Corporate Budgeting Is Broken – Let's Fix It

by Michael C. Jensen

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Traditional budgeting processes waste time, distort decisions, and turn honest managers into schemers. It doesn't have to be that way – if you're willing to sever the ties between budgets and compensation.

by Michael C. Jensen

CORPORATE BUDGETING IS A JOKE, and everyone knows it. It consumes a huge amount of executives' time, forcing them into endless rounds of dull meetings and tense negotiations. It encourages managers to lie and cheat, lowballing targets and inflating results, and it penalizes them for telling the truth. It turns business decisions into elaborate exercises in gaming. It sets colleague against colleague, creating distrust and ill will. And it distorts incentives, motivating people to act in ways that run counter to the best interests of their companies.

Consider just two examples. At one international heavy-equipment manufacturer, managers were so set on hitting their quarterly revenue target that they shipped unfinished products from their plant in England all the way to a warehouse in the Netherlands, near the customer, for final assembly. By shipping the incomplete products, they were able to realize the sales before the end of the quarter and thus fulfill their budget goal and make their bonuses. But the high cost of assembling the goods at a distant location – it required not only the rental of the warehouse but also additional labor – ended up reducing the company's overall profit.

Then there's the recent debacle involving a big beverage company. The vice president of sales for one of the company's largest regions dramatically underpredicted demand for an upcoming major holiday. His motivation was simple – he wanted to ensure a low revenue target that he could be certain of exceeding. But the price for his little white lie was extremely high: The company based its demand planning on his sales forecast and consequently ran out of its core product in one of its largest markets at the height of the holiday selling season.

Such cases of distorted decision making are legion in business. No doubt, you could list similar instances that you've observed – or perhaps even instigated – at your own company. The sad thing is, these shenanigans have become so common that they're almost invisible. The budgeting process is so deeply embedded in corporate life that the attendant lies and games are simply accepted as business as usual, no matter how destructive they are.

But it doesn't have to be that way. Even if you grant that budgeting, like death and taxes, will always be with us, deceitful behavior doesn't have to be. That's because the budget process itself isn't the root cause of the counterproductive actions; rather, it's the use of budget targets to determine compensation. When managers are told they'll get bonuses if they reach specific performance goals, two things inevitably happen. First, they attempt to set low targets that are easily achievable. Then, once the targets are in place, they do whatever it takes to see that they hit them, even if the company suffers as a result.

Only by severing the link between budgets and bonuses – by rewarding people purely for their accomplishments, not for their ability to hit targets – will we take away the incentive to cheat. Only then will we eliminate the budgeting incentives that drive individuals to act in ways that destroy corporate value.

Cheaters Prosper

Let's look more carefully at how budgets drive compensation and, in turn, behavior. In a traditional pay-for-performance incentive system, a manager's total cash compensation (salary plus bonus) is constant until a minimum performance hurdle is reached – commonly 80% of a budgeted target. (The target might be expressed as profits, sales, output, or any number of things; for our purposes, it doesn't matter what's being measured.) When the manager exceeds that hurdle, she receives a bonus, often a substantial one. The bonus then increases as performance mounts above the hurdle until the bonus is capped at some maximum level – 120% of the target is usual. This system is illustrated in the exhibit "A Typical Executive Compensation Plan."

The kinks in the pay-for-performance line – caused by the minimum hurdle bonus and the maximum cap – create strong incentives to game the system. As long as the manager believes she can make the minimum hurdle, she will naturally try her best to increase performance – by legitimate means or, if push comes to shove, by illegitimate ones. If the measure is profits, for instance, she will have a strong incentive to increase the current year's earnings at the expense of next year's, either by pushing expenses into the future (delaying purchases or hires, for example) or by moving future revenues to the present (booking orders early or offering special discounts to customers, for example).

If, on the other hand, the manager concludes that she can't make the minimum hurdle, her incentives flip 180 degrees. Now her goal is to move earnings from the present to the future. After all, her compensation doesn't change whether she misses the target by a little or a lot; she still gets her full salary (assuming she doesn't get fired, of course). But by shifting profits forward – by prepaying expenses, taking write-offs, or delaying the realization of revenues – she increases her chances of getting a large bonus the following year. This is a variation on the "big bath" theory of corporate financial reporting: If you're going to take a loss, take as big a loss as possible.

