THE REAL KEY TO CREATING WEALTH

Rewarded by knockout results, managers and investors are peering into the heart of what makes businesses valuable by using a tool called Economic Value Added. ■ by Shawn Tully

WHAT IF you could look at almost any business operation and see immediately whether it was becoming more valuable or less? What if you as a manager could use this measure to make sure your operation—however large or small—was increasing in value? What if you as an investor could use it to spot stocks that were far likelier than most to rise high? What if using this measure would give you a marked competitive advantage, since most managers and investors aren’t using it?

There is such a measure—but you’ll have to move fast to seize your competitive advantage, because it is catching on quick. It goes by several names, depending on which user or consulting firm you talk to; McKinsey and others do a lively trade teaching it. The preeminent popularizer of the concept is Stern Stewart & Co. of New York City, which calls it economic value added, or EVA. It is today’s hottest financial idea and getting hotter.

Seeing why is easy—just look at the charts on this page. Managers who run their businesses according to the precepts of EVA have hugely increased the value of their companies. Investors who know about EVA, and know which companies are employing it, have grown rich. Little wonder that highly regarded major corporations—Coca-Cola, AT&T, Quaker Oats, Briggs & Stratton, CSX, and many others—are flocking to the concept. “EVA played a significant role” in AT&T’s recent decision to buy McCaw Cellular for $12.6 billion, says William H. Kurtz, an AT&T financial executive. AT&T this year will make EVA the primary measure of business units’ and managers’ performance. Explains Quaker CEO William Smithburg: “EVA makes managers act like shareholders. It’s the true corporate faith for the 1990s.”

So what is it? Simply stated, EVA is just a way of measuring an operation’s real profitability. What makes it so revealing is that it takes into account a factor no conventional measure includes: the total cost of the operation’s capital. The capital is all the money tied up in such things as heavy equipment, real estate, computers, and other stuff that’s expected to be productive for a while after it has been purchased, plus so-called working capital, mainly cash, inventories, and receivables. EVA is simply after-tax operating profit, a widely used measure, minus the total annual cost of capital (see box).

Here’s how Coca-Cola CEO Roberto Goizueta, a champion wealth creator, explains it: “We raise capital to make concentrate, and sell it at an operating profit. Then we pay the cost of that capital. Shareholders pocket the difference.” This turns out to be profound. Incredibly, most corporate groups, divisions, and departments have no idea how much capital they tie up or what it costs. True, the cost of borrowed capital shows up in a company’s interest expense. But the cost of equity capital, which the shareholders have contributed, typically appears nowhere in any financial statements—and equity is extraordinarily expensive capital. Until managers figure all this out, they can’t
Quaker CEO Smithburg is an EVA evangelist. It helped him make a move that hammered the stock temporarily but will aid the company long term.

know whether they’re covering all their costs and adding value to a company.

Understand that while EVA is easily today’s leading idea in corporate finance and one of the most talked about in business, it is far from the newest. On the contrary: Earning more than the cost of capital is about the oldest idea in enterprise. But just as Greece’s glories were forgotten in the Dark Ages, to be rediscovered in the Renaissance, so the idea behind EVA has often been lost in ever darker muddles of accounting. Managers and investors who come upon it act as if they have seen a revelation.

You’d act that way too if you had been at CSX for the past five years. “EVA is anything but theoretical,” says CEO John Snow, who introduced the concept at his company in 1988. “How we use capital determines market value.” Snow has lots of capital to worry about, a mammoth fleet of locomotives, containers, and railcars. His stiffest challenge came in the fast-growing but low-margin CSX Intermodal business, where trains speed freight to waiting trucks or cargo ships. Figuring in all its capital costs, Intermodal lost $70 million in 1988. In other words, its EVA was negative $70 million. Snow issued an ultimatum: Get that EVA up to breakeven by 1993 or be sold.

Freight volume has since swelled 25%, yet the number of containers and trailers—representing a lot of capital—has dropped...
from 18,000 to 14,000. They used to sit in terminals for two weeks between runs, but once CSX managers started seeing them as expensive, idle capital, they figured out ways to return them to the rails in five days. This is hardly rocket science. But before EVA, no one had done it; no one had had enough incentive to do it.

