frame and not just for a series of one-night budget stands. Managers who are confident in their abilities and who sincerely want to build valuable business franchises prefer to be recognized when they are really successful and set loose to make it happen—which is just what the EVA bonus plan does so well.

I am sometimes asked if I advocate breaking the bonus link to budgets and using formula-based targets in order to deemphasize budgeting and planning. Not at all. It's quite the opposite. Budgeting and planning are so important that they should not be corrupted by also making them the basis for earning bonus awards. My point is that companies that the management incentives to business plans are forfeiting some of the best means available for driving better results.

In case you are wondering, EVA is the only measure that fits into a formula-based bonus plan with an automatically adjusting performance target. That is because it's the only measure where bigger is always better, where more is unequivocally better than less. One reason for that is the capital charge, which resets the profit performance bar. And as I will show in Chapter 3, EVA also irons out a whole bunch of accounting distortions. For instance, EVA is based on spreading out research and development (R&D) spending instead of expensing it, so there is no incentive to cut the spending to make a near-term budget and bonus goal. That's just one example, and you will have to read the chapter to fully appreciate that the care taken to measure EVA as a true gauge of economic profit pays a big dividend in being able to use it in a formula-based bonus plan. No other measure passes the test at all. An the others—and those include book earnings, profit margins, sales growth, and return on investment (ROI)—can seemingly improve in ways that the company's true performance and real value are actually diminished, as I will further explain and illustrate throughout the book. This is just a huge win for EVA and a major reason to use it.

A very good example of a highly effective EVA bonus plan comes from Ball Corporation, a metal packaging and aerospace company with \$9 billion in annual revenues. I am pleased to say that I led the effort to help Ball's management adopt EVA in 1992, and that Ball has used essentially the same EVA bonus plan ever since. It is a model plan. The bonus is based exclusively on EVA. The message it conveys is simple—increase EVA. It clearly ties pay to performance. And it motivates all team players to use EVA in modeling decisions and looking for ways to improve performance. And they do use it, right down to the hourly staff in the beverage can manufacturing plant, who watch their parts stores like hawks and pounce on downtime to maximize the run time.

As described in the proxy excerpt description of the plan that follows, Ball's bonuses are based on beating a performance target that is strictly a weighted average of EVA results over prior years, and without any linkage to the budget or business plan goals. All team players are motivated to increase EVA as much as possible rather than to waste time negotiating annual budget goals. And because the bonus is based on an automatically adjusting formula for EVA, the same plan with the same structure has endured through the ages, through the dot-com bubble and burst and recovery, through the housing bubble and burst and slow recovery, through a whole raft of acquisitions, through thick and thin. The bonus plan is like a boat with a deep keel. Whichever way the wind blows, the incentive plan has a strong stabilizing tendency that keeps bonus pay coming back to a base bonus for maintaining EVA and a bonus premium for increasing it.

BALL CORPORATION: DESCRIPTION OF ANNUAL EVA BONUS PLAN, 2012 PROXY, PAGES 28–29

This short-term pay-for-performance incentive is used to encourage and reward the CEO and other NEOs for making decisions that improve performance as measured by EVA. It is designed to produce sustained shareholder value by establishing a direct link between EVA improvement and incentive compensation.

EVA was selected as the measure for Ball's Annual Incentive Compensation Plan because it has been demonstrated to correlate management's incentive with share price growth and shareholder returns. EVA is computed by subtracting a charge for the use of invested capital from net operating profit after-tax as illustrated below:

	Net Operating Profits min	nus Capital Charge
EVA =	After Taxes	(the Amount of Capital Invested
	("NOPAT")	by Ball multiplied by Ball's
		After-Tax Hurdle Rate)

Generating profits in excess of both operating and capital costs (debt and equity) creates EVA. If EVA improves, value has been created.

Performance Measures—Targets are established annually for each operating unit and for the Corporation as a whole based on prior performance. The Plan design motivates continuous improvement in order to achieve payouts at or above target over time.

The Corporation's and/or operating unit's EVA financial performance determines the amount, if any, of awards earned under the Annual Incentive Compensation Plan. Such awards are based on actual EVA performance relative to the established EVA target. For any one year, the EVA target is equal to the sum of the prior year's target EVA and one-half the amount of the prior year's EVA gain or shortfall relative to the prior year's EVA target and may be calculated as follows:

Current Year's EVA Target = Prior Year's plus ¹/₂ (Prior Year's minus Prior Year's) Target EVA plus ¹/₂ (Actual EVA minus Target EVA)

Improvement in EVA occurs when the amount of net operating profit after-tax less a charge for capital employed in the business increases over time. It establishes a direct link between annual incentive compensation and continuous improvement of return on invested capital relative to a 9% after-tax "hurdle rate." The Corporation has established 9% as the "hurdle rate." when evaluating capital expenditures and strategic initiatives in most regions in which we do business. This "hurdle rate" is above the Corporation's true cost of capital.