Finally, if the manager is having a great year and her performance is nearing the budget cap, she again has an incentive to push profits into the future. Because she's

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not going to get any additional compensation if performance exceeds the level at which the cap is set, accelerating expenses or postponing sales will have no negative impact on her current earnings, but it will raise the odds that she'll reap a high bonus next year as well. This perverse incentive becomes even stronger if her current year's performance is used in setting the following year's targets, as is often the case.

When these kinds of subterfuge simply move profits from one year to another – by changing accruals, for example – the adverse impact on company value is probably small. But rarely is the activity so benign. Usually, the shuffling of dollars results from decisions that change the operating characteristics of a company, and it generates high, if sometimes hidden, costs that erode the total value of the company. We saw such erosion in the two examples presented earlier. We see it as well in the common practice of channel stuffing – when managers ship loads of products to distributors to meet immediate sales goals, even though they know many of the goods will soon come back as returns. And we see it in distorted pricing decisions. The managers of one durable-goods manufacturer, struggling to meet their minimum bonus hurdles, announced late one year that they would be raising prices 10% across the board on January 2. The managers made the price hikes because they wanted to encourage customers to place orders by year-end so they could hit their annual sales goals. But the price increase was out of line with the competition and undoubtedly ended up costing the company sales and market share.

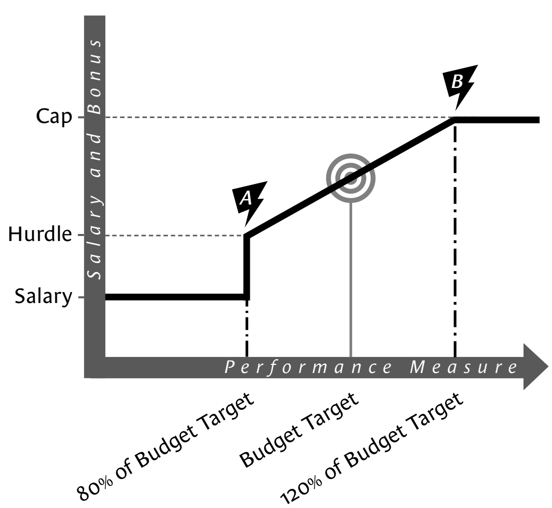
Even more insidious effects are common. One of the main reasons that big companies have budgets in the first place is to help coordinate the disparate parts of their businesses. By openly sharing accurate information and basing decisions on a common set of numbers, the thinking goes, you ensure harmonious interactions among units, leading to efficient processes, high-quality products, low inventories, and satisfied customers. But as soon as you start motivating unit and department heads to falsify forecasts and otherwise hide or manipulate critical information, you undermine the salutary effects of budgeting. Indeed, the whole effort backfires. You end up with uncoordinated, chaotic interactions as people make decisions on the basis of distorted information they receive from other units and from headquarters. Moreover, since managers are well aware that everyone is attempting to game the system for personal reasons, you create an organization rife with cynicism, suspicion, and mistrust.

When the manipulation of budget targets becomes routine, moreover, it can undermine the integrity of an entire organization. Once managers see that it's okay to lie and conceal information to enrich themselves or simply to hold on to their jobs, they soon begin to extend their dishonest behavior to all parts of the company's management system and even to its relationships with outside parties. Managers start to feed misleading information to customers, suppliers, and employees, and the CEO and CFO begin to "manage the numbers" to influence the perceptions of board members and Wall Street analysts. Even boards of directors are drawn into the fray, as they end up endorsing deceptive reports to shareholders. Sometimes, outright fraud ensues, as we've seen recently in high-profile cases involving companies such as Informix, Sabratek, and Lernout & Hauspie.