The company is also making do with a locomotive fleet of 100 instead of 150, a $70 million reduction in capital. How? On the route from New Orleans to Jacksonville, Florida, four locomotives used to power trains at 28 mph. But the trains arrived at midnight, long before they were unloaded onto trucks or freighters. Spurred by the EVA imperative, CSX decided to run the trains at 25 mph with only three locomotives and arrive three hours later, still in plenty of time to be unloaded at 4 or 5 A.M. The three locomotives also use some 25% less fuel than four. Slower trains and surging productivity met Snow's challenge. Intermodal's EVA was $10 million last year and is on track to triple in 1993. Wall Street has noticed: CSX stock was at $28 when Snow introduced the EVA program and was recently at $75.

It's a similar story in another capital-intensive business, making gasoline engines. Before introducing EVA in 1990, Briggs & Stratton was a rigid hierarchy. The company had no profit centers in the engine business below the corporate level—like most companies, it had no idea of each division's EVA—and it took macho pride in making almost all components in-house.

Today headquarters grants a wide berth to five divisions that make engines for lawn mowers, pumps, and other products. Each knows its EVA, and that knowledge has led to big savings from outsourcing. The company is phasing out production of the largest engines for pumps and generators, freeing the capital that had been unprofitably tied up in making them. Says John Sheely, the executive in charge of engineering: "EVA's discipline caused us to make the right decision." Now it buys premium engines, at a lower cost, from Mitsubishi. Molded plastics and other components, once made in small batches in-house, flow from suppliers that produce in huge quantities.

Briggs & Stratton struggled with a miserable 7.7% return on capital in 1990, way below the capital's 12% cost. By focusing on that hurdle, the company has just cleared it, and the stock market is applauding: The share price has jumped from $20 in 1990 to $380 recently.

One of EVA's most powerful properties is its strong link to stock prices. The two numbers show a remarkable tendency to move up and down together. Says James Meenan, chief financial officer of AT&T's long-distance business: "We calculated our EVA back to 1984 and found an almost perfect correlation.
with stock price." Stock prices track EVA far more closely than they track such popular measures as earnings per share or operating margins or return on equity. That's because EVA shows what investors really care about—the net cash return on their capital—rather than some other type of performance viewed through the often distorting lens of accounting rules. For example, IBM's cash flow per share and book value per share increased smartly between 1984 and 1989. But anyone looking at the company's EVA in that period (see chart) had a far better idea what was happening.

For this reason, investors understandably favor companies committed to increasing EVA. Eugene Vesell, senior vice president of Oppenheimer Capital, which manages $26 billion, says, "We like to invest in companies that use EVA and similar measures. Making higher returns than the cost of capital is how we look at the world." Oppenheimer has earned 17% an-

**WHAT'S YOUR EVA?**

The power of the economic value added (EVA) concept comes from the insight that you can't know if an operation is really creating value until you apply the true cost of capital to all the capital employed. Most operations within companies—and some companies themselves—have no idea what either amount is. Finding out is fascinating and often startling.

**Question No. 1:** What's the true cost of your capital? You know the cost of your borrowed capital; at least in the short term it's the interest you pay, adjusted to economists call the opportunity cost. Many managers resist this idea—how can it be a real cost if I don't have to write a check every month?

If that's your reaction, think of it from the point of view of the shareholder who has given his money to you instead of to Coca-Cola or Berkshire Hathaway or the Magellan Fund. If you're not employing his money as successfully as they are—and not showing any promise of doing so—he will take his money back by selling your stock, sending its price down. Other investors will be less in-

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<th>After-tax operating profit</th>
<th>Cost of capital</th>
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<td><strong>Anheuser-Busch</strong></td>
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<td>$1,756 MILLION OPERATING PROFIT</td>
<td>$11.3% (WEIGHTED AVERAGE COST $8.0 BILLION TOTAL CAPITAL)</td>
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| **Spiegel**               |                 |     |
| $188 MILLION OPERATING PROFIT | $11.1% (WEIGHTED AVERAGE COST $1.6 BILLION TOTAL CAPITAL) | **$59 MILLION** |
| $-69 MILLION TAXES        |                 |     |
| **$119 MILLION**          | **$178 MILLION** | **$59 MILLION** |

reflect its tax deductibility. (In the longer term it's more complicated, and we'll leave that aside.) But what about equity capital, the money the shareholders provided? Since you aren't required to pay for it, you may think it's free. But it isn't—and its cost is much more than many managers would imagine.