For a given year, a payout at 120% of target annual incentive compensation is achieved when actual EVA is equal to the EVA target. Actual annual incentive payments each year can range from 0-200% of the targeted incentive opportunity based on corporate performance and/or the performance of the operating unit over which the executive has responsibility. For the Corporation's consolidated plan, a payout of 0% is realized when actual EVA is \$104 million less than targeted EVA. A payout of 200% or greater may be achieved if actual EVA is \$52 million or higher than target EVA. However any amounts over 200% of target are banked and remain at risk until paid over time in one-third increments whenever actual performance under the Annual Incentive Plan results in a payout of less than 200% of target.

In 2011, Ball's actual EVA performance exceeded our EVA target by \$46 million and resulted in a payout of 188% of target, as shown below:

EVA Objectives for Fiscal 2011

Target	200% Payout	Actual
\$96.3 million	\$148.3 million	\$142.3 million

Not surprisingly, Ball has produced oodles of EVA. You do tend to get what you pay for. EVA progressed from a *loss* of \$52 million for the fourquarter period ending mid-1997 to profits of \$63 million by mid-2003, \$137 million for mid-2008, and \$223 million for the four-quarter period ending mid-2012. Ball has been the top performer in its sector, way outpacing its rivals on EVA and on stock performance. The improvement came not only from improving profitability, but also from growth, including a string of acquisitions and a bout of global expansion.

I don't design bonus plans any longer. I had my turn at that. But I certainly like to talk about them and share best practices from my experiences over the years. This is not the final word in the book on using EVA in bonus plans; as I said, the topic is treated in more depth in Chapter 7 when the question of setting targets for EVA comes up.

A good example of how EVA provides managers with a langible incentive to improve performance and add value comes from Coca-Cola. Coke adopted EVA in the early 1980s, the first large company to really embrace it. CEO Roberto Goizueta was a huge fan, and after Cole produced the greatest shareholder wealth of any company in 1994, according to a ranking that *Fortune* magazine published using our statistics, we asked him to accept a trophy that Stern Stewart & Company and *Fortune* had cast to celebrate this accomplishment. He said he would, on one condition. He insisted on telling the attendees at the presentation ceremony why he was so keen about EVA. We accepted.

"EVA is not just for the corporate head office to use," he told the audience. "We think it is a way for everyone in the company to get on the value bandwagon." And he gave an example. Coca-Cola traditionally shipped its concentrated symp to its bottlers in stainless steel containers. The containers sat patiently on Coke's balance sheet and were slowly depreciated against earnings, which made them quite accommodating to book profits. But according to Goizueta, "Someone deep in the midmanagement ranks looked at this and said, 'Wait, we don't really care about book profit. We care about EVA profit. What if we switched over to cardboard containers?'"

Here's the issue. Cardboard containers are not reusable. They are used once, discarded, and charged to earnings. Switching to them would reduce Coke's accounting profit and profit margin and raise unit production costs compared to staying with the stainless steel containers. Goizueta raised his hands in the air, reminiscent of Charlton Heston parting the Red Sea as Moses in *The Ten Commandments*, and asked the conference attendees, "And how many of *you* at *your* companies would even consider a decision like that that would reduce your profit and profit margin and raise production costs in one swoop? But that is why you need EVA, because maybe you should take those hits. You need EVA so everyone can see the right decision amid a sea of conflicting indicators."

In this case, selling the steel containers reduced Coke's capital and capital charge so much that it way more than offset the profit lost by expensing the cardboard containers. It was firmly EVA positive, even if it was NOPAT negative, to make the switch. But how would you really know that without running the numbers, including the impact on the capital charge? And that is precisely why EVA bonus plans are so effective, and so much more effective than stock ownership. With EVA, team members can run the numbers and use a little math to figure the correct decision where trade-offs are involved, as they always are in any real decision. The team members can use EVA to determine how much product prices or profit margins would have to increase to maintain or increase EVA in case a customer makes a request that ties up more inventory or plant capital, for example. They can compute the EVA impact themselves and get it right. They may not know or care that they are increasing the stock price. They only need to know that they are rewarded for EVA and that EVA gives them a concrete way to get to the right answer, and they can let the stock price just take care of itself.

I'll give you a few other examples of where EVA correctly motivated managers and guided them into making much better decisions. One of my clients in the late 1990s was Beet Buy. The company's business model has been squeezed in a vice of late by Apple, Amazon, and Wal-Mart. But back then Best Buy was in even worse shape. The company had a lot of operational and inventory problems and was not near earning its cost of capital. It had no discipline around capital investment or a common way to keep score to get everyone pulling on the same oar. People were working at cross-purposes in many instances. So I was asked to make a presentation to the management committee, including Dick Schulze, the founder and CEO at the time (and the man who is currently contemplating taking Best Buy private), and afterward Dick commissioned me to help Best Buy to adopt EVA as its polestar. This was in 1997 and 1998, and it happened at the very time management was considering adding musical instruments to the merchandise lineup.