The damage can go well beyond the walls of individual companies. Think about what happens, for example, during a boom. As financial analysts and investors raise expectations for growth beyond the capability of companies, many managers begin to borrow from the future to satisfy the present demands. This results in an overstatement of earnings and cash flows for many companies and an exaggeration of the extent of the good times. Conversely, during the early stages of an economic slowdown, as demand falls below predicted levels and inventories

A Typical Executive Compensation Plan

In a traditional pay-for-performance compensation plan, a manager earns a hurdle bonus when performance reaches a certain level (A). The bonus increases with performance until it hits a maximum cap (B). The kinks in the pay-for-performance line create incentives to game the system. When performance approaches the hurdle target, a manager has a strong incentive to accelerate the realization of revenue and profit. When performance hits the cap, the manager has a strong incentive to push revenue and profit into the next year.



build up, managers often find themselves falling short of their bonus targets. When they and their companies all react in the same, predictable way – taking big baths by maximizing the bad news – the cumulative effect is to exaggerate the economic weakness, perhaps deepening or extending the recession. Macroeconomic statistics and even public policy are likely distorted in the process.[1]

Getting the Kinks Out

The only way to solve the problem is to remove all the kinks from the pay-for-performance line – to adopt a purely linear bonus schedule, as shown in the exhibit "A Linear Compensation Plan." Managers are still rewarded for good performance, but the rewards are independent of budget targets: The bonus a manager receives for a given level of performance remains the same whether the budget goal is set at Target 1 (below actual performance) or at Target 2 (above actual performance). The linear bonus schedule, in other words, rewards people for what they actually do, not for what they do relative to what they say they can do.

That removes the incentives to game the system. Because unit managers no longer get a pile of cash for exceeding a target, they have no motivation to feed falsified information into the budgeting process in order to lowball their goals. As a result, senior management receives unbiased estimates of what can be accomplished in the future, and the quality of planning and coordination improves considerably. At the other end of the process, managers are no longer rewarded for moving revenues and expenses around when the end of a budget period approaches. Because their bonuses are always determined by their actual performance, an extra dollar of revenue or profit (or whatever measure is used) will generate the same bonus this year as it will next year. Not only will this remove the costs of gaming, it will also free managers from all the time they traditionally had to devote to it. They can dedicate that time to their real jobs: maximizing the performance and value of their businesses.

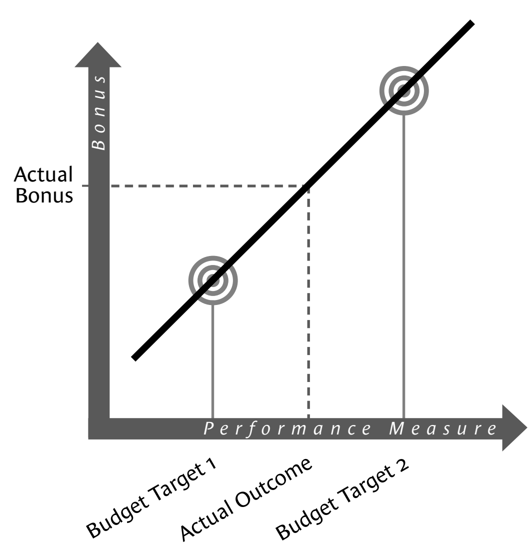
Two additional points should be made here. First, nonmonetary rewards also have to be independent of budget targets. Handing out promotions or public accolades based on the ability to hit budget numbers, for example, will provide a continued incentive for gaming. That practice has to stop. All rewards must be based purely on actual performance.[2] Second, since pay will still go up as performance improves, dishonest managers may continue to lie about their numbers in order to increase their bonuses. That, of course, is a risk that companies have always had to watch out for. A linear bonus schedule does not reduce the need for good control systems and attentive executives.

Removing the kinks from the compensation system allows the budgeting process to do what it's intended to do: provide the basis for good business decisions and enable the effective coordination of disparate units. But many managers will reflexively object to this proposal. Yes, they'll say, a linear bonus schedule will remove the incentive to game the system, but won't it also remove the motivational effects of performance targets? It's a legitimate question, and it's one that is difficult to answer with hard numbers. Empirical evidence shows that tying goals to rewards does enhance performance. A recent survey of more than 500 studies, for example, indicates that performance increases by an average of approximately 16% in companies that establish targets.[3] But even if we assume such findings are accurate, we don't know whether the performance increase is itself a result of gaming, as managers rush to overstate their results to meet the new targets.