Your true cost of equity is what your shareholders could be getting in price appreciation and dividends if they invested instead in a portfolio of companies about as risky as yours. It's what declined to supply any capital. So as long as you're not at least matching the investor's opportunity cost, you're on the road to oblivion. Says Talton Embry, an EVA enthusiast whose New York investment firm owns stakes in a host of big companies: "Capital looks free to a lot of managers. It doesn't look free to investors who help them the money."

So what is equity's cost today? Over time, shareholders have received on average a return that is six percentage points higher on stocks than on long-

term government bonds. With bond rates around 6.3%, that puts the average cost of equity at 12.3%, though it goes much higher for companies with volatile stocks and lower for those with more stable stocks. Assuming you use debt as well as equity capital, the cost is the weighted average of the two.

**Question No. 2:** How much capital is tied up in your operation? Even if you don't know the answer, you know what it consists of: what you paid for real estate, machines, vehicles, and the like, plus working capital. But proponents of EVA say there's more. What about the money your company spends on R&D? On employee training? Those are investments meant to pay off for years, but accounting rules say you can't treat them that way; you have to call them expenses, like the amount you spend on electricity. EVA proponents say forget the accounting rules. For internal purposes, call these things what they are: capital investments. No one can say what their useful life is, so make your best guess—say five years. It's truer than calling them expenses.

When you've answered these questions, you can multiply the capital from Question 2 by the rate from Question 1 and get the dollar cost of the capital in your operation. Now it's a simple matter to figure your EVA. Start with the commonest management yardstick, operating earnings. Subtract taxes. Then subtract the capital cost. What's left is your EVA.

If it's positive, congratulations—your operation is creating wealth. If it's negative, you've just learned your operation is destroying capital. You'd better fix it, fast. For how, see box, page 50.

Don't assume that because capital costs a lot, it's a bad thing. Look at the EVAs of Anheuser-Busch and Spiegel (above). It isn't how much capital you've got, but how you manage it.
nually on average over the past decade, well above the S&P 500.

EVA is not just for industrial companies. In general, it works fine in service businesses as well. A few types of companies require special adaptations of basic EVA analysis. Examples: natural resource and land companies and others with assets that appreciate rather than depreciate.

At AT&T, Chief Executive Robert Allen is breaking the ultimate corporate monolith into lean operating units. The driving tool is EVA.

Until recently AT&T provided balance sheets for only a half-dozen huge groups, such as long-distance services and telephone equipment. But dozens of units sold products and services ranging from telephone sets to toll-free 800 numbers. The capital used by each of the myriad long-distance services was lumped together at the group level. Since no individual service knew how much capital it used, none had any idea if it was beating its cost of capital and thus adding value to AT&T.

Allen’s solution: Starting last year he encouraged managers to divide their businesses into profit centers resembling independent companies. The long-distance group now consists of 40 units selling such services as 800 numbers, telemarketing, and public telephone calls. All the capital each one uses, from switching equipment to new-product development, goes on its balance sheet.

“The effect is staggering,” says Meenan. “‘Good’ is no longer positive operating earnings. It’s only when you beat the cost of capital.” Some businesses found they had been posting negative EVAs for years. Now they’re on a tough timetable to make the hurdle.

One of America’s most enthusiastic proponents of EVA is Coca-Cola’s Goizueta, who extolled return on capital long before formally introducing EVA companywide in 1987. “I’m a great returns man,” says Goizueta, seated in his antique-filled Atlanta office sipping steaming espresso from a red Coca-Cola cup. He has included a clear and persuasive description of EVA in Coke’s latest annual report. On weekends Goizueta scours other companies’ annual reports for impressive rates of return, reclining on a pillow embroidered with a favorite slogan, THE ONE WITH THE BIGGEST CASH FLOW WINS. He uses simple metaphors to distill EVA: “When I played golf regularly, my average score was 90, so every hole was par 5. I look at EVA like I look at breaking par. At Coca-Cola, we are way under par and adding a lot of value.”