It seemed a good idea. Operating margins on musical instruments were clearly quite a bit higher than in Best Buy's traditional lines, and management was on the verge of a go decision. But once EVA came along, management zeroed in on the fact that musical instruments turn slowly and tie up a lot of capital. Teens come in and drum and strum for some time before saving enough dough to make the buy. Not only that, but the average ticket price was higher than typical Best Buy fare and would tie up even more money than usual in the inventory supply chain. The bottom line was that a move into musical instruments would boost the firm's operating profit and margins but reduce its EVA. Thankfully, it was rejected, which management might not have done had operating margins remained the focus of attention.

Another example was the decision by CSX Corporation, the railroad company, to enter intermodal—the business of putting trucks on railcars to ship them around. Management for years dragged its feet because intermodal would produce a much lower profit margin than the firm's main rail business was earning, and management did not want to dilute the margin. But once EVA came along, management realized that intermodal could add lots to EVA even with a lower margin because it required much less capital than the main rail business. It would piggyback off the existing network of assets, as it were, and would be incrementally quite EVA positive.

Another EVA-inspired move for CSX was to spend more on maintenance. Prior to EVA, management's goal had been EBITDA which meant that maintenance spending had been viewed as a necessary evil and a charge to be minimized. But EVA motivated management to consider the benefits, and not just the costs, of maintaining the equipment. Line teams figured that more and better maintenance spending could save capital and boost EVA. They arranged to have railcars and locomotives roll into the repair yards more frequently and leave more swiftly, with a substantial payoff in fleet uptime, reliability, and longevity. EVA payed the way for CSX managers to spend more money on their income statement to save money on their balance sheet.

The last example I'll cite for now is Briggs & Stratton. This was a long time back, but is still relevant. Briggs was reeling from Japanese intrusions into its markets in the 1980s, when firms like Honda started to sell gaspowered engines and lawn mowers in the United States. In defense, Briggs added upscale versions of its engines that were outside its manufacturing comfort zone, which only made matters worse. Enter EVA. All of a sudden, Briggs slashed and redirected capital spending. Why? "The guys are now spending the capital money like it's their own," admitted CEO Fred Stratton.

EVA prompted Briggs, which had been a very highly integrated company, making almost everything in the engine but the spark plugs, to hive off, sell off, even to spin off many of its internal manufacturing lines that just were not competitive compared to outside vendors. And most incredibly, Briggs decided to outsource the manufacture of its troublesome high-end engines to Daihatsu and Mitsubishi. "We decided to let the Japanese fend off the Japanese," quipped the CEO. "Even so, we probably never would have done that without EVA, for cultural reasons; and also, it took our margins way down, as we were only able to charge a much lower markup on the engines we bought and resold than the ones we made, but in so doing we released capital and increased our focus. It was very EVA positive for us—it tuned our engine, probably saved the company." Getting everyone to focus their efforts on improving a single measure that completely and correctly consolidates all the pluses and minuses of decisions into one score is incredibly powerful—more than most CFOs or CEOs who have not lived with it would believe. And ironically, and again counterintuitively, the hard part is not really so much in adding EVA. EVA can be explained simply, illustrated, and made relevant, and with our software tools it is a snap to automate and start using the best practices. In my experience, the hard part is convincing everyone to let go of the other financial metrics they have come to cherish over the years, and to trust EVA and let it be the one key focal measure that really matters.

Let's face it—most companies don't do anything of the sort. Most CFOs track a disorganized jumble of performance metrics without a way to express that one matters any more than any other. I recall once visiting a company that was placing a 10 percent weight on each of 10 metrics in its bonus plan, and when I stated the view that that was quite a few, the executives said, "But they are all on our balanced scorecard, and they are all important." I said, "But brushing your teeth in the morning is important, too. Why not add that? Why not put a 1 percent weight on 100 measures and bring everything into the picture?"

The serious point I was trying to covey was that in their attempt to make everything important, nothing was. They had a scorecard without a score. They acted as if each measure should be increased and would add to value on its own, as if no trade-offs ever needed to be made. But in the real world and in real decisions, choices and trade-offs always have to be made—the most basic of which is that you generally cannot increase sales unless you increase capital. And that is why it is so essential to have one score that properly consolidates the pluses and minuses into a net sum.

Another criticiste is that they had so broken down the management equation into a set of mini-metrics that they were micromanaging the business and inhibiting their team from taking initiatives. They were straitjacketing their managers into a preordained way of running the business. At best they were re-creating EVA by an imperfect and very complicated proxy. At worst they were treating their management team disrespectfully, as if they had to spoon-feed them every detail and manage their every decision. I call that marionette management—management by pulling on strings. I say cut the strings and let Pinocchio come to life. *Educate and empower* is the hallmark of an EVA company. http://www.bookshop.com