Nor do we know definitively the long-term costs of gaming. No comprehensive study has been done, and such a study would be hard to carry out, given how pervasive and well-hidden these costs are. However, Donald Roy conducted a landmark study, published in the *American Journal of Sociology* in 1952, of an analogous situation: the use of piecework targets to determine the

A Linear Compensation Plan

The solution to the budget gaming problem: Adopt a purely linear pay-for-performance system that rewards actual performance, independent of budget targets. A manager receives the same bonus for a given level of performance whether the budget goal happens to be set beneath that level (Budget Target 1) or above it (Budget Target 2). Removing the kinks eliminates the incentives for managers to game the process.



bonuses of factory workers. Based on his findings, Roy estimated that productivity in the factory he studied would increase by 33% to 150% if the targets were discontinued. Based on that research, as well as my own observations of the widespread, destructive effects of gaming, I conclude that the costs of budget-based bonuses far outweigh the benefits in most, if not all, situations.

When you start rewarding managers for falsifying forecasts and otherwise distorting critical information, you threaten the integrity of your entire organization.

Finally, it's important to note that setting extremely aggressive stretch goals, as is so common in business today, can itself have damaging repercussions. By establishing the expectation that managers will constantly push to exceed reasonable growth and profitability targets, senior executives can end up creating a dysfunctional organizational culture in which all the problems I've described are amplified. That's what happened recently at one prominent multinational corporation. A new CEO came in, and he suspected that unit heads were routinely lowballing their budget targets and then delivering mediocre results. He quickly reorganized the company to establish clearer accountability down the line, and then he launched an intensive campaign to get everyone to set stretch goals for the coming year, with their bonuses hanging in the balance. The effort blew up in the CEO's face.

The budget-setting process became a year-long exercise in internecine warfare. Knowing that their bonuses hinged on their ability to hit the new targets, line managers battled over the way the overall corporate stretch goals for revenues and profits should be allocated among the business units. Each, of course, tried to reduce his or her unit's target. Every time revised goals were circulated, new arguments broke out. And when the targets were eventually finalized, things got even worse. Within months, most unit heads realized they wouldn't be able to reach their stretch goals, and they let the year fall into the tank in a way that is consistent with pushing revenues and profits out to the future. They were clearly hoping that by taking a bath this year they would be given lower targets next year. Needless to say, the CEO's tenure was short.

Making the Switch

It's not going to be easy for companies to adopt a linear compensation system. Target-based bonuses are deeply ingrained in the minds of managers and in the managerial codes of most organizations. Getting managers to give them up will be tough, and getting them to give up promotions or reputational rewards for "beating budget" will be even tougher. Most difficult of all, though, will be getting them to break free of the cynicism that surrounds the entire budgeting and bonus-paying system. But the benefits are so great – in terms of a company's long-run economic and organizational health – that the journey will be well worth the time and effort. And there are some guidelines that can help the transition proceed more smoothly.

Get the details right. The design of compensation programs lies outside the scope of this article. But it is important to emphasize that the success of a linear bonus program, like that of any pay system, hinges on its details. There are three key considerations: the performance measures used, the positioning and slope of the bonus line, and the establishment of minimum and maximum compensation levels.

In establishing performance measures, executives run the risk of distorting managerial decisions, even under a linear bonus system. One example is the use of multiple measures of performance. This practice can motivate managers to think more broadly and carefully about the operating and economic drivers of business success. But it also adds complexity to the system in a way that can impede decision making. Suppose, for example, a manager is told to increase both profits and market share in the coming year. If, after some point, market share can be increased only by cutting prices, and thus profits, the manager no longer has a basis for making reasoned decisions. The conflicting goals eliminate his ability to act purposefully. When using multiple performance measures for individual managers, companies should be careful to establish a single, clearly defined measure of overall business success, such as economic value added. That will give managers a basis for making trade-offs among performance measures when they come into conflict.[4]

A second example is the use of ratios as performance measures. Here I can be blunt: Don't do it. Using ratios, such as sales margin or return on assets, inevitably produces gaming. That's because managers can increase the measure in two ways: by increasing the numerator or decreasing the denominator. If, for example, a company tracks performance according to margin as a percentage of sales, managers can increase their pay by simply cutting back sales (selling only the highest margin products) instead of working to increase the margins on all products. The result: Total dollars of profit fall, and company value erodes.