To get there, Goizueta used a double strategy. First he concentrated capital in the hugely profitable soft drink business: “As Willy Sutton used to say about banks, that’s where the money is.” He dumped a motley of businesses that made pasta, instant tea, plastic cutlery, desalinization equipment, and wine. All posted returns on investment of 7% or 8%, far below their cost of capital. Soft drinks earn much, much more, so that Coke last year earned 29.4% on capital, almost 2½ times its cost.

Second, Goizueta focused on raising returns far faster than the bill for capital. One tool is leverage. In the early 1980s Coke was practically debt-free. To Coke’s costly equity—it was much costlier in those high-inflation days—Goizueta added less expensive borrowings, lowering the average cost of capital from 16% to 12%.

At the same time, he coaxed the business into doing more with the capital it had—or with less. The company produces more concentrate with 40 plants now than
it produced with 52 in 1982. "We’ve even replaced expensive metal containers for concentrate with inexpensive plastic ones," says Coke CFO Jack Stahl, another gung ho EVA advocate.

Result of all this: Coke’s EVA has surged an average of 27% annually for the past five years. Coke stock is up from $3 to $43 since Goizueta took over 12 years ago.

To see how EVA can change a company’s attitude and behavior from top to bottom, look at Quaker Oats. Until Quaker adopted the concept in 1991, its businesses had one overriding goal—increasing quarterly earnings. To do it, they guzzled capital. They offered sharp price discounts at the end of each quarter, so plants ran overtime turning out huge shipments of Gatorade, Rice-A-Roni, 100% Natural Cereal, and other products. Managers led the late rush, since their bonuses depended on raising operating profits each quarter.

This is the pernicious practice known as trade loading (because it loads up the trade, or retailers, with product), and many consumer products companies are finally admitting it damages long-term returns. An important reason is that it demands so much capital. Pumping up sales requires many warehouses (capital) to hold vast temporary inventories (more capital). But who cared? Quaker’s operating businesses paid no charge for capital in internal accounting, so they barely noticed. It took EVA to spotlight the problem.

The evangelist is William Smithburg. A smooth extrovert who sports striped suspenders and flamboyant ties, Smithburg, 55, became Quaker’s CEO in 1981 at age 43. He is a physical-fitness buff and fierce competitor who plays handball and pumps iron.

Smithburg is using EVA to pursue a lofty goal: transforming Quaker from a journeyman into one of the food industry’s most profitable companies alongside Kellogg and General Mills. Says he: “Our biggest problem was using too much capital.”

Quaker employs a version of EVA it calls controllable earnings, which is yielding big savings at a sprawling plant in Danville, Illinois, that makes breakfast cereals and snacks. Until last year the plant operated at a slack pace early in each quarter and planned purchases, production, and deliveries for the big bulge at the quarter’s end. Near the start of each quarter the plant would start filling warehouses with two- to three-month supplies of boxes and plastic wrappers as well as ingredients like granola and chocolate chips. It needed huge stocks because it turned out most of its products in a six-week surge. As products rolled out, Quaker packed 15 warehouses with finished goods. Corporate headquarters absorbed the costs of those inventories and encouraged managers to keep big, comfortable stocks. Says Steven Brunner, the strapping, mustached plant manager: “I used to treat inventories like they were free.”

To smooth out the bumps—and save capital—Quaker ended the trade-loading madness in the fiscal year ended June 30, 1992, canceling the usual year-end promotions. Predictably, the stock plunged—temporarily. Free from the quarterly scramble, the Danville plant is whittling away at working capital and pays a stiff capital charge in the internal accounts for stocks of raw materials and finished goods. Result: The plant has trimmed inventories from $15 million to $9 million, even though it is producing much more, and Quaker has

[Image: Jack Stahl, chief financial officer at Coca-Cola: “EVA forces you to find ingenious ways to do more with less capital.”]
MANAGING

closed five of the 15 warehouses, saving $6 million a year in salaries and capital costs. Says Brunner: “Controllable earnings makes me act like an entrepreneur.”