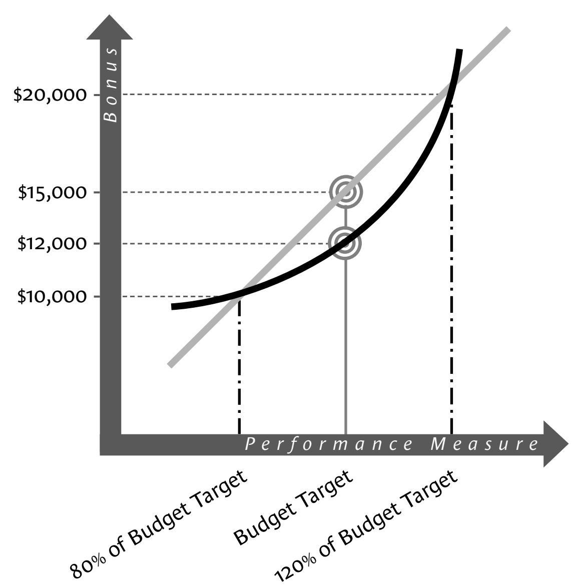
The positioning and slope of the bonus line work in tandem to determine the amount of money a manager receives for a given level of performance. Moving the line to the right on the performance scale, for instance, makes it harder to get an additional dollar of bonus, while providing a steeper slope makes it easier to get that dollar. In setting the line, executives have a tendency to focus on the short term. In particular, they often position the line based on the prior year's performance. That reduces the risk that managers will be overcompensated for overly conservative projections of performance (a high bonus in one year makes it harder to get a high bonus the next year), but it also reduces incentives for increasing performance. Because managers know that an increase in performance this year will result in higher targets for succeeding years, the motivation to make the extra effort is dampened – unless the current year's bonus is extraordinarily large. A better way is to look further into the future, setting bonus lines for a number of years out based on longer-term projections for growth and profitability. This is harder to do, but it reduces the potential for manipulation.

In general, it is extremely important that companies model the economic impacts of different positionings and slopes for their bonus lines. As in any compensation system, the right balance must be struck between the rewards delivered to employees for incentive purposes and the capital retained for reinvestment or for distribution to investors or other owners.

Finally, there's the issue of limits on compensation. Ideally, you wouldn't have any – all pay would be directly related to actual performance. But there are strong pressures to limit both the upside and the downside for employees and managers. Most companies have to pay salaries in order to attract and retain employees (thus defining the lower bound of compensation), and most feel compelled to set some upper limit to bonuses. What's important is to try to set the upper and lower limits outside the range of likely outcomes to minimize their potential for setting off gaming. In many cases, this will require companies to raise bonus caps well above traditional levels, which is sure to create organizational discomfort. For example, a manager will inevitably end up paying certain high-performing subordinates more than he himself makes. Also, some managers may complain that certain people are being paid inordinately large amounts just because they happened to get lucky. (Of course, luck is extremely hard to distinguish from talent, and much of the griping will simply be a sign of jealousy.) Managing such conflicts – by clearly articulating the philosophy underlying the pay plan, for example – is one of the difficult but necessary challenges in moving to a more rational compensation scheme.

The Impact of a Curvilinear Compensation Plan

Curvilinear pay-for-performance plans are no cure for gaming. They encourage managers to increase the variability of year-to-year performance measures. In this example, a manager makes more by achieving 80% of a budget target one year and 120% the next than by hitting the target both years. Under the linear plan, by contrast, the manager would earn the same in both scenarios.



Don't backtrack. Even after managers become intellectually convinced that a linear bonus schedule is desirable, they may still argue for a compromise plan that again allows budget targets to influence compensation. In a number of companies I have worked with, executives have, for instance, proposed replacing the new linear schedule with a curvilinear one. By making the pay-for-performance line curve upward more steeply after the budget goal is reached (and less steeply before it is reached), bonuses begin to increase more rapidly for every incremental improvement in performance beyond the target. That may appear to fulfill the psychological need of many managers to "get something more" after surpassing a goal, without putting any obvious kinks back into the system. But in fact, curvilinear schedules reintroduce a strong incentive for gaming.