As Smithburg forecast, the long-term strategy is paying off. “We knew the customers would come back,” he says. “But when they did, our capital costs were much lower.” Controllable earnings have flourished. Most important, the stock is up 30%, to a recent $65.

Since EVA measures value creation and can be figured at levels well down in the company, it is an ideal basis for many managers’ compensation. It provides a startling new view of a familiar process.

Most companies determine bonuses by how an executive performs against a budget; the most common target is a percentage rise in operating earnings. But the budget benchmark has a glaring flaw: Managers have an incentive to negotiate a target that’s easy to beat. “The negotiation process is long and difficult,” says Derek Smith, executive vice president of Atlanta’s Equifax, an information services company that now bases compensation on EVA. “Instead of reaching for the stars, managers have an incentive to aim low.” Most plans also rein in managers by imposing caps. For example, Harneischfeger Industries of Brookfield, Wisconsin, limited bonuses to 40% of base pay for all but a half-dozen top executives. It’s switching to an EVA compensation plan in November.

Such a plan typically consists of two familiar parts, a bonus and stock incentives, applied in new ways. Bonus targets are established automatically each year as a percentage gain in EVA, determined by averaging last year’s target, say 10%, with last year’s result, say 20%. That would fix this year’s goal at 15%. Bonuses have no limits.

WAYS TO RAISE EVA

There’s nothing fancy or complicated about how to make economic value added (EVA) go up. It is a fundamental measure of return on capital, and there are just three ways to increase it:

Earn more profit without using more capital. You probably spend much of your time thinking of ways to do this; cost cutting is today’s favorite method. Nothing wrong with that, but focusing on it often blinds companies to the other ways of raising EVA.

Use less capital. In practice, this is often the method that companies adopting EVA find most effective. Coke uses plastic containers for concentrate instead of costlier metal ones. CSX figures out how to operate with 100 locomotives instead of 150. Quaker reschedules production to require fewer warehouses. What to do with the capital saved? Companies can return it to shareholders through higher dividends or stock buybacks, or can . . .

Invest capital in high-return projects. This is what growth is all about. Just make sure you expect these projects to earn more than the total cost of the capital they require.

But what if a manager gets lucky, earning a handsome bonus because of a swing in the business cycle? Companies generally put some part of an exceptional bonus in a “bank” and pay it out over the following three years. The manager’s “bank balance” shrinks if he or she fails to keep meeting targets.

G. Bennett Stewart III (left) and Joel M. Stern are the financial consultants who hatched EVA.

Some EVA companies object to setting goals by formula. Coca-Cola and Quaker negotiate EVA targets with their managers. “There are too many variables,” says Philip Marineau, Quaker’s president. “Some businesses, for example, are just starting out with heavy investments and need a special timetable to reach a positive EVA.” Marineau, however, says that it’s far easier to set challenging targets than under the old system: “The compensation system is driving managers to reach higher.”

Pay component No. 2, a stock incentive program, is also unusual. Instead of receiving stock options, a no-lose arrangement by definition, managers risk real money. CSX’s plan shows how the program works. In mid-1991, 160 managers accepted a company offer to sell them shares at the market price of $48.325. They paid 5% cash; the company lent them the balance at 7.9% interest. The program ends next July, when the managers can cash in their shares. If the price stands above $69, CSX will forgive the loans’ interest and 25% of the principal. If it doesn’t, they’ll have to pay the interest on their loans; they could even lose money. But with the stock recently at $75, that looks unlikely. Shareholders won’t complain.

EVA is powerful and widely applicable because in the end it doesn’t prescribe doing anything. If it tried, it would inevitably run aground in certain unforeseen situations. Instead it is a method of seeing and understanding what is really happening to the performance of a business. Using it, many managers and investors see important facts for the first time. And in general, they validate EVA’s basic premise: If you understand what’s really happening, you’ll know what to do.  

50 FORTUNE  SEPTEMBER 20, 1993