To see why, look at the exhibit "The Impact of a Curvilinear Compensation Plan." In the example portrayed here, a manager whose profit performance in two succeeding years exactly matched the budget goal would receive a bonus of $12,000 in each year, for a total of $24,000. But if she could manipulate that same amount of profit so that she hit 80% of the goal in one year and 120% in the next, she would receive $10,000 in one year and $20,000 in the other, for a total of $30,000. The curvilinear plan, in other words, has given her a strong monetary incentive to start fudging the numbers again, and, in this case, she would be rewarded for increasing the variability of performance. What's more, she would be willing to do this even if it lowered overall performance within some range. In contrast, under a truly linear scheme, the manager would receive the same total ($30,000) in both scenarios.

Last January, Chrysler Motors introduced a new dealer-incentive plan that was based on a curvilinear pay-for-performance scale. The plan paid dealers a monthly bonus ranging from zero (for those who achieved less than 75% of their sales targets) to $500 per car sold (for those who achieved more than 110% of the target). When car sales began to slow in April, many Chrysler dealers realized that they were unlikely to exceed the targets for the month and therefore they reduced inventories, shifting sales of cars from April to May, when they could be much more certain to earn the $500 per car bonus. In the end, Chrysler's CEO had to announce that company sales fell 18% in April as a result of its dealer bonus program, while overall industry sales were down only 10%.

Lead from the top. Given the complexity of designing a new pay system, as well as the controversy it inevitably sets off, CEOs will feel a natural desire to hand off responsibility for the effort to the human resources department. That would be a mistake, probably a fatal one. HR has neither the standing nor the influence to make a fundamental business change that will have a profound impact on the decisions of line managers. And that's exactly the kind of change that I'm talking about: All members in the organization will have to shift their thinking about the role and use of both budgets and incentives. Performance measures will have to be changed, and bonus levels will have to be recalculated. Since these issues are as sensitive as any within a company, strong leadership is essential. Only the CEO has the credibility to make the business case for the changes and to rally the troops behind them.

The CEO should recognize that the new plan will meet with intense resistance, even at the highest reaches of the organization. Some of the strongest objections, I have found, tend to come from CFOs and their teams. Finance executives naturally fear that reducing the importance of budget targets in motivating line managers will make it more difficult to control results and avoid surprises. It will be the CEO's responsibility to make sure the CFO, not to mention Wall Street analysts, understands that the new approach will improve the quality of both the information provided and the incentives paid to managers. And better information and better incentives will lead to better results. Yes, there may be greater uncertainty in quarter-to-quarter results – as there will no longer be any motivation to set artificially low targets and then do everything possible to meet them – but the long-run profits will be superior.

Finally, every line manager will have to understand the new system and the theory behind it and be prepared to explain it and defend it against opposition and opportunism from the ranks. There are no shortcuts through the education process. Organizations don't change overnight, particularly when the very frame through which we see the business is involved. Remember, it has taken many years to weave lying and deceit into the fabric of our businesses; cleansing the fabric will take time as well.

1. See M. C. Jensen, "Paying People to Lie: The Truth About the Budgeting Process," working paper (Harvard Business School, April 2001). Available on-line at http://ssrn.com/paper=267651.

2. To read more on how goals can distort behavior, even in the absence of ties to tangible rewards, see M. Schweitzer, L. Ordonez, and B. Douma, "The Dark Side of Goal Setting: The Role of Goals in Motivating Unethical Behavior," working paper (Wharton School, University of Pennsylvania, 2001).

3. See Edwin A. Locke, "Motivation by Goal Setting," in *Handbook of Organizational Behavior,* ed. Robert T. Golembiewski (Marcel Dekker, 2001). Also see Edwin A. Locke and Gary P. Latham, *A Theory of Goal Setting and Task Performance* (Prentice Hall, 1990).

4. See Michael C. Jensen, "Value Maximization, Stakeholder Theory, and the Corporate Objective Function," *Business Ethics Quarterly,* January 2001. Available on-line at http://ssrn.com/paper=220671.

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